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LIFE PRODUCT DEVELOPMENT UPDATE

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Panelists: CHARLES G. FISHER
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Recorder: DANIEL JÁQUEZ

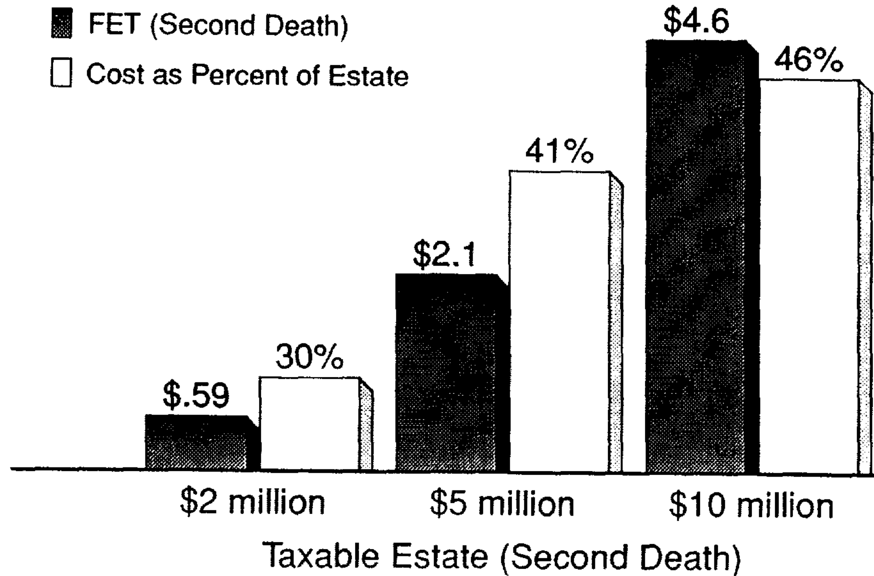
Current issues in the design and development of life insurance plans, such as:

- o Universal life
- o Variable universal life
- o Term insurance
- o Survivorship products
- o Traditional plans

MR. JOHN M. FENTON: We're very pleased to have three excellent speakers. They are going to be providing us with the current state of affairs in life insurance products, including the recent trends in a variety of products, and what we can expect in the future. I'd like to briefly introduce our three speakers in the order that they will be speaking. The first is Phil Polkinghorn. Phil is a principal with Tillinghast, an actuarial consulting firm. He's located in Hartford, Connecticut. He has been with Tillinghast since 1983, and he has been consulting on a variety of topics, including product design and profitability, financial performance measurement, and agency compensation issues. Phil will be talking about last survivor products as well as participating whole life products. Our second speaker is Chuck Fisher. Chuck is a Second Vice President and Actuary with the Guardian Life Insurance Company. He has been with that company since 1985. Prior to that, he worked with Metropolitan Life Insurance Company. Chuck is the Actuary at Guardian's subsidiary Guardian Insurance and Annuity Company (GIAC). He is responsible for all actuarial aspects of equity or variable products. Chuck will be talking about variable life insurance products. And our last speaker will be Larry Silkes. Larry is a consultant with his own firm, Lawrence Silkes Consulting. He is involved in consulting to life insurance companies on product work, financials, and taxation. Prior to that, he worked for several companies, including National Benefit Life, Johnson and Higgins, and New Jersey Life. I should also mention that Daniel Jáquez, from Tillinghast, is our recorder.

MR. PHILIP K. POLKINGHORN: To start out in describing the last survivor market to you, I'd like to talk a little bit about why it is sold. As most of you know, the key reason is because of estate taxes, the Economic Recovery Tax Act of 1981 (ERTA) provided an unlimited marital deduction against estate taxes. However, some companies have found that the last-to-die product can be used in certain business situations for high dual income families and, very occasionally, as an accumulation product. But, an estimated 95-97% of the sales are to meet estate settlement costs. And the reason is that wealthy people feel that estate taxes, particularly for larger estates, can be almost confiscatory. Chart 1 shows, for various estate sizes, the tax bite at the second death.

Estate Settlement Costs *($ Millions)*



PANEL DISCUSSION
CHART 1

And if you take a look, the effective tax rate on different size taxable estates ranges from as low as, 30%, when you are at an estate of, say, $2 million, to as high as 46% if you've got a $10 million estate. Now, the reason that people find last survivor insurance to be effective in meeting these estate tax needs are twofold. First is that it provides liquidity in the event of premature death. Many estates are made up of nonliquid assets, businesses, things of that nature, that can't instantly be converted to cash.

How does the last survivor sale typically take place? In many cases, the initial applicant and owner of the policy is an irrevocable trust. The purpose of this is to keep the proceeds out of the estate. Obviously, if the policyholders -- the covered insureds -- owned the policy, then the proceeds would be included in their estate, and they'd need to buy that much more insurance in order to pay estate taxes. But, if the policy is not owned by them, but say by an irrevocable trust or even by their children, then the proceeds will not be included in their estate. And some people will gift the policy or have their children be the initial applicant and owner, but that brings up problems of control. And so more commonly, an irrevocable trust is the initial applicant and owner of the policy.

Some companies are becoming more and more successful selling last survivor coverage in executive benefit plans on a split dollar basis. For certain key executives it can be a valuable benefit, and in calculating the imputed income for tax purposes, the imputed income is very low. It is basically q_x times a q_x, as long as both insureds are still alive. So, any actuary who has multiplied two very low mortality rates together can figure out that the imputed income is negligible and the perceived benefit, on the part of the executive, is very large.

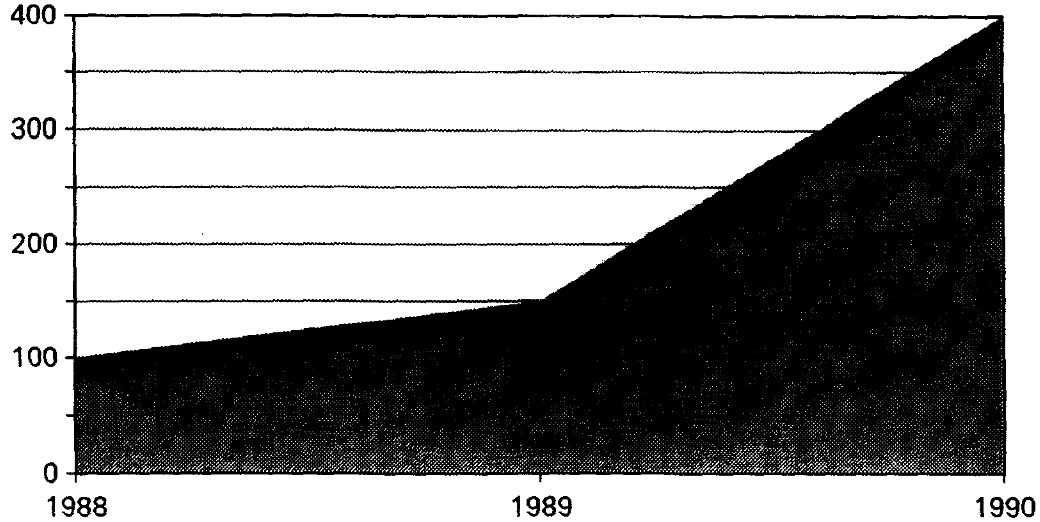
One of the questions that we get asked quite often by people considering the last survivor market is, "Is it large enough?" Chart 2 gives an estimate of the growth in new premiums written in the last survivor market over the past few years.

You'll notice that in 1988 the market size was estimated at around $100 million. In 1989 it was estimated at around $150 million, and recently we performed a sales survey for the first six months of 1990. We had 23 respondents to the survey who reported $177 million in new premium for the first six months of 1990. We had two late responses that would have taken that figure up over $200 million, so if things continue on at just a level clip during 1990, we might expect roughly $400 million in new premium for calendar year 1990.

I won't go into exactly which companies are in the market or leading the market. I think you are all pretty much aware of the companies that are quite active in the second-to-die market, but it is interesting to take a look at the market share. Probably six or seven years ago, the market was dominated by just one or two companies. It is still heavily dominated by four or five companies. If you take a look at the distribution of business by premium and face amount sold during the first six months of 1990, you'll see that based on premium, 63% of the business was sold by the top four companies in our sales survey. And the second four had 22%, and the balance went to all others. And, on face amount, the statistics were a little bit different, but still quite similar (Chart 3).

Estimated Market Size

New Premiums Written *($ Millions)*



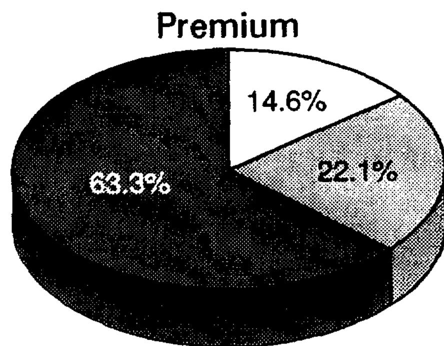
All figures are estimates based on sales surveys.

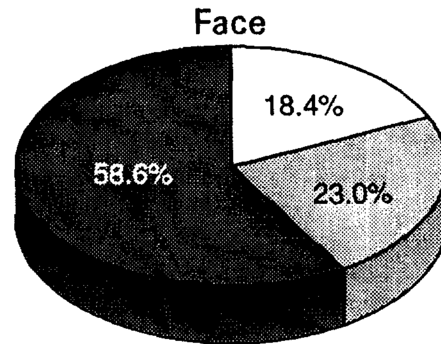
1990 figures are based on survey of sales through June 30.

CHART 3

Relative Market Share

Top Four
Second Four
All Others





So, it's still a market that is dominated by a relatively small number of players. At least part of that is due to the fact that many of the companies that are in the market have been in for a relatively short period of time.

Looking at product design, we have some very basic issues that face companies in this market. The first is whether to develop a product that has a single status or dual status. And, by this we refer to the internal cost structure of the policy. Does it have a difference in dividends, cost of insurance rates, cash values or reserves depending upon whether or not two people are still alive or just one is alive? A second key issue is whether to offer a joint equal age product, versus basing your cost of insurance rates, dividends, other policy parameters, upon the exact age combinations of the two insureds. I will discuss some of the pros and cons of the decisions in each of these areas a bit later.

And, finally, most of the various generic product forms that are available for single life policies are also available in the last survivor market. There are fixed premium products, flexible premium products, products with graded premiums; both participating and interest sensitive versions are being marketed quite successfully.

In evaluating the single versus dual status issue, the major considerations are cash surrender benefits, administrative capabilities, funding of term option and heavy substandards or uninsurables.

Cash surrender benefits are a tiny bit lower on dual status policies. I guess this is difficult for some people to envision, because cash surrender values change on a dual status product. They jump dramatically at the first death, but if you look at cash values in the aggregate, cash values under a dual status product will be slightly lower than those for a single status product. This occurs because cash values for a single status product are calculated assuming a blend based upon statutory mortality, of one alive and two alive statuses. And since statutory mortality is generally higher than pricing mortality, the single status product ends up with cash values based upon an assumption that there are more one alive statuses than if you did it based on pricing mortality. So, there is a tiny bit of an advantage to a dual status product if you're trying to keep cash surrender costs down. I say tiny, because it's small in absolute terms, and the surrender rates are very low on this business as well. The key considerations to keep in mind are the administrative capabilities of your organization. It's much more difficult to administer a dual status product than a single status product. You have to keep track of roughly three times as many dividend scales, different reserves, different cash values, etc.

Another key consideration when making this decision is in funding term options. Most of the successful participating last survivor products have term options where additional term insurance can be purchased by payment of an extra premium, or through a combination of premiums and dividends. For some of the early dual status policies, not only did cash values and dividends increase at the first death, but also if you had additional term insurance, the cost of that term insurance increased as well at the first death, to reflect the fact that the probability of death was just that much higher once one of the people was already gone. This increase in the term cost was fine as long as you were selling just a base policy, where the cash value and reserve increased, and thus the

dividends increased enough to make up for it. But if you start blending in additional term insurance, you could be caught in a situation where if the first death occurred rather early, it would be difficult for the policy to fund itself on the basis illustrated, since the policy's dividends now have to pay for the higher term costs. A couple of companies, and I believe Guardian is one of them, have developed products that are dual status for the base plan, but the term insurance benefits do not distinguish between one alive and two alive statuses.

In this market it's very important to handle substandards and uninsurables on a flexible basis. And, some companies who offer dual status products have a bit of concern about taking one uninsurable with another life that is standard if they have a large increase in values at the first death.

If we look at the issue of joint equal ages versus exact age calculations, again, this is something where one of the key considerations is convenience and ease of administration. Another issue is state filing requirements. Most states will tell you that they have no problems with joint equal age rules, however, there are a few, Texas and New Jersey included, that will require special certifications for policies that use joint equal age rules. And, these certifications revolve around the issue of insuring that policyholders who are sold a policy on a joint equal age basis receive fair nonforfeiture values. Generally the certification has to say that the company will not deliver for sale a policy where the joint equal age cash values are less than those that would have been achieved by going back to first principles, reflecting the actual ages of the two lives. Given this onerous procedure, the members of the Texas Insurance Department have put forth a proposal to the NAIC Life and Health Actuarial Task Force to study this issue a bit more to see if perhaps there is a set of guidelines that states could use in evaluating joint equal age rules, because they realize that joint equal age rules are only approximations.

In this market, flexibility is very important, and you have to consider some of the key riders that you need to be successful. If you are offering a participating product, you need to have some sort of term option that will allow the policyholder to reduce his outlay, his premium per thousand, and a paid-up additions rider to give flexibility to produce quick vanishes and that sort of thing. The level of the premium can be very important. As we mentioned earlier, often the policy is gifted to an irrevocable trust, and there are gift tax exclusions. And it would be nice to have the premium be as low as possible in relation to those exclusions.

Another option that is often mentioned in connection with second-to-die policies is called the policy split option, and I will talk a little bit more about it shortly. Becoming more popular are first-to-die riders on the same two policyholders who buy the last-to-die policy. Two years ago, very few companies in the last survivor market offered joint and first-to-die riders as well. That's becoming more and more common. While it is important to have a waiver benefit in this market, you will find that the waiver benefit isn't utilized that frequently. The lowest average age of policyholders for companies we worked with has been around age 49. But more typical would be an average in the 55-60 age range, so, a waiver benefit doesn't offer much to people in that age range, since it typically expires at age 60 or 65. Another factor to consider is that many insureds in this

marketplace don't need current income to pay the premium anyway. So, a waiver has limited desirability to them.

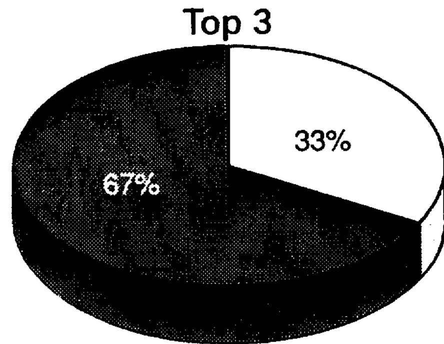
If we take a look at the term option, one of the things we asked in our sales survey was for a distribution of the total face amount between the base policy and these various term options (see Chart 4). Some of the companies had difficulty in splitting the data in this manner, but for all companies, roughly 80% of the face amount was coming from base plans reportedly, and 20% from these term options. However, we knew that some companies could not make the split, so they reported it all as base plan. We took another look using only the top three companies reporting. These companies tended to be more established in this market and had better data. For those companies, roughly 67% of the face amount came from the base plan and a third came from these term options. So, the term options are used. The policy split option that we mentioned earlier basically gives the two insureds the right, upon a tax law change, a divorce, or occasionally the disillusionment of a business, to split the last survivor policy into two single life policies. Some companies offer this benefit at no charge, but require evidence of insurability at the time of the split. The more valuable benefit seems to be one where you charge a premium, but you'll do it on a guaranteed insurability basis. The purpose of this option is not really that companies want to sell this to make money, but it is to overcome an objection. It is something that the agent can present if the prospects say, "Well, what if there's a change in the tax law, and I don't need my last survivor insurance anymore? What can I do?" Then you trot out your policy split option. Most of the splits offered are 50-50: you split the face amount and the cash value evenly between the two lives. However, one or two policy split options will let you vary the amount, up to a 70-30 split. There has been a great deal of controversy and varying degrees of concern over antiselection, and how to develop rates for this option. There was a treatment of this issue in the reinsurance section newsletter. I encourage you to read it if you have further interest in that, but it was a very theoretical exercise and depended greatly upon the degree of antiselection you expect at the point of the split. Generally, we've expected not much more than you would find with term conversions.

Just to give you a feel for the size of the market and the size of the policies being sold, Chart 5 shows some results of the sales survey relating totals to per policy averages. You can see that the average face amount is approximately $1.3 million. If you break this out by participating versus universal, or interest sensitive product forms, the results would be quite similar. I think participating contracts have just a slightly higher average size. And the average premium per case is roughly $20-22,000.

In analyzing these from the customer's point of view, the key competitive measures are rate of return on death, the amount of premium required to vanish in a specified number of years, and what's the lowest possible premium I can get by on. Often, the last one is used in sales situations to illustrate how low the premium can go, and then when the actual case is sold, the agents will convince the policyholders that they don't want to pay forever, and so they should have the second one, which is a low premium vanish. The rate of return on death is obviously important since this is designed to meet estate tax settlement cost at the second death. People want to know, "Well, how does the rate of return compare with having taken these premium dollars and invested them someplace?"

CHART 4

Distribution of Total Death Benefits
Last Survivor Sales for First Six Months of 1990



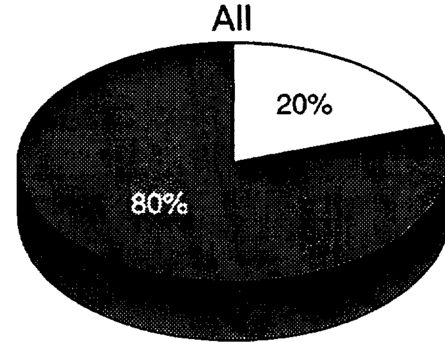


CHART 5

Results of Sales Survey

		Face Amount (000s)		*Premium (000s)*		
	Policies	*Including Term*	*Base Only*	*Ongoing*	*Lump Sum*	*Total*
Total	7,981	$10,158,847	$8,150,261	$154,386	$22,614	$177,001
Industry Average Per Policy		1,273	1,021	19	3	22

As I mentioned earlier, this is a much older age market than many companies would encounter in the single life market, and the handling of substandards is very important, because there are many more of them here. It's reasonably common practice to take one uninsurable life if the other life is standard or, say, Table D or less. Companies that operate on a joint equal age basis will often assign the uninsurable an equivalent age, 92 or 95 or something like that, so the resulting policy is not much better than a single life policy, but the agents like to be able to offer to deliver a policy that has both the insureds' names on it. They don't like to turn somebody down. It's very common in this market, unlike the single life market, to use age rate-ups for substandard insureds. An example might be to take someone who's Table D and say that the individual is rated eight years older than his or her actual age. So, if you're age 55 and you're Table D, the company would say, "We're going to treat you the same as someone who's 63 and fully standard." This obviously has some 7702 implications, in terms of actual ages versus insurance ages, and things aren't very clear in that area. We've heard from John Adney in the teaching session on "A Primer Financial Planning with Life Insurance" that, when regulations are finally issued, that he doesn't expect the Treasury to be too kind to us in the area of substandards and joint life policies. But I guess it's something where we'll wait and see, and the companies that are using age rate-ups feel that it's difficult to get at, but they feel like it represents the actual charge that they're making for mortality; it's reasonable. For companies that reinsure heavily, this is a technique commonly used by the reinsurers, and so their underlying mortality cost is heavily influenced by this technique.

The extra premium approach to substandards becomes very complicated because you have so many different combinations. You can have one insured who's 400% of standard and the other one fully standard, you can have two who are 200% each, and the mortality pattern varies. Just to give you a quick example, if you have two insureds who are both 300% of standard, their initial mortality would be roughly nine times a standard case, but it would ultimately grade to about three times the mortality for the youngest, healthiest life of the two lives. It's not a straight ratio across the life of the policy. The other thing that makes that a bit complicated is that, if you use this approach, you have a lot of rates that you have to generate to cover all the possible examples. And if you try to use some simplified approach, you're going to find yourself noncompetitive in certain areas, and this is a market where being competitive, on some substandard cases, is very important.

Reinsurance is obviously very important for companies with small retentions. As we mentioned, the average size is around $1.3 million. Companies taking a look at this have often considered raising their retention level. Underwriting concessions are fairly common; often the reinsurer won't go along with these. And capacity can be a problem. For some companies with low retentions, it's sometimes difficult to generate more than $5 or $6 million of capacity on an automatic basis. Finally, the rates are getting a little bit better, but initially, they were found not to be too attractive to companies that relied heavily on reinsurers.

In looking at retention levels and deciding whether or not to increase them, companies have taken two approaches. One I've labeled the Common Sense Approach. I don't know if that's an appropriate label or not, but it goes something like this: a company

with a $1 million retention says, "If a husband and a wife came into us, and each of them wanted to buy a $1 million single life policy, we'd sell it to them both. And if they both died, we'd pay out $2 million." And so the company argued that, "Well, if they come in and they want to buy a $2 million last survivor policy, we're no worse off." The other approach is to actually do some risk analysis from a risk theory point of view, and if you just look at this on the surface, it appears that you'd come up with a lower retention since the variance of claims about the mean, as a percentage of the mean, is obviously much higher for last survivor insurance than single life insurance. And while that's true, you have to remember, though, that your mean or expected value is much smaller, so you've got a higher percentage of a smaller value.

Mortality assumptions have presented a great many problems to companies entering this market. They're at a loss for how much to assume for the joint accident risk, the probability that both people go in an accident. The heartbreak syndrome is another issue. Some evidence has shown that the probability of dying 12 months after losing a spouse is much greater; there have been alternate studies performed that indicate that this is correlated as much to income level as to the fact that you're now single. Another factor that presents difficulties is the lack of large bodies of female mortality data at the advanced issue ages.

With respect to persistency, lapses have been very low. We've heard reports of lapses around the 3% level. Some companies have experienced only 1%. It's important to remember that this product has a steep claim cost curve, and so what happens in the later durations can be very important, and on a related note, persistency bonuses that have become so popular in certain products could be dangerous here, because you might well experience much lower lapsation.

I promised John, since no one else agreed to do it, that I'd talk a little bit about traditional whole life. In the traditional participating life area, we've seen a continued trend toward comprehensive packages -- bundlings of base policies with term options and paid up additions riders, to make the sale a bit more flexible. We've also seen a product packaged quite interestingly recently, so I'm mentioning it here -- a product that offered a refund of premiums, less the guaranteed cash value plus any dividends paid, in the event that the company changed its dividend scale. It's a feature designed to give you greater assurance that your dividends wouldn't change. I asked one of my colleagues in my office if he thought the company was holding an extra liability for that refund, and he said, "Of course, not. If the company had to hold an extra liability, it wouldn't do it." But, I'm not sure. As further evidence of, I think, the packaging that's going on and the greater flexibility in the traditional life market, as you know, traditional life has gained market share against interest-sensitive products over the past few years. During a period when term sales are relatively flat or declining, the average premium per thousand of interest-sensitive and traditional products combined has been declining at a rapid pace. And I think part of this is due to the comprehensive participating packages that are now being offered.

MR. CHARLES G. FISHER: Through a subsidiary, GIAC, Guardian Life sells variable life insurance and variable annuities. GIAC started selling variable annuities in the 1970s and in 1985 started selling variable life insurance. I'm the actuary for the

subsidiary GIAC. This talk will be in two parts. First, I'm going to talk about what GIAC is doing in the variable products area. I want to talk about this because I think there's some significant differences in the variable products area when compared with the so-called regular life insurance market.

In my opinion, the major force for change in the U.S. financial markets has been the economic upheaval of the recent past. High rates of inflation, drastic changes in interest rates and significant unemployment have all affected the investor's outlook. In the past, people almost automatically put their money in the bank. Now, with all that's been happening, the consumer has become a much more sophisticated investor. After tax investment returns are looked at very closely, and different investment products have come to the foreground. For example, mutual funds have seen explosive growth in sales. Variable products have also seen significant growth. I think a lot of the change in the financial markets is due to this sophisticated investor who has studied the different investment products.

Some insurance companies have developed products to address the sophisticated investors, and I think they've seen an increase in their market share. Other insurance companies haven't addressed the sophisticated investor, and I think they've seen some of their market share eroded.

I am now going to review the products that GIAC offers and the sales and asset growth of GIAC. GIAC offers the Guardian Stock Fund, the Guardian Bond Fund, and the Guardian Cash Fund. We also have Value Line, Inc. managing money for us. The Value Line Centurion Fund is a mutual fund that invests only in those stocks ranked first or second for "Timeliness" by the Value Line Investment Survey. The Value Line Strategic Asset Management Trust is a balanced mutual fund that Value Line, Inc. manages. We have a real estate account, and zero coupon Treasuries. We're working on an international fund, and we have a fixed account.

Table 1 shows GIAC's variable annuity sales. We had $74 million of premium issued in 1985, and in 1986 sales went up; 1987 was good until near the end. In 1988 sales dropped down. In 1989 sales have come back, and we're projecting higher sales in 1990.

TABLE 1
Guardian Insurance & Annuity Company
Variable Annuity Sales

Year	Premium Issues
1985	$ 74,440,098
1986	131,553,014
1987	159,973,492
1988	79,357,320
1989	150,204,436
1990	210,000,000 (Projected)

Table 2 shows our asset growth. Assets have increased significantly due to our large premium income.

TABLE 2

Guardian Insurance & Annuity Company

End of Year	Assets
1985	$ 399,903,729
1986	655,351,255
1987	924,644,282
1988	1,065,203,852
1989	1,326,857,787
1990	1,425,000,000 (Projected)

Table 3 shows single premium variable life sales. In 1985, we introduced a single premium variable life product. In 1986, sales went up. In 1987, we got a double hit to sales -- there was the stock market crash and the new tax law. In 1988 our sales went down to $26 million. In 1989, the slide continued to $6 million, and in 1990 we project that they'll rebound slightly.

TABLE 3

Guardian Insurance & Annuity Company
Single Premium Variable Life Sales

Year	Premium Issued
1985	$ 1,650,133
1986	69,938,643
1987	152,820,001
1988	26,120,110
1989	6,189,053
1990	12,000,000 (Projected)

GIAC has experienced some success in variable products, and I'd like to just give you a about exactly what kind of business you're in. In GIAC, we think that, to a large extent, we're in the money management business.

There are some implications to be made from this statement. If you're in the money management business, a lot of your time and effort should be given to discovering what's going on in the money management field. For example, what are mutual funds doing, and is there a hot fund around that you can put inside your variable product? It's very important that you have a different frame of mind when you're looking at these type of products. For example, you're selling performance, and you are competing with mutual funds. We recently redesigned all our sales literature, because we kept getting complaints that our sales literature for our variable annuities wasn't up to the standards of mutual funds' sales literature. We redesigned it to look more like mutual fund literature.

About 50% of GIAC's sales are through stockbrokers and about 50% through the Guardian's field force. We are in direct competition with mutual funds in brokerage

houses. It's very important for us to have literature that is like mutual fund literature so that it's more easily understood by stockbrokers.

When people do comparisons, they look at their peer insurance companies. It is important that you also look at mutual fund companies, and see, for example, how your expenses for your variable annuities compare not only with your peer insurance companies, but also how do they compare with load mutual funds and no load mutual funds?

Another lesson is simplicity of design. Maybe a suggestion will come up for an accidental death rider. The marketing people will say, "That will just complicate the product. We don't need these riders. They just make things look very complicated to the investor. Keep it simple." So, a lot of times these actuarial brainstorms of a term rider or something like that just don't fly in this marketplace.

Also when you're looking for trends or when you're looking into the future, you shouldn't just look at insurance companies in the U.S. Look at what's happening in other parts of the investment world. For example, I've studied the insurance market of the U.K., where about half of the sales are in variable products. I have tried to see what trends are evolving in the U.K. and how I can use this knowledge in the U.S.

Through the first two quarters of 1990, variable annuity sales are estimated to be $5.5 billion. For the first two quarters of 1990, single premium variable life sales are estimated to be $240 million. A few years ago, single premium variable life sales and variable annuity sales were much closer to each other. With the change in the tax law, sales of the two products have gone in opposite directions. Variable annuity sales are up 75% in the first six months of this year while variable life sales are down. We believe, at Guardian, that we're going to see something of a comeback in single premium variable life sales. We're now talking to one of the major wire house brokerage firms about a new marketing program for our single premium variable life insurance (SPVLI) product.

We think that SPVLI has some inherent advantages over a variable annuity contract. A variable annuity contract defers taxes, but eventually you have to pay taxes on the increase of your money. An SPVLI product defers taxes, but then at death there's an increase in the cost basis. We think that a very powerful argument can be made for an SPVLI policy. We think that in the future the advantages of an SPVLI product will become more apparent to both perspective buyers and to agents.

Another area, that seems promising is living care benefits on a single premium life policy. About a year ago, Richard Klein of First Penn Pacific gave a talk on a long-term-care rider for his company's single premium life policy. It has had success with this rider, and I called up Richard for an update. He said that his company's long-term-care rider has had a very positive impact on First Penn's single premium sales at the older ages. It was originally thought that the market for this rider would be from ages 45-60. But the company found out that the market, when you add a long-term-care rider to a single premium product, was actually individuals over 60. That is, at those ages, people are really thinking seriously about long-term care. From ages 45-60, people still haven't truly started believing what is going to happen to them in the future.

First Penn Pacific has developed a marketing program, and the rider and the single premium life product are being sold through a large brokerage firm, financial planners, etc. The idea is that you have this investment product, and your money can accumulate inside this investment vehicle, and then you have the increased cost basis at death. This is a very attractive product, but the idea is that in an emergency, you can take some money out through the long-term-care rider. For the market that is being addressed, people are concerned about long-term care. People are living longer, and the problem of long-term care becomes more significant.

First Penn Pacific is now working on several versions of the rider. The design of the original rider had a six-month elimination period, and it paid 2% of the net amount at risk per month at the end of the elimination period. First Penn recently did a study of the states where the rider is approved, and where the rider isn't approved, and it found that in the states where it is approved, the company has a significantly higher average issue age. It feels that this is another proof of the success of the rider. It feels that the rider has enabled First Penn to sell single premium variable life policies where it wouldn't have before. It thinks that this is one of the reasons why single premium life sales have increased for the company, as opposed to most other companies.

I think that living care benefits on a single premium policy is an area of promise. This is because, for potential policyholders, this rider is of utmost importance to them. It would not be like a waiver of premium rider or an accidental death rider, but it would be something that was of real concern to the client.

Finally, I'm going to talk about the Investment Company Act of 1940. The SEC and the life insurance industry have long debated the scope of the SEC's jurisdiction over mortality and expense risk charges in variable contracts. I will briefly go over the history of the debate and give you a feel for what is happening. The 1940 Act places limitations on the amount of charges that can be deducted in connection with the issuance of a security. The 1940 Act places specific limits on sales loads, but there are not specific numerical limits placed on risk charges.

I'm going to now discuss mortality expense risk charges for variable annuities and variable life insurance. Originally, there was a long debate whether the SEC can regulate risk charges, because it's an insurance charge and not a sales load. Insurance companies first said that the SEC shouldn't regulate these risk charges, because they are insurance charges. The SEC, of course, disagreed and it continues to regulate the charges.

A workable arrangement evolved where you had a level of industry practice -- 60 basis points for scheduled premium policies, 90 for flexible premium policies, 125 for variable annuities. The SEC made a proposal in 1984 for a change in its regulation of the risk charges. Briefly it was that the risk charges should be within the range of industry practice. However, the SEC would require additional representation where a portion of the risk charge was labeled a distribution risk charge. An insurance company would then have to give some representation along the lines of 12b-1 plans to justify the charges.

The 1984 proposal was not looked favorably upon by the insurance industry. The industry considered it somewhat unfair. In 1987, the SEC came out with its 1987 reproposed rule. The insurance industry considered this even more onerous than the 1984 proposal. The emphasis in the 1987 reproposed rule would be on disclosure in the prospectus and the registration statement for the contract. Issuers would be required to make certain detailed disclosures concerning the nature of the proposed risk charges. The potential liability for misleading or inaccurate statements in the registration statements would serve as a significant means of self-regulation.

Now, in 1990, the ACLI is proposing amendments to the 1940 Act. While discussions have been going on for about thirty years over the regulation by the SEC on risk charges, we feel that the subject of regulation of risk charges is very important for anybody in the variable products area. However, I won't even hazard a guess as to what the final outcome will be.

MR. LAWRENCE SILKES: The first two discussions dovetail very nicely into my discussion of product design and product utilization as dictated by the perception of the buyer. What is the perception of insurance to the buyer? Is it an expense or an investment?

If insurance is an expense, even a necessary expense, our objective is to keep expenses as low as possible. If it is an investment, the objective is to put in as much money as is prudent.

I am going to describe several strategies for keeping the cost to the policyholder low in insurance markets such as the term market where the companies are trying to keep the premiums as low as possible. On the investment end, we should all be aware of the strategies that companies are using to keep premiums as large as possible by getting around the seven pay test. The UL market goes to both extremes. Companies are coming up with products that resemble a 30-year term or go to the other extreme of dovetailing a seven pay strategy with an annuity or premium paid in advance.

The term products are getting cheaper and cheaper. Term has a bad history in the industry. I remember the first textbook I read on *Life Insurance* by McLean. The author said term was a no-no for the client and the industry. During the term wars of the late 1970s and early 1980s, my company was one of the leading term companies, and an agent told me that he gave my company "cheap term" while he gave his quality business to his merger company. To paraphrase John Schesigner, the company that offered term violated an important insurance principle: It sold insurance at a reasonable price. The industry's problem with term is that it cannot support a large managerial sales organization. The managerial shop needs a tremendous amount of premium income in order to sustain the overhead.

Agency compensation drives the whole insurance industry. Let us examine the nonforfeiture law. In the law there is a carve out of 125% of the premium plus $10 per thousand to provide for acquisition expenses. The valuation law also carves out a portion of premium for compensation. These laws fit hand-in-glove with high compensation.

But our discussion is going to center on how to keep term cost low. A whole life policy has been defined as a bundle of options. A term policy has fewer options than a whole life policy. One key omitted option is the cash value. This can be compared to a large full service department store competing with a discount store that does not allow returns.

The costs that go into the term policy are mortality, surplus compensation and persistency. The public, now realizing that annual renewal term (ART) with low going in premiums can be costly over a longer period, has shifted its market to longer term such as 5-, 10- and 15-year products. When an insured takes a 10-year term, he pays several times the premium he would have paid on an ART because in either case the mortality is the same; however, the persistency risk is shifted to the insured in the ART. The company is receiving higher premiums without any additional benefit being paid to the insured.

To keep mortality cost low, companies have been using more effective screening. Prior to this time, preferred underwriting usually meant a policy in excess of $250,000. With the current underwriting tools, the term "preferred" has real meaning. With the use of blood screening, the company can now spot the alcoholic and drug abuser in addition to more effective nonsmoker testing. By eliminating the alcohol abuser, studies show a decrease in traumatic deaths.

To adopt the 1975-80 table to price a product, the table has to be modified for smoker/nonsmoker. In addition, the table does not recognize the medical/nonmedical underwriting criteria. A further consideration in using the 1975-80 table is that the select mortality does not grade into the ultimate mortality. The mortality data come from two distinct studies, and the contributor to each study differs. One approach to overcoming this difficulty is to use the 15th year as the ultimate mortality. The discontinuity between duration 15 and 16 could be as high as 25% where the rate of increase is 15%.

The 1975-80 table provides results on the average for year 1977. The select table of 15 years could represent several different underwriting eras. Future mortality comes from current underwriting standards.

The 5- and 10-year product sells very well, and the companies are guaranteeing the premiums. The guarantees cause a tremendous surplus drain, but companies are able to use the unitary method of valuation that avoids the heavy drain that would result from the guarantees. New York state has redefined the unitary method so the initial strain is still present at issue. Therefore, the strain must be alleviated through reinsurance.

Cost also is becoming a major item. Instead of competing directly with the 5-year term or a 10-year term, some companies are introducing a 4-year term and a 7-year term. It's a question of just getting the person to concentrate on premiums and not duration. There is another thing that we may consider: there's no reason that a policy should be on an annual basis. Mortality studies are strictly done per year, and death rates are per year, per thousand. For the first year, we can still work with maybe a 9-month or a 10-month renewal. Again, using the basis that we're looking to cut our cost.

Some companies are coming out with products where the preferred nonsmoker and smoker rates are the same for the first several years. And then, starting in the third year, depending upon your smoking statements, you'll either get a lower rate or the smoker rate. Your rate will continue at the low level or the smoker rate. To me, this is just introducing another option that's going to increase costs, but again, sales people have their own motivation.

Another interesting concept is guaranteed revertability. Companies will guarantee upon the end of the original select period or term period where the rates are low, a lower renewal rate without evidence of insurability. This can be done with an exercise in pricing that, including the initial premium, is the premium adequate, with this extra premium, to sustain the mortality and the additional mortality in later years. It's a variation of the guaranteed insurability rider.

UL products go the complete spectrum of selling low premiums or high premiums. There is a company that is issuing a UL product that is a level premium for 30 years. Since the advent of the Technical and Miscellaneous Revenue Act of 1988 (TAMRA), many companies and agents are apprehensive about selling a high premium product. Basically, the high premium product is used to imitate the participating product. We've gone away from that, in trying to go in for low premiums and for longer durations. It's very possible to have a 25-year term with zero cash value, using a UL product. We all understand the opposite effect, of how everybody is trying to use the UL as a cash accumulator, using it as an investment and trying to maximize the contribution that can be put into it. Tax law, valuation law, compensation, all tend to regulate the product, not the function. And, with the advent of TAMRA, we are regulating how much money can go into a life product at specific durations at least for the first seven years and the combination of annuities and/or premium paid in advance, and shifting the cost between them to minimize the tax effect to the insured.

What has also happened very much on the high end of the premium scale is utilizing the tontine effect by giving interest bonuses -- making the product a complete investment product with interest free loans, allowing the insured almost to have a banking account, where he can take money out at will and not have any additional charge. If the cash value is large enough, the insurance cost could go to zero. Some insurance departments are tending to tamper with the use of very liberalized ledger illustrations, and liberalized bonuses at later dates, and want some type of formula for implementing the additional bonuses.

We just heard an excellent discussion about the last-to-die policy, and how we can get the premium extremely low, and part of the reason the premium becomes extremely low is the low cost of the joint death probability. And if instead of a last-to-die policy, we had a first to die, and instead of paying up on the last death, we pay up on the first death, the premium would increase by increasing the company's risk, because you're literally selling a policy not to pay up on the first of the two to die, and that will increase the cost. So, in a sense, if you want to have a single premium product with the least amount of risk, or minimizing the amount of risk, a joint policy would be much more effective than a single life policy. But why stop at two? Why can't we have a third to die? The second to die has its specific purpose with estate tax purposes, but there are

other uses for the vehicle. And why stop at three? Let us go to a last of three to die, or a second to die out of three, or a joint death, the first to die out of three? That would be much more effective.

MR. FENTON: Are there any questions that the panel could entertain at this time?

MR. BRIAN R. LAU: I just had a comment to make. In fact, we do hold initial reserve for the premium refund rider.