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PRODUCT PORTFOLIO MANAGEMENT

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- o New product displacement of inforce policies
- o Critical resource management
  - -- Revenue
  - -- Capital
  - -- Expenses
- o Agency considerations
- o Monitoring experience
  - -- By product line
  - -- By product
  - -- By agent

MR. ALAN W. SIBIGTROTH: I am president of my own consulting firm and investment business. The panel will talk about what we can do with regard to our existing portfolio of insurance products, to better manage financial results and achieve better operating performance. It's always intrigued me at actuarial meetings how many sessions we have on designing new products. The emphasis is on the design of new and aggressive vehicles, but from my perspective there's relatively little discussion about what we do with the new product when we've got it. We're going to talk about what we can do with the products that are in force, and how to manage them for better overall operating performance.

We have on our panel Charles (Terry) Nichols, Senior Manager with Ernst and Whinney. He spent a number of years prior to that with New York Life. Terry's experience has been in the area of financial management information systems and financial operations review with accounting clients.

We also have Carl Wright who is Vice President and Chief Actuary with the Union Central in Cincinnati. Carl has a financial background and is now responsible for individual life performance.

Terry will talk about some of the accounting parameters and concerns that one might want to be aware of in looking at operational performance.

MR. CHARLES A. NICHOLS III: I work for an accounting firm, and because of that my work tends to be oriented toward financial statements. When Alan asked me to serve on this panel, I wanted to bring some of my experience with financial statements to the question of monitoring and improving results.

I've noticed that many of my audit clients have a lot of information, but because of the standard way it's presented those clients often don't learn as much as if they had been able to monitor their results. I want to present ways in which this information might be rearranged to provide more meaningful results, and assist in monitoring the business. The advantage of this approach as one of many possible different ways to analyze and monitor business is that the data, at least in the aggregate, are already basically available to the insurance company. You need to dig for breakdowns to get data on a finer basis for segment reporting, but you have something, to begin with, and it indicates where you should be directing your efforts to refine it.

My approach will be to describe this methodology, give a simple numerical example of it, describe how it might be applied to monitoring results, talk a little bit about the problems of this method, and then some miscellaneous comments about segment reporting and expense analysis.

Exhibit 1 shows a standard form of income statement. I've designed this and the exhibits which follow in such a way that they apply to statutory and to GAAP reporting, the two major models used by insurance companies. Some items will not be fully applicable to both. The standard statement looks pretty much the same for statutory and for GAAP, although there would not be a deferred acquisition cost (DAC) asset line for a statutory statement. To the extent that a statutory adjusted reserve methodology is used, there is an implicit deferral and amortization of DAC that is sometimes worthwhile to break out. With this methodology, I intend to take these elements of a statement and rearrange and

regroup them somewhat; essentially to take the components of a reserve change and associate them with the cash accounts of a company. By doing so, you get an approach that is more like a gains by source or a margin analysis of your business. Another basic step in this kind of analysis is to split out those items which pertain directly to the block of business and those items which might be said to be allocated to it for financial reporting. Although both are parts of the income for a given block, line or product, it is helpful to see them separately. I'm going to describe an analysis of these items and then put that analysis back together in a different way.

EXHIBIT 1

STANDARD FORM OF INCOME STATEMENT

		Statutory	GAAP
	Premiums	100	100
+	Net Investment Income	60	60
-	Benefits	75	75
-	Increase in Reserves	30	40
-	Expenses	55	55
+	Increase in DAC Asset	--	20
=	Income	0	10

The first piece I want to analyze is net investment income. Exhibit 2 shows net investment income split into the net investment income on the net reserve assets and the income on surplus assets. Net reserve assets would be the Commissioner's Reserve Valuation Method (CRVM) or other statutory reserve for statutory and the benefit reserve less the deferred acquisition cost asset for GAAP. Later, you'll see this breakdown recombined in a different way.

EXHIBIT 2

ANALYSIS OF NET INVESTMENT INCOME (NII)

		Statutory	GAAP
	NII on Net Reserve Assets	55	50
+	NII on Surplus Assets	5	10
=	Net Investment Income	60	60

Exhibit 3 is an analysis of benefits. On the statutory side there is a split because statutory reserves do not provide for all the benefits payable since that they are not programmed in as a projection of what you would expect to pay out. What I mean by this is that statutory reserves are based upon a mortality assumption but no lapse assumption. Therefore, the benefits not provided by

reserves are lapses. The adjustment for terminations is really the source for covering those costs.

EXHIBIT 3

ANALYSIS OF BENEFITS

		Statutory	GAAP
	Benefits Provided in Reserves	15	75
+	Benefits Not Provided in Reserves	60	0
=	Benefits	75	75

Exhibit 4 shows an analysis of expenses. I divide expenses into three basic categories: (1) the acquisition costs of the company, (2) the ongoing maintenance expenses for a given block or line, and (3) other expenses which may be appropriately allocated to a given reporting entity.

EXHIBIT 4

ANALYSIS OF EXPENSES

		Statutory	GAAP
	Acquisition Expenses	40	40
+	Maintenance Expenses	10	10
+	Other Expenses	5	5
=	Expenses	55	55

Exhibit 5 is an analysis of the increase in reserves. This analysis is similar to page 6 of the annual statement. The net premiums and the interest required increase the reserve. Then there are reserve releases for benefits and for maintenance expenses. Finally, there is a reserve adjustment for terminations. The reason I show this separately is because it's helpful to analyze the reserve, retrospectively, as a buildup of a fund. If you think of it that way, the use of factors to generate a reserve is really a kind of dynamic adjustment methodology. Every year when you apply a factor to inforce, in a sense you're renormalizing the amount of reserve you're holding.

If you were building up the fund as an accumulation, you would get off track because the termination experience and benefit experience will differ from what you projected. On a statutory basis, the reserve released is what's used to fund the cash value benefits.

EXHIBIT 5

ANALYSIS OF INCREASE IN RESERVES

		Statutory	GAAP
	Net Premiums	100*	65
+	Interest Required	40	70
-	Reserves Released for Benefits	25	70
-	Reserves Released for Maintenance Expenses	0	5
-	Reserve Adjustment on Terminations	65	20
=	Increase in Reserves	50*	40

*after adjustment for the implicit DAC deferral ($= \beta$ crvm $- \alpha$ crvm)

The analysis of increase in DAC asset, shown in Exhibit 6, is somewhat analogous to the reserve. It's often helpful to think of the DAC as a negative reserve item. In fact, it really is in a CRVM calculation where it is an implicit deferral of acquisition costs. The interest required on the outstanding DAC asset balance builds up the balance. Net premium amortization (a negative item in income) and termination adjustments draw down the DAC asset. This would be in the case primarily with a company on a factor method or a dynamic worksheet method, but essentially these are the components of the increase in DAC assets.

EXHIBIT 6

ANALYSIS OF INCREASE IN DAC ASSET

		Statutory	GAAP
	Acquisition Expenses Deferred	20	40
+	Interest Required		15
-	Net Premiums		25
-	DAC Asset Adjustment on Terminations		10
=	Increase in DAC Asset		20

Finally, I have recombined these items in Exhibit 7 to provide a clearer and more meaningful definition of the sources of income. I do this in terms of the definitions of certain items of gain for the income statement. The first is premium gain, which is the difference between the premiums earned by the company and the net premiums for the reserve and DAC that are offset against income. A second item of gain is the investment gain. It's basically net income on the net reserve assets plus interest required on the DAC asset which, in a sense, is an addition to the amount of investment income available for the product. I'll note parenthetically here, the universal life guidelines by FASB requires no interest earnings on the DAC asset. This almost inevitably requires that you'll have a

negative investment gain early on. That's one way of thinking about how the amortization must proceed more rapidly under that model.

EXHIBIT 7

ANALYTICAL FORM OF INCOME STATEMENT

		Statutory		GAAP	
	Premiums	100		100	
-	Reserve Net Premiums	100		65	
-	DAC Net Premiums			25	
=	Premium Gain		0		10
	NII on Net Reserve Assets	55		50	
+	Interest Required on DAC Asset			15	
-	Interest Required on Reserves	40		70	
=	Investment Gain		-15		- 5
	Reserves Released for Benefits	25		70	
-	Benefits Provided in Reserves	15		75	
=	Benefits Gain		10		- 5
	Reserve Adjustment on Terminations	65		20	
-	Benefits Not Provided in Reserves	60		0	
-	DAC Asset Adjustment on Terminations			10	
=	Termination Gain		- 5		-10
	Acquisition Expenses Deferred	20		40	
-	Acquisition Expenses	40		40	
=	Acquisition Expense Gain		-20		0
	Reserves Released for Maintenance Expenses	0		5	
-	Maintenance Expenses	10		10	
=	Maintenance Expense Gain		-10		- 5
=	Underwriting Gain		0		5
+	NII on Surplus Assets		5		10
-	Other Expenses		5		5
=	Income		- 0		10

Against these two plus items, the income on net reserve assets and the DAC asset, is the negative of the interest required on reserves. The difference between them is the investment gain for the company on the unit of business being measured.

You think of the next two gains together if you don't have sufficient information to split them out. Benefits gain relates to the amounts programmed into the reserves by the reserve assumptions used. The reserve released for benefits is

the amount used to pay them. The benefits provided are the amounts you actually pay as a company. The difference is the gain you receive.

I have a series of items that are adjustments on termination of the renormalization that I mentioned earlier. There's both an item for a reserve adjustment and a DAC adjustment on termination, and in the case of statutory reserve where the cash value benefits come out of that adjustment, that piece should be appropriately allocated there. When you're analyzing income this way, you have to be careful to interpret gains appropriately. A high termination gain is usually a bad sign for the company in that the company is going to have less profitable future business generating income.

The last two items of underwriting gain are the acquisition expense gain, which is the difference between amounts deferred and the amounts paid for; and the maintenance expense gain, which is the amount released by the reserves for maintenance expenses and the expenses experienced by the company. These items in total (the premium, investment, benefit, termination, acquisition expense and maintenance expense gain) I call the underwriting gain for the product. Essentially, these are income and expense items that relate directly to the product and do not include items that might be allocated to it by the company's financial reporting system. But those items are present, so I include them as the last two items before you arrive at the income for the line or product. These are the net investment income on surplus assets as an addition, and the other expenses that are not included in acquisition and maintenance expenses as a deduction.

The exhibits thus lay out an approach for performing this analysis. It can be refined in various ways; you can split the benefits gain into gains for different kinds of benefits, but I'm trying to give you a sense of how the analysis might be applied and what you would take into account for your own particular business.

In the exhibits I have worked out a fairly simple numerical example which shows the kinds of results you might see if you applied this to a company. I've done this on both a statutory and GAAP bases so you can see what's happening on both. In Exhibit 1, the standard form of income statement, note that the numbers are essentially the same for statutory and GAAP except for the increase

in reserves and the increase in DAC items. This would make you think under GAAP the company was doing alright; at least it had a positive income. Under statutory, it was growing fast and was experiencing surplus strain. These items alone, however, are not enough to tell you about what's going on.

Exhibit 2 shows an analysis of net investment income, and starts to show where the differences arise. Under statutory, the net investment income on net reserve assets is going to be higher because those assets are greater. Therefore, there are fewer surplus assets for a given line of business. The total would be the same under statutory and GAAP.

Exhibit 3, Analysis of Benefits, also shows differences in that the benefits provided in the reserves are essentially all the benefits for GAAP and for statutory, the mortality benefits. The benefits not provided in statutory reserve are those for cash values (lapses).

Exhibit 5, the analysis of increase in reserves is also different. Statutory net premiums are a lot higher than the total GAAP net premiums -- DAC and reserve. Statutory net premiums in this example are probably higher than you'd actually get from the net premium run off of the valuation system because I'm making an adjustment for the CRVM deferral. The CRVM deferral is equal to the difference between the beta (renewal) and the alpha (first year) net premiums under the CRVM method. Interest required is lower under statutory because of the lower interest assumptions. Reserves released for benefits are different. They're lower under statutory because cash values are not taken into account. There are no maintenance expenses provision in statutory reserve, but there are some in GAAP. Also the reserve adjustment for statutory is higher because it includes the cash value benefits. The analysis of expenses, shown in Exhibit 4, is the same for statutory and GAAP. Those are cash items and they're not going to be affected by the reserve methodology used. Exhibit 6 shows the analysis of increase in the DAC asset. This is where the difference between the beta and the alpha premiums appear. I did not fill out the statutory column for all items because the equivalent to DAC amortization takes place in the CRVM statutory benefit reserve and all those other items are implicit in the change in reserve analysis. Under GAAP, there are items for each change in the DAC elements: the expenses deferred, interest required, net premiums or amortization, and then the adjustment on terminations.

Finally this all has to be put together. Exhibit 7 is the analytical form of the income statement complete with numbers. In the premium gain, the numbers go together. There's a zero gain under statutory because I'm assuming that the statutory net premium takes up the entire gross. Under GAAP there is a gain of ten for the difference between the total GAAP net premium and the premium earned. In the investment gain, there is a significant difference in the analysis because of the low statutory assumptions. There will be a gain even if there is a loss of interest on a more realistic GAAP type basis.

Benefits gain on the statutory basis will be positive, generally, because of the conservative statutory mortality assumptions. On the GAAP basis, however, I have shown a small loss of more realistic GAAP mortality assumptions. Termination gain needs to be analyzed carefully, because a gain now means losses later on. A larger gain for GAAP occurs because on that basis gains are not required to fund the cash values paid out. Acquisition expense gain is an applicable item for statutory because there is some partial deferral through the CRVM adjustment; a $20 loss is assumed for statutory and a 1 for 1 offset for GAAP. Finally, a maintenance expense gain is assumed to be a fully negative item for statutory. This is because there is no explicit statutory provision for maintenance expense, but a small loss for GAAP because of an under projection of maintenance expenses. The underwriting gain works out be zero for statutory and slightly positive for GAAP. In the final analysis for this numerical example, you start with the underwriting gain, add the investment income on surplus, which is less for statutory due to the larger reserve, and then deduct the other expenses. What's left is the same income seen on the original standard form of income statement.

There are some problems with this method. I think the most obvious one is that to the extent that your reserve assumptions are not realistic, you're going to get gains that are not realistic. In this case statutory assumptions are not going to be as realistic as GAAP and, therefore, the method might work better for GAAP. However, the key to this method is developing these gains and comparing them to a yardstick. This yardstick may be expressed for the different gains as a factor times a base income statement item. For example, expense gain as a factor applied to inforce for maintenance expenses or premium for commission, mortality gain as a factor applied to inforce, or investment gain as a factor applied to the reserve assets. The important thing is to use the

yardstick and be aware of its deficiencies. In spite of that, this method works reasonably well. Risks not contemplated in traditional reserves also produce a problem for this method; in particular the cost of options for cash value insurance or single premium deferred annuities (SPDAs). This is not going to tell anything about them, and that could be a real problem for such kinds of business. Another possible problem is data availability, particularly since you need to break down items more finely than the form in which it may be readily available. The data availability problem, however, would be present in about any method. At least this method can be used first in aggregate and then it can be decided what kinds of splits should follow for each particular line of business.

In summary, first choose your yardstick, then express your goals in terms of the yardstick chosen, next measure the results against the goals (using factors applied to bases of income items) next take action when problems appear, and finally always be aware if the deficiencies of the method being used.

MR. SIBIGTROTH: We're trying to identify management information that will direct decisions which may be in contrast to the kinds of information developed for annual report purposes. We've talked about sources of gain and identifying, those areas involving the management of a business that need some fine tuning to get better overall performance. What about the use of segment profitability, that is, subdividing the business component so we are in effect putting together financial statements or income pictures for individual products, as opposed to a line of business or total company? Can you describe how a company might go about developing such systems, and how they might be applied to allow management to take some action?

MR. NICHOLS: I think that the pattern of analysis and monitoring of results I've described is something that can be applied at any different level of the business once the information is captured. There might be some problem in capturing that information, but that's a problem with any reporting and monitoring methodology. I think if you segregate the results, then you could apply this methodology to them, and choose appropriate yardsticks and measurement hurdle rates for any element of the business. The information is generally available on an aggregate basis but not as much a refined breakdown, and that's what you would need to develop. I believe, however, this information

could be valuable for reporting on a segment, or on a product group, or on a product once you organize the available information in this fashion.

MR. CARL B. WRIGHT: At Union Central we have actually gone to a breakdown for each product for which a breakdown makes sense. If you combined fixed premium life insurance, once known as traditional life insurance, and universal life in an analysis, the results wouldn't make any sense and wouldn't tell you anything about either one of those products. When we introduced single premium whole life, even though it had some elements that looked like universal life and also some elements that looked like the SPDA, we decided to break it out. The most difficult part of a breakout like this is, ultimately, the allocation of expenses. The allocation of investment income is not bad because we have assets which are associated with each product. The real tough nut is the allocation of expenses because that involves a certain degree of arbitrariness. If you're going to break lines down more finely, it's important to develop an expense allocation method that is more refined and allows more accurate allocation of expenses by line.

MR. NICHOLS: I definitely agree with that. In the financial management information system projects I've worked on with clients, often the biggest area of confusion and difficulty is breaking expenses down. This confusion also happens if there's a corporate area that's doing the breakdown. It will be providing expenses to the line areas which will say "those aren't our expenses." All kinds of go-rounds and political things happen before that gets sorted out, but it is crucial to have this breakdown. It's also crucial to allocate the expenses to the three categories I described: acquisition, maintenance, and other, because unless that other piece can be split out, decisions for profitability might not be appropriate. Consider a line that may be experiencing losses because it has a heavy allocation of corporate overhead. If company management decides to eliminate the line without replacing it with something else, a larger loss may result if that particular line is earning a profit before those other expenses. So because of this, I think that breakout is very important.

MR. JAMES A. GEYER: I'm just curious as to how you'd tie or whether you'd tie some of this work to pricing assumptions rather than reserve assumptions since you're focusing just on reserves.

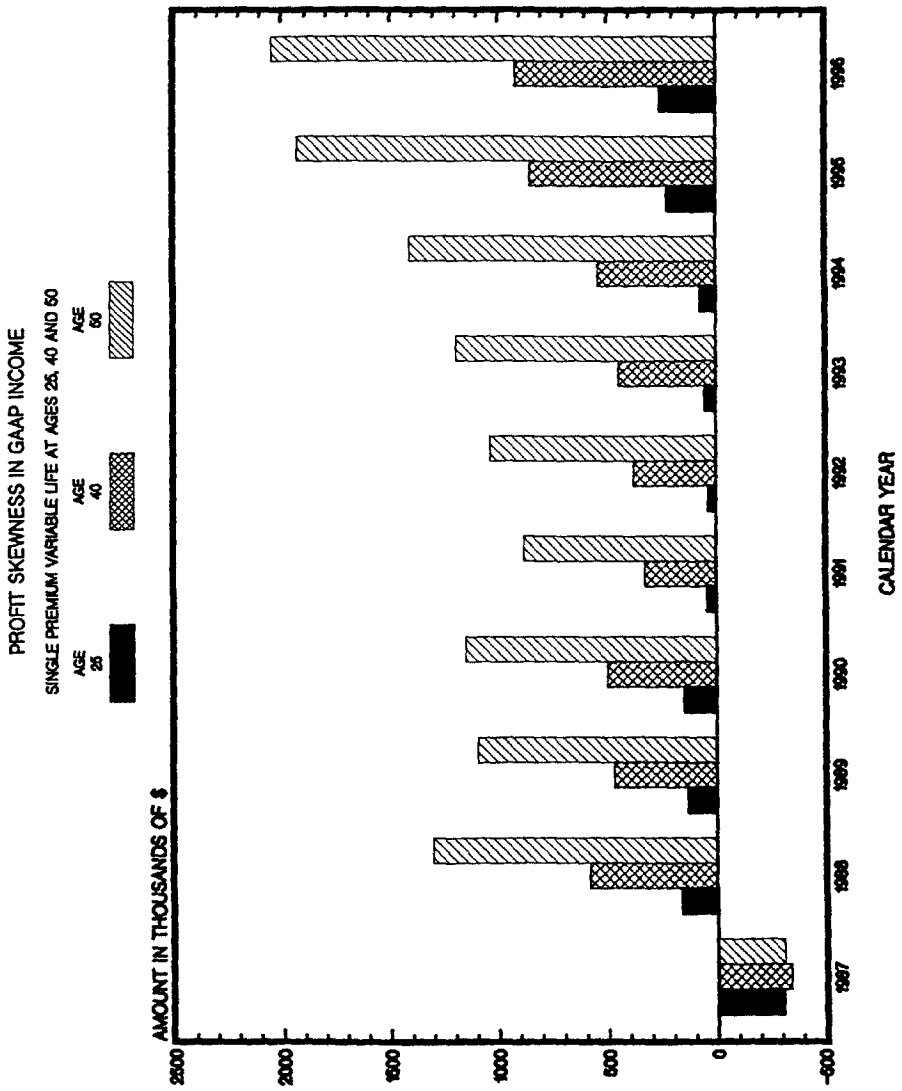
MR. NICHOLS: That makes a lot of sense in that the pricing assumptions are the most realistic expectation of the results of the business. Ideally it would be good to have a financial reporting system that had reserves and analysis on that basis. However, I think in practice to have these many separate systems, at least on a short-term basis, is undertaking too much work to get reasonable results in a short space of time. I'm presenting this analysis as something that a company could start out doing. One of the refinements down the road might be to calculate a reserve or a yardstick that is more closely based on pricing. It is a better basis to measure, but even at this point there are some bases that can serve as yardsticks.

MR. WILLIAM BOSSI: When you're working with companies writing flexible premium universal life in your reformatted income statements, do you make any changes in measuring the premium gain and attempting to measure a net premium? Do you define a net premium for a flexible premium universal life?

MR. NICHOLS: A lot of that would depend upon the kind of reserve methodology they were using. In a sense, the question of premium gain is not really an important one, if the reserve assumption assumes that 100% of the premium goes into the fund. If that's the case, there would not be a program premium gain going forward. If there is a premium assumption and a reserve that is different from the fund, in this type of methodology you would see how much premium came in without projecting future amounts of premium, and find out what the gain was in that year. In other words, if you have a percentage of premium assumption for net premiums, you could isolate that element of income in that year by applying the net premium factor to the premiums actually received. In general, one advantage of this method is that it starts you with a clean slate each year. You're renormalized in the same sense that the reserves and DAC themselves are renormalized in dynamic methodologies; you just want to see what's happened in that year of business as far as gains and losses go.

MR. SIBIGTROTH: I would like to make a few comments about agency financial systems. Again, the key word here is control. We want to develop financial information that will help us control our business. One of the issues that we have is what I call profit skewness. That is, profitability of the product across the issue age spectrum or the underwriting class will vary. In Table 1, we have an illustration of a single premium variable life insurance contract at ages

TABLE 1


PROFIT SKEWNESS IN GAAP INCOME
SINGLE PREMIUM VARIABLE LIFE AT AGES 25, 40 AND 50
AGE 25
AGE 40
AGE 50
AMOUNT IN THOUSANDS OF $
2500
2000
1500
1000
500
0
-500
1987
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1996
CALENDAR YEAR

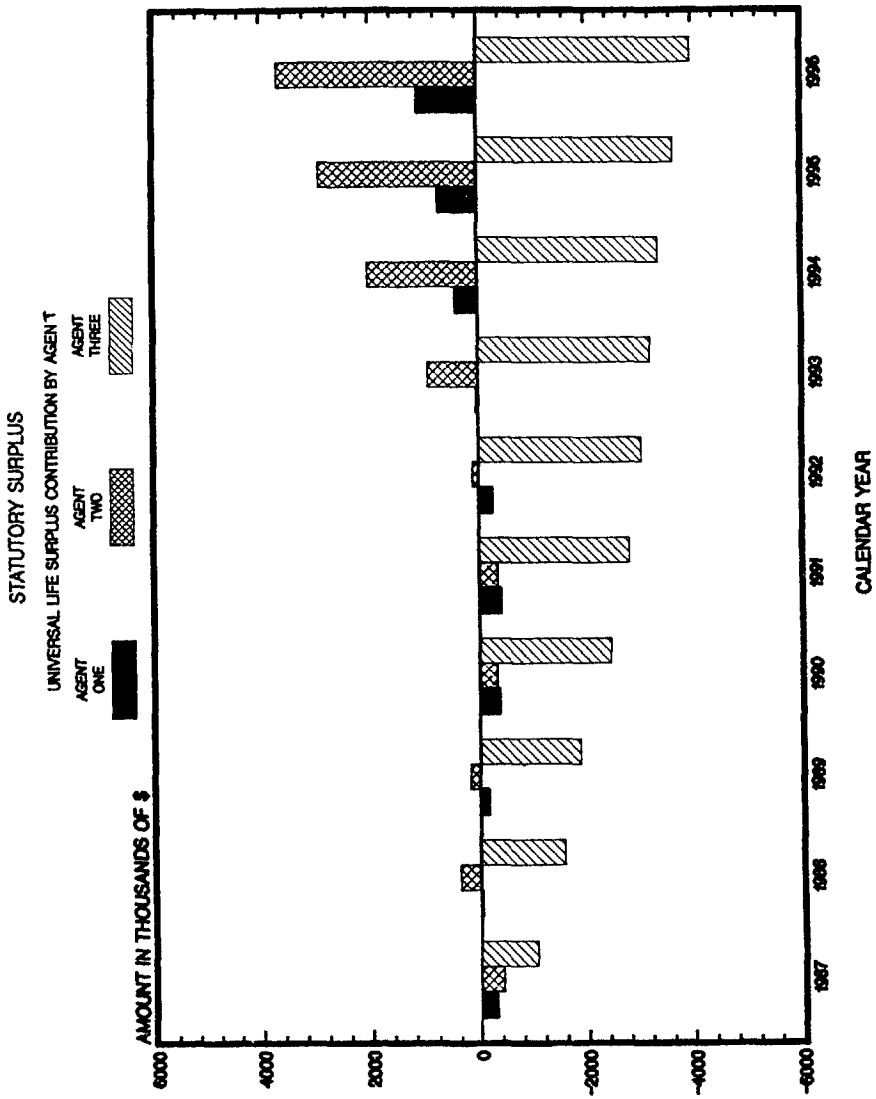
25, 40, and 50. The bars represent the GAAP income contribution. Now the differences may be caused by regulatory constraints; SEC requirements regarding the product's structure. It also could be due to the overall pricing strategy of the company; that is, they may attempt to employ the mix of business, being a somewhat reasonable distribution, to make money for the firm overall. The problem with that strategy, as it relates to the agency community, is that an increasing number of actuaries are working for marketing organizations. These actuaries are doing the inverse of this approach to identify those areas where a product is particularly competitive, and to identify market opportunities where they can be aggressive. If they employ this strategy to a great degree, it can pose problems as the company's mix of business changes. So if you have profit skewness within your portfolio, that's something to watch for.

Another thought might be to develop surplus positions for different agencies. Table 2 shows the universal life surplus contributed by three agents. We have a profit picture with a substantial loss to the company from agent three. The question is what is this agent doing to us and how can we better structure our marketing program to deal with such agents? In the case in question here, agent three has been rotating much the business onto different contract forms and as a result, the assets haven't remained with the firm.

Another concern is that some agents may lack the revenue base to support home office administrative costs; that is to say, if a company is selling less than $100,000 through any given agent, the cost of servicing and supporting that agent may quickly erode whatever profit opportunity they'd get from less than $100,000 in sales.

The displacement of inforce business is a particularly intractable problem. Agents and marketing people would typically suggest as a defensive move that the company offer a more aggressive interest-sensitive design to protect themselves from losing the business to other companies. However, the profit impact of such a move is hard to measure and it's not clear whether this is a good move to make from the company's perspective. It's hard to measure because it is difficult to know how much of the lapsing business would renew with the company under a different contract or would renew with someone else, and how much of the company's old business could be retained by the new product.

TABLE 2


STATUTORY SURPLUS
UNIVERSAL LIFE SURPLUS CONTRIBUTION BY AGENT
AGENT ONE
AGENT TWO
AGENT THREE
AMOUNT IN THOUSANDS OF $
6000
4000
2000
0
-2000
-4000
-6000
1987
1988
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CALENDAR YEAR

But in terms of the overall profit picture, how will the asset retention and profit structure of the new product compare with the old one? Looking at the business as a whole, it is not at all uncommon to see inforce business profit margins of four to five times that of the new product. In such situations it may be viable to play, what I call the inertia, that is to say, leave the product in force, work with a lower base, but also take a much higher margin per unit.

In looking at this picture, you want to be careful to deal with the obvious marketing concerns of who we are affecting? You may have an individual in the field who is selling individual annuity business and you're thinking of reducing the interest levels for that business. You may want to be sensitive, though, to other business that he's writing with you in more profitable areas.

Many universal life and flexible variable contracts are priced for fixed target spreads which depend greatly on asset retention. For such products, it's not only important to measure contract lapsation, but also to review premium continuation on inforce policies. This is because of high front-end charges and a limited fixed spread resulting from an asset base that in some cases is unfunded. One means to help measure some of this is to develop a reporting system by individual agent which shows for both inforce and terminating business the annualized premiums, the reserves or assets and the volume of insurance by duration. This would be subdivided by major product categories. This could be very effective in identifying those people taking portions of their business at different durations and moving it to other companies, or those with problems retaining some of their inforce business. It's also helpful to identify agents who are successful in certain markets. However, it will have no teeth unless it is inserted into operations, or becomes part of the compensation package either for agents or home office marketing people. It's important to introduce this as part of the persistency bonus or part of an agent deferred profit strategy to get them to be more interested in the results. Again, given the introduction of flexible premium and mutual fund sales, it is important to consider not only the premium changes but also asset changes. It is very important to identify asset migration that may occur at later durations. For example, it's not enough merely to retain assets under one vehicle for three or four years, but to hold onto it for a longer term. Also, these systems should be real time. We should have this information within a few days or a few weeks after the close of the accounting period, either monthly or quarterly.

MR. NICHOLS: Alan, I want to make a couple remarks on measuring agent profitability. The situation where it is necessary to terminate an agent because he is not covering the cost of servicing him, is a good example of where it's important to analyze these costs very carefully. If there are any fixed costs in that calculation, then eliminating the agent could mean a net loss to the company, because he is covering his variable and perhaps a portion of the fixed expenses. In other words, when you're looking at the cost of servicing the agent, you should be concentrating on the cost that your company would not have if the agent weren't there. The other point I want to make is that in measuring agency profitability, I think it only makes sense to measure profitability on the items that the agent himself or herself can affect. These include persistency, mortality, and morbidity in the early durations. Measuring them that way could produce a repercussion on pricing to make the product economical. You might want to adjust the commission scale so as to normalize the amount of profit per dollar of commission cost that you pay to the agent.

MR. WRIGHT: We've talked primarily about life products and now I'd like to turn our attention toward disability income. My example is going to be based on disability income because I've come to understand in the context of our operation how important that's become. I'm going to be dealing primarily with what might be broadly termed operational issues, but you will find in the course of what I have to say that I cover a lot of different areas. There is a close interrelationship between these operational issues and the general financial management and marketing of the product with the marketing itself affected by your distribution outlets. Disability income is for my company essentially a new line of business.

First, I'd like to describe our product organizational setup and its history at Union Central. Prior to 1981, we had a product that was not competitive. It was basically an accommodation product for our field force, and the sales on it were very limited. In 1980, we were approached by an outside company which asked us to develop a competitive disability income product that it could sell under it's name. Decisions made in prior years, favoring expansion of our field force, fit in with this product idea. It would be good for the client company, as well as ourselves, in attracting a new kind of agent to Union Central.

Because of this outside stimulus, much effort was put into establishing an active and competitive product line. Since no one had a firm handle on disability

income, and because of the importance of making it work properly for client companies as well as ourselves, we established a disability income committee. Initially, this committee reported to our president. After a reorganization, it reported to the head of the individual operations.

There are a number of problems with committees being responsible for a product line. First, there is no one who can make a decision. It was very difficult to define responsibility. More recently, we ran into what I call turf issues. These issues are questions of who will make the recommendations that will be accepted, to what extent will marketing play a role, and to what extent will the underwriting department play a role. When all is said and done, where does the buck stop? So out of necessity, I stepped into that vacuum for the company two years ago. I simply decided that I had to be the one to start making some decisions about the disability income line and the direction we were going to take.

In designing your product, you have to define the market you're going to be in. Union Central established that it wanted to be in the professional managerial market. There are many terms for those classes, but they're typically the highest two classes to which disability income is sold. In addition, we needed to be able to provide income to the support staff of those people who we were selling in a group type situation.

For the disability income line, if you're going to be in a competitive, aggressive marketplace, you have to keep up with the Joneses. That's the best way I know to describe it. However, keeping up with the Joneses is not an easy task. From the marketing standpoint, you're never caught up with them, you're always behind. They'll tell you what they want in terms of enhancements today. Then they'll say, once they get these enhancements, which will take us about six months to implement that we're all ready a year behind. It goes on like this, and part of managing the product line is managing the benefit provisions and enhancing them, or as I say, keeping up with the Joneses.

Because Union Central Life had virtually no volume prior to 1981, and it embarked upon a new line of business, it had to watch out for the elephants. By elephants I mean the big companies in disability income that can afford to do things that we cannot, because they've got the income to support it. If you

don't watch out, and you take the best price and the best benefits without recognizing some of this, you can get stomped on by the elephants acting in their own best interest.

We market our product through three different types of marketing outlets or distribution systems. The first, which surprisingly supplies the smallest portion of our business is our career agency system. This is an agency system where you bring new people into the business and you grow them through the business. You have to teach them life insurance sales before you teach them disability income sales, which is a much slower process.

Our second major outlet, and the source of 35% of our business, is our special marketing agencies. These are not career agencies. These are experienced agencies, ranging from one to as many as 40 or 50 agents. If recruiting new blood is done, the agencies do it, not the company.

The remaining 50% of our business comes from our client company relationships, where we sell essentially the same product, but we sell it on their paper. The characteristics we look for in a client company are the same as we look for, in agencies, whether it's the career agency type or special marketing agency type, also called a personal-producing general agent (PPGA) operation.

Having established your product design, there are a number operational management issues that you have to deal with in the context of managing the product line. The first I would call pricing benefit issues. I've already alluded to the necessity in a product line like disability income to keep your policy provisions current and competitive. If you don't you're going to find that your agents will start giving their business to other companies and you also may lose life sales as well.

You have to provide flexibility in your contracts. That is absolutely essential. Flexibility means modularizing or building your contracts in a way so that they can be combined in various ways that still result in an integral product. That way you don't produce situations where one combination of benefits is very competitive and another combination of benefits is not even in the ballpark. In a product line like this, we see the same situation in disability income as we do in the life side if you fall behind in product development. What ends up

happening is the policy is rewritten and replaced by other companies. There's also the issue of internal replacement and rewritten policies as they are upgraded. So part of building flexibility and modularity in your contracts is to allow old policyholders the latest benefit update. It can be something given to them automatically if there's no increase in premiums associated with it, or if there is, then go out to them with the option, but it prevents rewriting the contracts. Again, having to rewrite the contracts a lot is very expensive from the viewpoint of maintaining the block of business.

It is important to maintain a proper relationship between pricing and underwriting. Of course, there are always tremendous pressures to be more liberal in underwriting, but you have to determine if pricing can afford it.

There are also financial issues to be considered. An investment strategy for a disability income line is needed. It's going to look different from the investment strategy for universal life, for single premium whole life or annuity. It must be known what the cash flow characteristics of the line are. You then have to develop an investment strategy associated with them. Don't worry about cash value cashouts, but be very concerned about claims. Know the timing of the cash flows and develop an investment strategy that will properly support them. Also, try to maximize the investment income earned by the line, consistent with cash inflow and outflow. Investment income is critical to the profitability of a line like disability income as much as any other line, because a fairly sizeable asset base is developed -- although it develops and has different characteristics than a life insurance product. A related matter is managing a new line, trying to decide how to control its growth. If controlling the growth of the line fails, an untenable surplus position in the company may result. Do not look at the growth of this line outside the context of the entire company. Manage within the company's total surplus and the company's total ability to support a new line of business.

One thing I alluded to before was the importance of expense allocation and control. We're talking about a product that doesn't have a lot of margin. I'm not sure this is any different from many other products today. But often, what happens with disability income, is that a person will say they spend about 10% of their time on it. If the base over which that expense will be allocated is small, 10% of their time becomes a large number. What if the real answer is 3% or 2%?

It takes a lot of effort to get people to think small. Even though the disability income line in our company generates about 15% of our premium, there are some areas that say they spend 5% of their time on disability income. If you look at it, the answer is that they spend 1/2 of 1% of their time. They've allocated 10 times too much expense to that line of business. So in a company where a line is not your major line of business, it's important to get reliable expense allocations. Remember, though, that if the expense does not get allocated to the disability income line, the money was spent so somebody's going to get it.

That raises the issue of who's going to get the money, and who's going to get the expense? But it's part of managing the line -- making sure that allocations among lines are appropriate. I'm in the unusual position of having to be concerned about the expense allocations to every one of the individual product lines because its my role. But it's still important to me that it be accurate. If people are spending time on a product line such as disability income, but they don't allocate any time to it, then I'm getting a misleading picture of my expenses. It's not my desire to overcharge or subsidize it, so I'm looking for accurate expense allocations.

In a new line, reinsurance is extremely important, so look at what your need is before determining what kind of reinsurance to get. Is your concern initial drains on surplus, or is it the risk and the claims? In other words, there are the same considerations as any life insurance product. This will help you determine whether to go the coinsurance route, which implies you're looking for support for claims on amounts over a certain level, and also that help is needed with the surplus strain. Extended wait reinsurance is not going to provide surplus help on the initial strain, but will provide some expense reduction and administrative reductions in cost from not having to reinsure short term claims. A third approach is a stop loss reinsurance. This may be appropriate if your concern is primarily major adverse deviation.

System support is another area that is essential to managing the line properly. We all know that most administrative systems are geared to life insurance products. Disability income has enough unique characteristics that it doesn't fit those systems. You can't make it fit because if you tried, the result would be records with information that's very difficult to understand. So it's important to make sure you can support this product and its flexibility as you're developing

systems. The way disability income products are designed today, more flexibility is needed with them than with the universal life product, and yet they're all very different. As you think about systems support, you must think about reinsurance needs and the ability of your system to handle the reinsurance administrative detail needed to properly administer the reinsurance. I've talked to many companies about reinsurance systems, but they are all life systems. In 1980, when disability income was an accommodation line of business, I would guess that we had 250, maybe 500 disability income policies reinsured. Today, with our own volume of new issues plus our client company relationships, we're reinsuring somewhere in the neighborhood of 5,000 policies. I would say in another five years we'll be reinsuring another 10,000 to 12,000 policies. This is significant enough that we have to have a good system to handle these policies.

Another essential support is a claims payment system. Presently at Union Central, we don't have a good claims payment system. As we developed experience systems we found that it's virtually impossible to get the kind of data needed. So if you're going to be in a product line, this is a system that's more essential to the administration and management of the block than for life insurance. Life insurance purchasers die or they surrender. But here you have to be aware of all the different ways they can get benefits in order to check out your pricing relative to your benefits.

The next area I want to talk about is performance management. Some may say that's a contradiction; you can't manage performance. I think you can manage performance, but before you can manage, you have to have both the systems and the staff to measure it. I want to share a personal example. Last fall we did a product profit review of the disability income line for the senior management of our company, including the president, all the executive vice presidents, the senior actuary and a number of other people. The president said to me, "Can you tell me what the margin is on this product?" My answer was, "No, I can't." I did not at that point even have an asset share model that would tell me what the product profitability was on any basis. We had started the development of this product with a consulting actuary whose basic orientation was toward providing data needed for filing the product and meeting the state requirements for filing. It did that very well, but unfortunately it didn't tell me a whole lot about the product such as, what the effect of persistency was, or how much investment income was being earned or what contribution was

being made to the operational profitability of the product. Basically, I had an underwriting model that said here's your claims, here's your premiums and here's your loss ratio, and, unfortunately, it didn't tell me a whole lot more. So we went to work and finally developed an asset share for our disability income line.

The point of this, however, is that you have to have the tools to do the job just as you do for life insurance. What I'm speaking about in terms of any of these issues is true of disability income as well as life insurance. I use disability income as an example because I think we started out farther behind with our disability income line, but I have come farther over that time frame. Part of being able to measure or manage any line is having the necessary staff. I'm a rather firm believer that you only make money if you spend money. I mean you spend it judiciously and wisely, but you must be able to measure what is happening with your line. You cannot assume that it's all going to work out.

The next area is beginning to build an experience measurement system. We're finding this rather difficult, because we don't have an adequate claims payment system and much of that has to be done manually. Once you've built the systems and staff and you begin to measure, you'll find there are a number of essentials in measuring the performance. Terry gave us specific ways of looking at the results, particularly for life insurance. There are some parallels for health insurance that you can use to the extent possible when trying to analyze your sources of gain. We're not doing as well with that as we are on the life insurance side, but it's obvious when you have a client distribution system that it's essential to be able to measure your performance by company. Measurement of the aggregate can make it look like everything's okay and it may be true. It's the same issue Alan raised in terms of the particular agent who's not doing a good job for you. Instead, you may have a company that's not doing a very good job for you.

Because of our multiple distribution system, it's often essential to be able to measure the results by each separately. There will be differences between business sold through a career agency operation where you have the agent's loyalty and the others where we may be their primary carrier but we certainly are not their only carrier. We discovered a problem in one of our client companies that required our attention. First we identified what states the problem

was in. You have to be able to analyze your data by the state in which you're doing business, because there are some states which may create problems for you. It's obvious that you want to be able to get down to the agency level. I don't know what the size of your company has to be to get down to the agent level, but we have done a little measuring at the agent level in situations where we've been asked to do it. I think what's more important is that on the marketing side companies have become very conscious of the need to measure at the agency and agent level. They're very concerned about the quality of business that's coming in; for them it's become a lot more than just getting the business and assuming that if we take care of the sales, the rest of it will all work out. They've particularly become conscious of the cost of acquiring the business, so much so that they've taken a very close look at how they compensate their career development agents, and the companies asking whether they are compensating the agents for the things the companies want to accomplish. What they've found is that at this point the answer is no. They have a number of career agency managers who are making a very good income, but not for doing the right things. There's a mentality that if a company brings in 25 new agents over a period of three years maybe two or three will survive and the company will grow. But what's happening is a tremendous amount of money is being spent. The agents aren't validating and they're really not producing business, yet they're compensated for bringing in new agents. They're not compensated for validating them. As you measure performance, it's essential to have the cooperation of the other areas of the company that are affected by this measurement and ensure they're measuring what they're best at measuring. We've had a lot of cooperation on that point.

A final area of measurement involves your various policy provisions. That goes beyond looking at just the policy itself, and includes verifying the elimination period, and the benefit period, and knowing if you're being selected against on certain riders, or whether certain elimination periods are underpriced or overpriced. As Alan said, whether they have actuaries or not, agents are very good at finding out where you're most competitive and also where your weak points are and exploiting those. I'm not using that in a negative way. Agents are doing what they're paid to do. They're paid to do the best possible job they can for their client. So if you allow them to do it, you're going to pay the price.

I'd like to talk about the financial management of the business. One of the issues to face when you're entering a new line of business is how much it's going to cost you to get into the business. This is true with any product you bring out, you need to know the cost of bringing that product on line. I suspect if your company is like mine, there are many of you who do not know what that cost is and whether it's worth it. If you've made the decision, though, that you're going to go in, a problem you face is funding. This gets back into corporate financial management issues. Do you fund the product out of corporate surplus? Do you have corporate surplus? Do you fund the product out of another line's surplus? If so, how do you repay that surplus? There are a number of questions of this nature. In addition to the development or initial cost of getting the block or product up and started, there is a rather long, ongoing investment as the block grows. I'm going to give you an example that's from our situation based on actual results and some projected results for the first 10 years of this product.

We started this new disability income line of business in 1981. The current premium growth has been quite rapid. After 1987, it's projected at a relatively conservative growth rate of about 15%, but if you look at our historical pattern up through 1986, the growth rate has been significantly in excess of that. Again, part of the reason for that is when you start from zero, you grow very rapidly. We don't expect operating losses to start turning around and getting smaller until about 1989 or 1990. I've done some ballpark projections on this, and it's my estimate that it'll be 13 years from the time we first start issuing this, product before it will show its first annual gain from operations. In the past, I don't know if the companies have ever recognized this because they have always had a large block of renewal business to support the new block. But we had essentially no renewal business to support this block. So we've had to deal with the fact that we're having long periods of losses, 13 years before we see possibly our first positive gain on this line of business. Now just for your information, by the time that 13 years arrives, we will be $25 million in the hole. We will have borrowed from someone's surplus to do this. I estimate that it will take approximately to the year 2000 to finally have the disability income line out of the hole, in other words, we still won't have a surplus for the line, but we'll break even after 20 years in the business. My purpose of relating this is to show the importance of managing the portfolio as closely as you can. To me this is what product portfolio management is all about -- knowing where you're going

and when you're finally going to get your head above water, because all management sometimes sees is the annual numbers. It's very difficult for them to see when you're going to come out of the hole or to recognize the investment that the company's making before it comes out. The only reason the losses stay that way is because of the tremendous growth in the line. It's basically a very profitable product, but that's hard to see when you look at those numbers. In order to recover your investment, you have to develop a critical mass when entering a new line of business. I define critical mass as the volume of business that allows you to withstand some adverse deviation in your experience and to begin to fund your growth. It's important as you design the line to balance the profitability and the competitiveness of the line of business, in order to recover the investment. You have to be able to measure your returns and to measure them, you have to know what to measure them against. You also have to know what your objectives and goals are. My company is really just beginning to go through that process of saying what kind of return should I get on a product like this? How should I even measure that return? Should it be measured as return on investment? Then you get into questions like how do you define investment? Return on equity? What's equity for this product? It is important to define surplus goals, what I call benchmark surplus goals or risk surplus goals. This is the amount of surplus that I need to have with the line to protect me against the C2 risk in this product. Then I have to put all this together with road goals. You ask yourself when do I want to break even on this line of business and what do I have to do to get there? How do I get there, and how far have I come?

I've tried to provide a really broad perspective of product portfolio management. There are many elements to it -- how much it costs you to get into a line, and thinking about how you're going to recover those costs, because you've got to do it if your company's to be a viable entity in the future. So what I'm saying applies not just to a single line of business, but to your entire company as well.

MR. SIBIGTROTH: Carl, I'm curious to know how you were able to get another company to come ask you to build a competitive product with such a meager offering.

MR. WRIGHT: You mean the old product?

MR. SIBIGTROTH: The old one.

MR. WRIGHT: What they saw in our company was our surplus to do it. They didn't see the product. That was the impetus for the product. They came to us and asked if we would be willing to develop an aggressive, competitive DI product that they could market under their name. Our company had made some earlier decisions about getting more aggressive product wise and also about expanding our distribution system. This was an opportunity to do that and so without knowing what they were getting into, our company agreed to do it. Then we hired a consulting actuary to develop an aggressive competitive product for them. But we didn't have one when the company came to us.

MR. NICHOLS: Carl had mentioned that the analysis I had shown could be applied in some respects to the disability income business. I wanted to show a breakdown that one might want to use when analyzing the business as an example of how my analysis can be customized for different products. I have illustrated this in Exhibit 8 for the benefit gain which is shown as just one item for life insurance. You can break it up into an incidence gain and a termination gain by comparing active life reserve released for claims, to new claim reserves established and then claim reserves released to claims paid. This is an example of how you can make the splits and the analyses that would be appropriate for whatever line you're dealing with.

EXHIBIT 8

BENEFIT GAIN ANALYSIS -- DISABILITY INCOME

	Active Life Reserves Released for Claims
-	Reserves Established for New Claims
=	Incidence Gain
	Claim Reserves Released to Pay Benefits
+	Claim Reserve Adjustment on Termination
-	Claims Paid
=	Termination Gain

MR. ROBERT J. HONKOMP: When you had your operating gain, showing a loss for 13 years, was that on a statutory basis?

MR. WRIGHT: Yes. One of the criteria that we have overall in the company is that we have a positive blue book bottom line. So at present, a lot of our

measurements are related to statutory. We recognize that we need to look at some other methods that may be more appropriate for management-based reporting such as a measurement based on cash flow surplus; statutory is a starting point for us. We had to start somewhere because we hadn't ever done it before and this was what we chose as our initial starting point.

MR. GEYER: I'm curious. With that 13-year loss, what did you look at to justify getting into this market? It doesn't look like something the company would want to get into.

MR. WRIGHT: The company in about 1980 was in the situation that if it didn't do anything, it was going to preside over the runoff of its business. It felt that with the surplus and other resources available, it was possible to become really very active in the insurance marketplace. The company realized, if it wanted to be around in 20 years, it was going to have to make a major investment. I'll be very honest with you. When the company went into the disability income business, it had no idea what it was going to cost or how long it was going to take to break even. Because a lot of the actuarial data that were supplied at that time were focused on one year's issues, and there was a presumption that growth would be supported by the inforce block of business. But we went through a quantum leap from 1982 through 1985 when we doubled twice or three times, in terms of sales. The result is a new issue base that is remotely related to our renewal base. We now have to recognize the importance of growth and critical mass for the company not only in this line but in all lines. We realize we have to manage where we are financially. I don't think they expected the kind of growth they got and this caused a big management problem. That's why I raised the issue of controlling growth.