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INTERNAL FINANCIALS

*Moderator: ROBERT D. SHAPIRO. Panelists: GARY CORBETT, J. PETER DURAN, JAN L. POLLNOW.
Recorder: DOUGLAS J. JANGRAW*

This panel will address the design and application of internal financial statements.

I. DESIGN

- . Identifying who needs information and why
- . Determining business segments
- . Treatment of surplus, overhead, indirect and developmental expenses, investment income, income taxes, capital gains and losses, and dividend scales
- . Determining statement format(s)
- . Calculating gains from each defined performance module
- . Establishing reporting distribution and frequency
- . Resolving key issues...e.g.:
 - Relationship of financial statements to strategic goals, annual plans and pricing assumptions
 - Relationship of financial statements to individual and unit/department performance measurement

II. APPLICATION

- . Identifying deviations from expected
- . Use in effective management of business

MR. ROBERT D. SHAPIRO: Internal financial statements are perhaps the most powerful communication mechanism that we have, assuming they are designed properly. Proper design means:

1. Reflection of the mission of the company; and
2. Consistency between corporate goals, manager goals and rewards, and the pricing mechanism.

Proper design does not mean modifying existing statutory or GAAP financials to a more realistic basis. Although reconciliation of internal financial results to normal accounting results is ultimately needed, it should be the last step in the process, not the first one.

Why is this order so important? The way we do things in a life insurance company is the product of the interaction of our people and structures with their beliefs about what is important and how things work. Without first dealing with our perceptions, beliefs, and organizations through clear

mission and goal consistency, modified internal financials will not change the way we do things and will do little more than add an additional six inches of computer output to the CEO's desk! The internal financial management system is a powerful agent of change (through communicating changes in what is important and how things work) but will not by itself change the fundamental nature of the company.

Consider a traditional company (i.e., one with conservative values and beliefs, technical managers, functional organization, and a problem-reduction/risk-minimization orientation) that wants to become aggressive and creative. Installing a new "realistic profit" financial system will do little unless other changes precede it. If a clear new "aggressive mission" is established, with creativity and risk-taking clearly identified as important, profit centers rebuilt around the key performance and business areas of the company, and with all new elements reflected in the internal financial management/manager reward systems, the resulting new internal financials will produce a strong and effective message of change.

MR. GARY CORBETT: My comments this afternoon will cover the topics shown in the program listing under "Design". I shall address each of the subtopics, but not in the order listed. My approach to these topics will be conceptual. I'll not be referring to approaches used by specific companies. My comments should be equally applicable to stocks and mutuals and independent of the basic organizational structure.

My definition of internal financial statements is: "statements that purport to produce a bottom line earnings figure and are not required by any external entity." The order of my talk will be as follows:

1. Determining business segments;
2. Identifying the uses of internal financial statements and who should receive them;
3. Establishing reporting distribution and frequency;
4. Determining statement formats;
5. Calculating gains from each defined performance module;
6. Treatment of surplus, overhead, etc.;
7. Some final comments relating to key issues.

I. Determining Business Segments.

First, the reporting for business segments should follow the company's hierarchical organization. Financial results should be consolidated at the same levels as management responsibilities are consolidated. I will use "corporate", "division" and "unit" to refer to a company's hierarchy.

Another aspect regarding the determination of business segments is the size of the smallest segments measured. How far down in the organization should internal financials extend? There is certainly no single answer to this question, but I would suggest the following criteria:

1. Materiality - size of segment compared to the other segments with which the unit will be consolidated;
2. Single vs. shared management responsibilities;
3. Arbitrariness of overhead and other expense allocations;
4. Could the segments stand alone? To the extent a segment can stand alone, it undoubtedly deserves separate treatment.

II. Identifying The Uses Of Information And Who Needs It.

I've identified seven uses for internal financial statements. I doubt that it's a complete list. The users will vary somewhat according to the specific use but will generally include all management levels at or above the segment being measured. You will probably want more consolidation as you move up the ladder.

The seven uses I have come up with are:

1. Planning - use of pro-forma statements for both operational and strategic planning;
2. Allocating resources;
3. Analyzing results;
4. Indicating the necessary corrective actions and testing alternatives;
5. Controlling (performance to plan);
6. Assessing performance;
7. Rewarding performance through compensation tied to financial results.

III. Establishing Reporting Distribution And Frequency.

1. Distribution.

A question that sometimes arises in this area is the extent to which a segment manager should see the financial results for the major business unit containing his or her segment or the results of other segments. This depends on corporate philosophy, but I would prefer distributing to the segment manager the results at one higher level in the company so that the manager can see how his or her segment results compare to others. However, I would not necessarily show that segment manager the breakdown of another segment's results. For example, the divisional

manager would receive the results for his or her units and the total company results, broken down by division, but would not necessarily see the unit results within another division.

2. Frequency.

The major question as to frequency is whether earnings statements should be prepared more frequently than annually. I believe this answer depends on:

- (a) Frequency of external statements.
 - If quarterly GAAP statements are required, then it is much more likely you will want to produce internal quarterly statements also. These are valuable to explain GAAP results;
- (b) The ease of producing statements, including analysis of earnings.
 - I question the effectiveness of internal statements if there is no accompanying earnings analysis;
- (c) If we do not produce quarterly statements, we must produce certain interim reports that would include information on important components of earnings, such as expense comparisons, lapse and mortality ratios, etc.;
- (d) Planning orientation and cycle.
 - Mid-year statements are very valuable in developing financial and business plans for the coming year. Also, nine-month statements are frequently used to refine such plans.

IV. Determining Statement Formats.

I am not going to suggest a specific format, but I believe there are certain criteria that should be followed:

1. Simplicity.
 - Explanatory labels for components should be expressed in layman's terms;
 - The selection of components should be such that it is easy to explain what impacts each segment;
2. Not subject to change from year to year;
3. Produce only one net earnings figure.
 - Don't give the managers a choice of emphasizing one or the other (e.g., a dollar result or a return on investment (ROI) percent);
4. Preference for dollars, rather than percentages, as a single measure, because it is easier to display the impact of changes in pricing, expenses, etc.
 - ROI or return on total capital (ROTC) cannot be ignored, but should be a factor in accepting or rejecting plans, rather than in ongoing financial reporting;

5. To the extent possible the sum of the unit results should equal the division result, and the sum of the division results should equal the company result. However, this should not be forced. It is preferable to use reconciliation lines to handle such items as the impact of consolidating taxes or of true overhead at either the division or company level.

V. Calculating Gains From Each Defined Performance Module.

I am not sure exactly what was meant by this sub-topic, but I will touch upon the hierarchical problem. Any of you who have attempted to analyze life company earnings know that there is always a problem as to which experience item should be varied first. For instance, if you have experienced higher than expected lapses and higher than expected interest earnings, should you value the impact of lapses using expected or actual investment earnings? Similarly, should the impact of the higher investment earnings be valued using expected or actual lapses? My preference is to assign the highest priority to those factors assumed to be most under the territories' control. In my example of lapses and investment earnings, I assume that lapses are more under control (this could vary depending upon company responsibilities), and thus, I would value the loss from higher than expected lapses using expected investment earnings. I would then value the extra profit resulting from the higher investment earnings on the basis of actual rather than expected lapses.

Needless to say, approximate methods must often be employed to analyze earnings. I believe we are seeing moves to more robust evaluation systems that can do this very accurately.

VI. Treatment Of:

1. Surplus.
My preference is to allocate required surplus to each division with the remainder becoming corporate surplus. Looking to the future, I would require a contribution to corporate surplus based on the characteristics of the business, with any balance over and above the required contribution being retained by the division.
2. Overhead.
Overhead should be reduced to the extent possible by fact-based allocations or agreed-to splits. I believe it preferable not to allocate true corporate office expenses. These expenses are better funded from contributions to surplus required from the divisions. (The extent of such corporate office expenses could affect the magnitude of the required surplus contribution from the territories.)
3. Indirect and developmental expenses.
Most development should be charged to the appropriate territory, but I would permit financing some major developments out of corporate surplus.
4. Investment income, including capital gains and losses.
So far as allocating investment income is concerned, assets should be identified as closely as possible with specific territories and product

lines. This is necessary for separate accounts, desirable for new money base products and optional for portfolio based products. The more specific the allocation, the easier it is to produce internal financial statements. One must be aware, however, of the possibility of sub-optimization of investment results if the allocation of specific assets is carried too far.

Capital gains could be a topic for an entire workshop or panel discussion. I'll satisfy myself for now by saying that capital gains, both realized and unrealized, should be included in investment income on some reasonable amortized basis. The Canadian statutory approach is one example of this. It is not perfect, but it is considerably better than not including capital gains in earnings at all.

5. Income taxes.

Bottom line earnings reported should be after taxes, to the extent possible, but the possibility that corporate tax might be different than the sum of territorial taxes must be recognized. One should not be adverse to using a reconciliation line to provide for this. The important thing is that territorial management recognize the after-tax impact of any plans or operating decisions.

6. Dividend scales.

Admittedly, the problem of providing for dividends is a new problem for me, having recently moved from a stock to a mutual company. Dividends should be specifically valued in any approach that recognizes the present value of future profits or attempts to calculate return on investment. The treatment of dividends can vary depending on whether or not the company takes a true mutual company approach to dividends, where future dividends will closely parallel changes in experience.

VII. Some Key Issues - Concluding Remarks.

Perhaps we'll get into a discussion of some key issues following the other panelists' presentations. I would simply conclude with the following remarks:

Any internal financial statements must be meaningful and must be understood and accepted by both the people doing the measuring and the management being measured. Financial statements are most meaningful if they are comparable to other segments within the company and to other companies. Desirably, they should also be comparable to other types of financial service companies. We have a long way to go to attain such comparability, but we are moving in that direction. Each company should choose profitability measures which are compatible with its form of organization and consistent with its established mission and objectives. The measure should then be an integral part of the company's approach to financial planning and to management rewards.

MR. J. PETER DURAN: As a mutual company, Mass Mutual has traditionally measured financial results only in terms of the statutory gain from operations. Over the past few years, there has been a growing feeling on the part of management that something beyond this is needed for effective

financial management of the individual line of business. Statutory financial reporting tends to obscure the true long-term financial impact of good and bad sales years, good and bad lapse years, etc. The phenomenon of the "surrender gain" under statutory reporting is an example. Considerations such as these have led us at Mass Mutual to seek additional financial measures of performance beyond the statutory gain.

Even within the framework of statutory reporting, we felt our understanding could be enhanced. For example, up until now, we have had no clear notion of what the statutory gain should be. That is, if all the assumptions used in the product pricing and dividend work were to be realized in a particular year and if new business were as assumed, what should the gain from operations be, and how can we isolate the sources of variance between it and the actual gain? We wanted to be able to translate the asset share results from pricing and dividend research into a corporate financial statement. This would then give us a target statutory gain.

We wanted our internal measure of financial performance to be one that satisfies the following criteria:

1. It should be reconcilable to the statutory gain.
2. It should give a target result which is tied to the pricing of our products.
3. It should show the full effect of deteriorating or improving experience.
4. It must be agreed to by both line-of-business and corporate management.

Internal financial statements at Mass Mutual are used for the purpose of managing the various major product groups. We divide our product line into three main categories: group pensions, group life and health, and individual. Our individual line includes the full range of individual insurance products, including variable life, universal life, traditional term and permanent insurance, annuities, both fixed and variable, and disability income insurance. Investment income is allocated among lines of business based on a combination of an asset segmentation method and an investment year method. Expenses are allocated by means of our cost accounting system. Corporate overhead is allocated based on agreed-upon splits. Statutory surplus is allocated to lines of business based on the buildup of statutory gains for each line. At this time, there is no corporate account. Thus, the various lines of business retain all their accumulated surplus. For internal financial reporting we have begun to report separately, by line of business, the portion of the gain which arises from interest on accumulated surplus. The remainder of the gain, which we call the operating gain, reflects the operations of the particular year in question.

Within the individual line of business, we recently completed a large project to determine the best method for internal financial reporting. To do this, we developed a simplified computer model of our ordinary life line of business. The model contained representative cells from each of our principal income blocks of permanent business, as well as cells to represent new business.

We began the project by making projections of the statutory gain and convincing ourselves that the results obtained were reasonable in light of our actual experience. The first method that was tested involved the measurement of gain in terms of the explicit surplus contributions in our products. These are expressed as a percentage of premium plus a percentage of reserves. The problem here was to find a reserve basis which would eliminate all gain effects arising from sources other than these explicit surplus contributions. This was accomplished by means of what we call the zero surplus dividend asset share. The zero surplus dividend asset share is simply an asset share accumulation where the dividends are such as to produce a zero book surplus position at some predetermined duration and to maintain that zero surplus thereafter. These dividends differ from the actual dividends by the explicit surplus contributions. It can be shown that if the resulting asset shares are used as the reserve basis, then the operating gain which emerges is simply these surplus contributions.

The advantage of this method was its obvious direct tie to the pricing process. Additional advantages were that the gain would increase as sales increased and decrease if lapses exceeded the amount priced for. On the other hand, the method is relatively difficult to reconcile to statutory results. Also, it does not show the full long term impact of increased sales or lapses in the year they occur.

The next method considered was GAAP, or rather what we considered would be a version of GAAP suitable to mutual companies. Here, a reserve system would be based on a net premium, calculated on the basis of pricing assumptions with respect to interest, mortality, expenses, lapses and taxes. Dividends would be considered a disbursement item. Provided experience remained equal to that assumed in the pricing, the GAAP method would show profits emerging as a level percentage of the gross premium. When products were repriced by means of a new dividend scale, the reserves would be changed so that the assumptions would be consistent with those underlying that scale. Thus, the lock-in principle would apply in the sense that reserve assumptions would remain unchanged only so long as they were the experience assumptions underlying the then-current dividend scale.

We rejected the GAAP method for several reasons. First, the method lacked a direct tie to statutory reporting. Second, there was no tie to the pricing of our products since surplus contributions are not a level percentage of premium, but rather a level percentage of premium plus a percentage of reserves.

In the three reserve methods mentioned so far, i.e., statutory reserves, zero surplus dividend asset share reserves and GAAP reserves, surplus contributions emerge gradually over the life of the policy. In contrast, the gross premium reserve method up-fronts all the gains to the year of issue. The gross premium reserve is calculated based on pricing assumptions at issue of the policy. We showed that the present value of the future operating gains, whether on a statutory, GAAP or zero surplus dividend asset share basis, was equal to the gain in the year of issue under the gross premium reserve method. In a similar way, the gross premium reserve method shows the full impact of lapses in excess of the assumed rate in the year those lapses occur. These aspects of the gross premium method appealed to us. On the negative side, we saw no direct tie to our statutory accounting.

Figures 1-4 compare projected operating gains on statutory, zero surplus dividend asset reserve and gross premium reserve bases under different scenarios. Figure 1 is the so-called baseline scenario. Here, experience factors are presumed to be consistent with pricing assumptions. New business grows at 10% per year. Note that the three methods produce similar patterns of gains when experience assumptions are the same as pricing assumptions. Differences in the various performance measures can be readily seen when deviations from pricing assumptions occur. These are reflected in the next few transparencies.

Figure 2 shows a situation where 1985 new business increases 50% over 1984, rather than the 10% in the baseline scenario. You can see that the gross premium reserve method shows the largest increase in gain. The zero surplus dividend and statutory methods show slight increases over the standard gains.

In figure 3, lapses increase to 30% in 1985 and then return to their normal level. Again, the gross premium reserve method shows the largest deviation from the standard. This slide also illustrates one of the problems with statutory gains, i.e., increasing gain from operations in an environment of poor persistency.

Figure 4 shows a situation where unit expenses inflate 10% in 1985 and then stay at this level. Here we have shown the gross premium reserve method on two bases. In the first case, reserve assumptions are not changed from the original assumptions. This allows the effects of the expense deterioration to emerge over time. If the reserve assumption is changed, the present value of all future expense losses is up-fronted to 1985. The moral is that changes in reserve assumptions are not to be taken lightly, and the actuary should be comfortable with the appropriateness of any change.

Finally, we began to investigate a value added concept of gain. The idea of the value added concept was to take a gain, on whatever method, and enhance it by adding to it the change in the present value of future gains on business existing at the beginning and end of the current year. We found that this concept could be applied to any system of reporting. What it produced, in all cases, was an operating gain equal to the operating gain under the gross premium reserve method. This result surprised us somewhat at first but, on reflection, seemed obvious. The value added concept simply incorporates into the current year gain the present value of all the future gains. This is the basic thrust behind the gross premium method as well.

At the present time, we are concentrating on the value added approach using statutory gains. Specifically, the value added gain we are considering is the statutory gain for the year plus the present value of the future statutory gains on business existing at the end of the year minus the present value of future statutory gains on business existing at the beginning of the year brought forward with interest. Experience assumptions used in the calculation of present values should probably be those which underlie the current dividend scale and current pricing. If those assumptions differ somewhat from current experience, an argument could be made to use current experience assumptions as the basis for present values. The problem with this is that it creates a mismatch in assumptions for all future years, when in fact the next dividend scale revision will presumably rectify the discrepancy. Since we do not want our true gain fluctuating all

TRUE GAIN MODEL
Yearly Gain From Operations
Standard Run

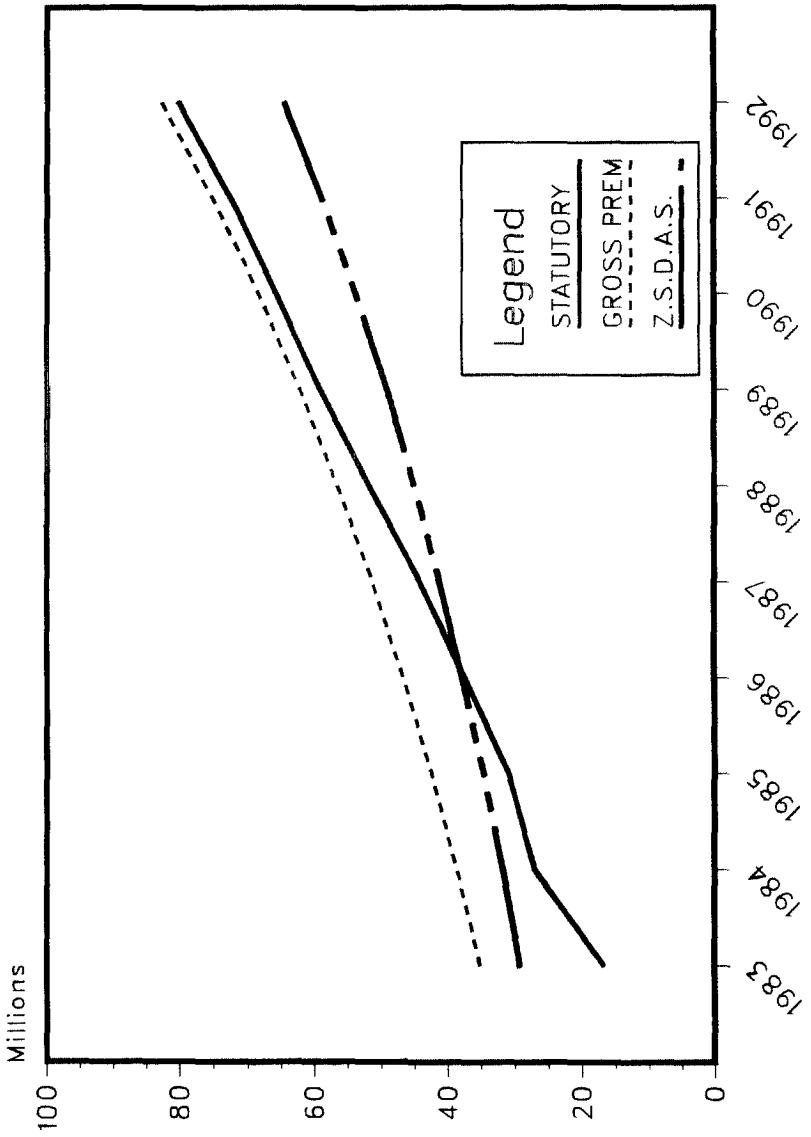


Figure 1

TRUE GAIN MODEL
Yearly Gain From Operations
Extra Sales in 1985

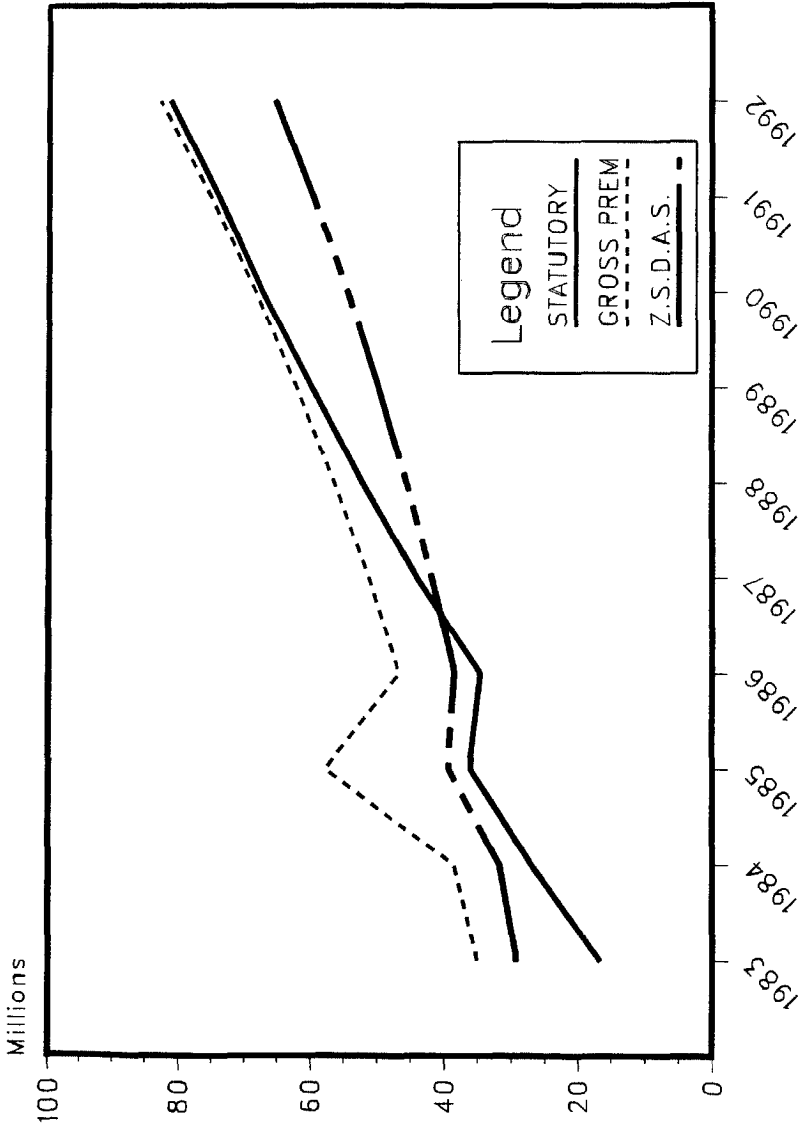


Figure 2

TRUE GAIN MODEL
Yearly Gain From Operations
Extra Lapses in 1985

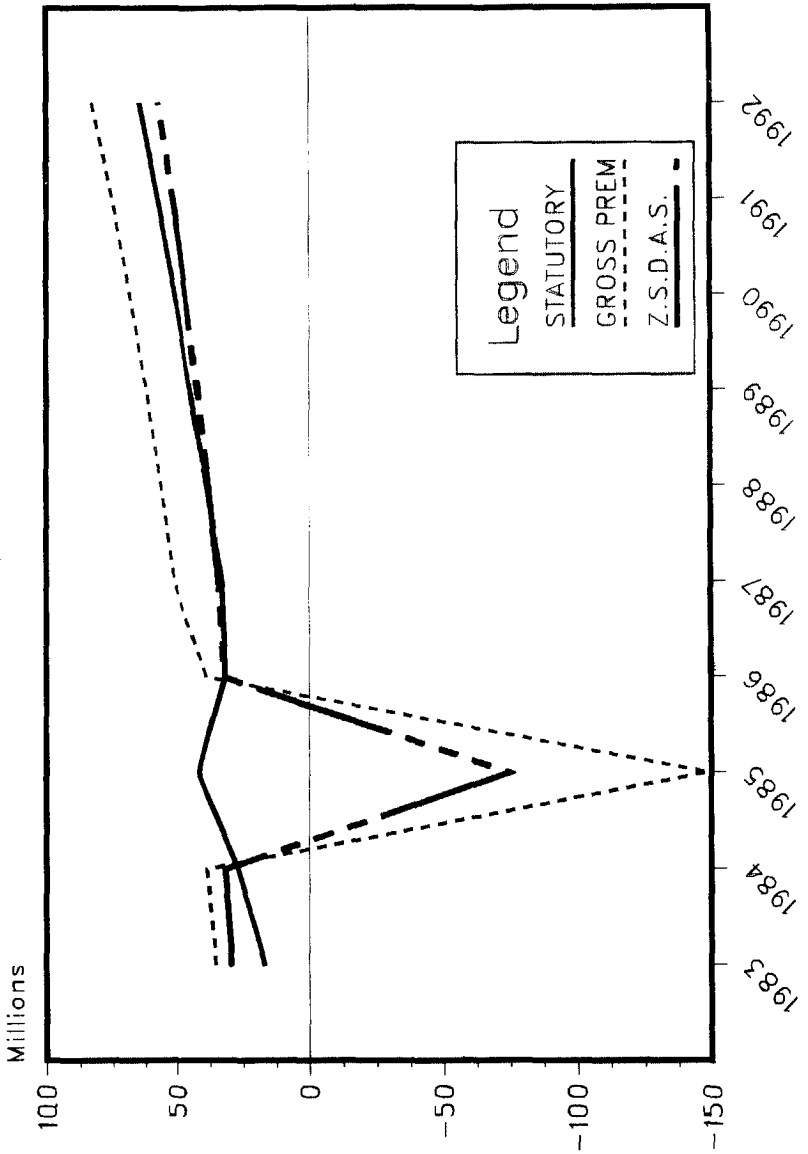


Figure 3

TRUE GAIN MODEL
Yearly Gain From Operations
Extra Expenses from 1985 on

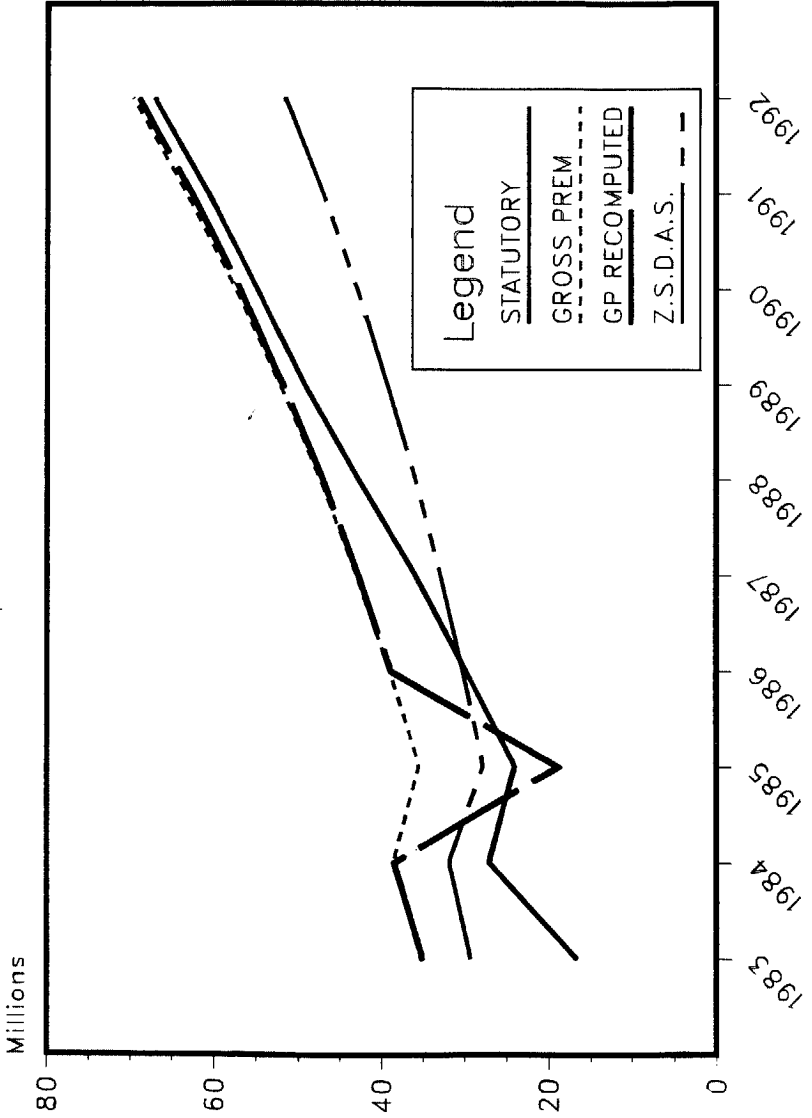


Figure 4

over the place for no good reason, our current thinking is that the assumptions used for calculating present values should be consistent with the assumptions that underlie the current dividend scale.

With regard to the frequency of reporting, we plan to project an annual gain each quarter, which is consistent with what we presently do with our statutory reporting.

The value added gain on a statutory basis would seem to fit most of our requirements for internal financial reporting. Obviously, it is tied to statutory results. Since it is equal algebraically to the gross premium reserve method, it shows the full impact of increased or decreased sales and lapses. In order to obtain a tie to our pricing, we have decided to calculate a target value added statutory gain. The target gain would be calculated on the basis of our pricing assumptions. If the actual gain differs from the target, it will be analyzed as to sources of difference.

Exactly how this internal financial reporting system will be used at Mass Mutual for line-of-business management has not yet been fully worked out. We envision a process whereby a target management basis result would be set prior to the coming year, based on pricing assumptions and any variances agreed upon in advance. Examples of such variances might be a new tax law or any extra expenses due to a large development project not covered in the unit expenses for pricing. A further key assumption in the process is sales, which are agreed upon between line-of-business management and corporate management. Results would then be reported and variances from the target gain would need to be explained.

MR. JAN L. POLLNOW: The first thing I'd like to do this afternoon is give a brief overview of what I plan to cover. In order to set the stage, I will describe The Hartford's organization, its planning process, and how this leads into the measurement of financial results. Next, I will briefly discuss our method of measuring earnings and its relationship to pricing and profit testing. I'll conclude with a discussion of one of our financial exhibits called Sources of Earnings.

In all of this discussion, you should remember that our emphasis is almost entirely on GAAP reporting. Statutory requirements are recognized in pricing and in reviewing capital needs, but all financial reporting is based on GAAP.

Hartford's Organization

The Hartford Life Operations is part of The Hartford Insurance Group, which in turn is part of the Diversified Services Corporation of ITT. Within Life Operations, there are three Hartford based companies, namely Hartford Life Insurance Company, Hartford Life and Accident Insurance Company and Hartford Variable Annuity Life Insurance Company. As you may know, ITT Life is also part of the Hartford's world-wide life operations, but they are based in Minneapolis and have their own management.

Within the Life Operations, there are two main divisions. One of these is the Employee Benefits Division, and the other is the Individual Life and Annuities Division. These divisions are responsible for product

development, marketing and administration of their respective products, and the Senior Vice President in charge of each division has responsibility for his bottom line. All financial reporting, including reserve valuation, is handled by a separate division, the Financial Controls Division, which includes an actuarial arm and a comptrollers arm.

For financial and management reporting, we track five lines of business. Within the Employee Benefits Division, there are Group Life-Health, Group Pension and Special Risk Life-Health. In the Individual Life and Annuities Division, there are Individual Life-Health and Variable Annuity. These lines are occasionally broken down further in order to provide in-depth analysis. In addition, there is a Corporate line which is mainly used to keep track of earnings on corporate surplus. It is also utilized for special reinsurance or other transactions that are corporate in nature.

Planning Process

As part of the ITT organization, we have had the benefit of its extensive business planning experience and its financial reporting system. This is a legacy of Harold Geneen and his need to plan and control a world-wide organization of extremely diverse corporations.

In general, we work with a five-year strategic plan with supporting financial data. A more detailed operational plan is developed for the early plan years. These plans contain specific programs to support the strategies and to respond to specific problems. The near term financial results of these programs are contained in a Budget for the following year. My reference to "Budget" here means the entire income statement, not just expenses. It is this Budget against which almost all financial tracking is done during the year, on a monthly basis.

Measuring Results

Each month, we hold something called a variance meeting. This is an opportunity for senior management to get together and review how actual results are progressing in relation to Budget. The idea, of course, is to keep as close to the business as possible so that any problems will be identified quickly and can be corrected as soon as possible.

Perhaps many of you have heard the expression "We do not want any surprises." I'm not quite sure where it started, but it obviously is something that cannot be accomplished. Perhaps what we are really trying to do is to identify the surprises as soon as we can and when they are small, rather than waiting for a big surprise at year-end.

The main tool used in the variance meetings is something called key indicators. By definition, these are the pieces of information which should allow management to keep an eye on what is going on, without getting lost in lots of detail. The indicators do, of course, vary by line of business, but some of the general ones that are used are sales, agent productivity, field office effectiveness, underwriting and administrative effectiveness, persistency and surrender indices, expense indices, and claim ratios. There are also special reports for various lines of business or projects. For instance, the Group Life-Health line has a strategy of trying to penetrate

large brokerage houses. Thus, one of their key indicators is a measure of how this program is working, both in absolute terms and in comparison to the expectation or Budget.

Another of the key indicator exhibits is something called Sources of Earnings. To some extent, this is just a take-off on the traditional actuarial gain and loss exhibit. From an actuarial and accounting point of view, this is the one exhibit that seems to tie all of the information together so that we can tell what is happening to the bottom line and why. The problem, of course, is taking the data we have available and trying to mold it into an explanation of what is happening.

Earnings Measurement

Before I get into how we measure sources of earnings, I believe it is necessary to give a brief summary of how we view earnings and what our goals are. An often-heard expression, which is quoted in a recent paper by Don Sondergeld, is that "the primary job of management is to manage capital" and "the return on total capital is an index used in measuring the job that management is doing". ROTC's are one of the main measures used by ITT, and as a result, we have tried to take this concept and apply it to each line of business. The details of this are described in Mr. Sondergeld's paper titled Profitability as a Return on Total Capital, which will be published in Volume XXXIV of the Transactions.

In order to consistently evaluate the ROTC's for the various lines of business, it is necessary to allocate the proper amount of investment income to each line. To determine this amount, we use various methods. These include the investment year method, separate portfolio segments for certain pieces of business (using the investment year method within segments), and even an aggregate approach using mean assets.

The investment income allocation includes the interest earned on what we call benchmark surplus, or what is sometimes referred to as target surplus. This benchmark surplus is related to the various risks inherent in each line of business, and is determined using simple formulas such as a percentage of premium or a percentage of reserves. The balance between the company's total statutory surplus and the sum of the benchmark surplus for the various lines is put into a corporate account. This corporate surplus could, of course, be negative, particularly where the companies are part of a larger group. The surplus for each line is determined monthly, and transfers are made into or out of the corporate account so that the interest that flows into each month's earnings is based on the beginning of the month benchmark surplus. This is consistent with our pricing philosophy.

Sources of Earnings

As I indicated previously, I would like to concentrate on one key exhibit, which we call Sources of Earnings. The purpose of this exhibit is to identify variances between actual and budgeted results, to measure variances from GAAP assumptions, and to identify something called normalized earnings. This analysis is generally developed about three weeks after the end of the month.

First of all, I will define what we mean by normalized earnings, and then I will describe the process we go through in determining the sources. Since we have a fiscal year equal to the calendar year, we normally look at earnings for a period beginning on January 1. As a result, we have defined something called normalized earnings, which are the earnings that belong in the current calendar year. In addition, because we must report earnings very early each month, before all of the supporting data is available, normalized earnings allow us to show the actual results for the month by eliminating approximations used in the early reporting. Our term for this difference between normalized and reported earnings is "period adjustments". In addition to correcting for the monthly estimates, these adjustments can arise from prior year-end errors and omissions or from adjustments that reflect true claim run-outs.

So that it will be easier for you to visualize the sources of earnings, I have put together an overhead which shows the type of exhibit we put into the key indicators book each month. The figures are purely hypothetical, but they will give you an idea of how the exhibit works and some of the problem areas that we have.

As you can see, there are three sections to the Sources of Earnings report. The first section reconciles the reported with the normalized net income. This basically means that period adjustments are taken out of the pre-tax earnings and federal income taxes are adjusted accordingly.

The second part of the chart is simply a breakdown of the period adjustments into those that are balancing items between actual and reported earnings for the current month and those that are from other sources. The balancing item for the month, which is made necessary by early reporting requirements, is called the Empirical Reserve. It is normally taken into the following month's reported earnings. Thus, the reported year-to-date earnings for a given month are basically the previous month's actual earnings plus an estimate for the current month. Generally, this means the Budget is used for the current month with adjustments for any significant items that have already become apparent during the month. For instance, we may increase or decrease earnings from Budget if there is a significant variance in death claims.

The third section of the chart is a breakdown of the normalized pre-tax earnings. This is the real Sources of Earnings which is referred to in the title of the report. The Sources of Earnings exhibit was prepared on a pre-tax basis to avoid the difficulties involved when dealing with companies' taxes in three different phases. Perhaps the new tax bill will make this easier, in which case we can change this part of the exhibit.

As you can see, the main purpose of the chart is to compare the actual earnings for the current year with those of the previous year and, particularly, with those expected in the Budget. The Variance column shows the difference between the actual and the budgeted results. It is this Variance column that seems to draw the most attention. I should point out that, in the Sources of Earnings section, the 1983 Budget column is based on our expectations for that particular year. In other words, when setting our 1984 Budget, we may decide to use a more realistic 15% lapse rate assumption, even though our GAAP assumption might be 10%.

PANEL DISCUSSION

HYPOTHETICAL LIFE
FULL YEAR EARNINGS
(\$ in Millions)

	<u>1982</u> <u>ACTUAL</u>	<u>1983</u> <u>ACTUAL</u>	<u>1983</u> <u>BUDGET</u>	<u>1983</u> <u>VARIANCE</u>
NET INCOME	3.40	1.30	2.30	-1.00
- NET REALIZED CAP. GAINS/(LOSSES) - A/T	.00	.00	.00	.00
+ FEDERAL INCOME TAXES	<u>1.10</u>	<u>.50</u>	<u>1.10</u>	<u>-.60</u>
= REPORTED PROFIT/(LOSS) FROM OPS. B/T	4.50	1.80	3.40	-1.60
+ PERIOD ADJUSTMENTS (PRETAX) *	<u>-1.60</u>	<u>.90</u>	<u>.00</u>	<u>.90</u>
NORMALIZED PROFIT/(LOSS) FROM OPS. B/T #	2.90	2.70	3.40	-.70
- NORMALIZED FEDERAL INCOME TAX	<u>.80</u>	<u>.70</u>	<u>1.10</u>	<u>-.40</u>
= NORMALIZED NET INCOME	<u>2.10</u>	<u>2.00</u>	<u>2.30</u>	<u>-.30</u>
* PERIOD ADJUSTMENTS (PRETAX)				
EMPIRICAL RESERVE	-1.00	-.40	.00	-.40
OTHER ##	<u>-.60</u>	<u>1.30</u>	<u>.00</u>	<u>1.30</u>
TOTAL PERIOD ADJUSTMENTS (PRETAX)	<u>-1.60</u>	<u>.90</u>	<u>.00</u>	<u>.90</u>
# SOURCES OF NORMALIZED PRETAX EARNINGS				
INTEREST ON GAAP SURPLUS	2.80	3.00	3.10	-.10
NORMAL PROFIT	3.00	2.90	3.30	-.40
EXCESS INTEREST	.80	.60	.20	.40
ACQUISITION EXPENSE	-1.30	-2.40	-1.90	-.50
MAINTENANCE EXPENSE	.00	.00	.00	.00
FAVORABLE MORTALITY	.10	1.20	.00	1.20
FAVORABLE MORBIDITY	.00	.00	.00	.00
FAVORABLE PERSISTENCY	-2.50	-2.60	-1.30	-1.30
OTHER	<u>.00</u>	<u>.00</u>	<u>.00</u>	<u>.00</u>
TOTAL NORMALIZED PRETAX EARNINGS	<u>2.90</u>	<u>2.70</u>	<u>3.40</u>	<u>-.70</u>
NOTE: NORMALIZED EARNINGS ARE THOSE EARNINGS THAT BELONG IN THE PERIOD.				
## GAAP RESERVE ADJUSTMENT	-.60	.90	.00	.90
PREMIUM TAX ADJUSTMENT	<u>.00</u>	<u>.40</u>	<u>.00</u>	<u>.40</u>
	<u>-.60</u>	<u>1.30</u>	<u>.00</u>	<u>1.30</u>

I would now like to give a brief run-down on the definitions that go along with the various sources of pre-tax earnings. These definitions are not hard and fast since we seem to continually learn more about our business and how we should analyze it.

The first item on the list is Interest on GAAP Surplus. This is defined as the interest that is earned on benchmark surplus plus the interest that is implicit in the GAAP adjustments. This interest is split out from the next item, which is Normal Profit, in order to distinguish how much of the profit could probably be earned in a relatively risk-free investment.

The next item, Normal Profit, is defined as the profit we expect from each line of business under normal GAAP assumptions. In order to get at this type of figure, we use rough estimates such as a percentage of premium on life products or a percentage of assets on annuity products. Universal life turns out to be a combination of both of these.

The next item is called Excess Interest. This is the amount of interest that is in excess of the pricing and profit-testing assumptions. For flexible products such as universal life or deferred annuities, which pay a current interest rate, we normally make an assumption as to the difference between the amount of interest we earn and the amount we expect to credit to the policyholder. For instance, in pricing and profit testing, we may assume that we will earn 9%, credit 8%, and thus expect a 100 point difference or lift-off. If, instead, we earn 12%, we will not show 300 points as the excess interest, but rather, we will determine the difference between what we were actually crediting and the 12%. Thus, if we credited 11%, there would be no excess interest.

The next item is Acquisition Expense. This might more properly be labeled Acquisition Expense Overrun. Ideally, it is defined as any acquisition expenses which are in excess of those assumed. However, we have found that this item can get rather tricky since some of the acquisition expenses are deferrable and some are not. As a result, this item must be coordinated closely with the definition of Normal Profit.

The next item, Maintenance Expense, has also given us some trouble. Again, this is an overrun type of figure. We have had some trouble defining this particular item since we have not been able to get an accurate indication of exactly what maintenance expenses are built into our GAAP calculations. One problem is that, in most of our GAAP calculations, the maintenance expense was implicitly assumed to be level and was not specifically defined. Another problem that can arise here has to do with the use of dynamic expense assumptions. On many traditional products, higher expense levels have been offset by excess interest earnings.

An alternate use for this item involves defining it using current pricing or profit-testing assumptions. This would then indicate if there are problems in the pricing or if some tightening of the belt is required in order to bring expenses down to assumed levels. The problem with this definition is trying to coordinate it with Normal Profits. I guess one possibility is to put everything on current assumptions, but I do not think I want to get into that discussion right now.

The next two items, Favorable Mortality and Favorable Morbidity, merely reflect variances from the levels assumed in the GAAP calculations.

Favorable Persistency is the next item. Ideally, we would like to reflect the effect of deviations from the lapse assumptions that were used in the GAAP calculations. However, to date, we have found that this is not very easy, and we have copped out by defining this as the amount of prepaid acquisition expense that is written off in excess of the expected. Naturally, with today's high lapse rates, this source will probably be quite negative and may even be worse than your Budget expectations.

The final item is usually a balancing item and may be used to reconcile an optimistic or pessimistic Budget. We all know that we can often define the individual pieces of the Budget, but when we add them all up, the total just doesn't quite fit. Or, to put it another way, we feel that the aggregate results will be better or worse than the sum of the individual pieces, but we cannot define just where the deviations will be. Well, here is where it goes.

What we have found is that, although it is interesting to define the sources of earnings, we are much more interested in the variance of these sources from the Budget. It is these variances that help us explain what is happening to the earnings and to identify the surprises early. We have also found that a review of the sources is very helpful when we are doing projections for four or five years into the future. Any unusual trends in the various items may indicate a problem with the overall projections.

MR. RICHARD S. ROBERTSON: I have two observations and four short questions. First, with regard to monthly reporting, I know of no one who, having been on a monthly reporting environment that works well, would even consider anything else. My second observation is, as you discuss ways of segmenting your operations for reporting, it is neither necessary, nor in most cases desirable, that you follow corporate lines. Finally, the questions. Gary, as you described your application of benchmark surplus, it sounded to me as if you started with benchmark, then you used some kind of historical accumulation thereafter. It seems to me that you have to mark it back to the benchmark at some point, either monthly or annually, but not continuously. Is that correct?

MR. CORBETT: Each year, the division would be assigned benchmark surplus, but in addition, "excess profits" might be accumulated within the division. "Excess profits" are those profits earned by the division over and above any required contribution to corporate surplus.

MR. ROBERTSON: Jan, in the area of the so-called period adjustments, is this a continuous process whereby every time you would find something that was wrong six months ago, you'd go back and redo what you had then, with this now becoming your official number, or is this a one time thing?

MR. POLLNOW: No, it is an ongoing process.

MR. ROBERTSON: So you have the problem of continuously changing versions of past earnings.

MR. POLLNOW: On a normalized basis, yes, because you try to find out what actually happened and compare it with what is actually happening this year.

MR. ROBERTSON: One thing we use, in addition to actual earnings, Budget, or whatever, is estimated or projected earnings, which is a currently updated expectation of what the current year's earnings are going to be. Does anyone else use that as one more column on the forecast?

MR. POLLNOW: Normally we have an official update of our forecast twice during the year. But, at any point in time, we may decide to change our forecast more frequently. That does not, however, affect the Budget column. Rather, we may choose to add a fifth column, which is the new forecast for the year.

MR. CORBETT: Let me comment on a few of Dick's remarks. With regard to monthly reporting, I question whether you can get accurate figures on a monthly basis. If you're tracing the components of earnings, i.e., lapses, mortality, expenses, which you may be doing weekly, you will start seeing deviations and can start taking the necessary actions. I question whether monthly reporting gives you any more information than does the tracing of key components.

As far as following corporate lines is concerned, I am not at all sure that I meant to say that the hierarchy of your financial statement should follow the corporate lines. I do think they should follow management responsibilities, which could go across corporate lines. But if you are going to tie your performance measurement or your compensation to these statements, you must somehow relate the bottom line to each manager's responsibility.

MR. ROBERTSON: Finally, does anyone have a good way of accounting for deferred taxes, recognizing that a dollar of deferred tax costs less than a dollar today?

MR. HENRY B. RAMSEY, JR.: Regarding Dick's comment about deferred taxes, I would assume, Peter, if you're doing the projection of statutory results into the future and using their present value as your adjustment, you would do this on an after-tax basis.

MR. DURAN: Yes, that is correct.

MR. RAMSEY: Well, when you have taken that into account, it is a discount of book profit, and the taxes are in the book profits. The valuation reserve, therefore, includes the provision for taxes in future years or takes account of the fact that you have a credit in the current year.

One variation we have used, an approach that I am not sure I have heard others use, is a concept of borrowed surplus. A line, or a segment of business, is required to hold the so-called required surplus in its line. If it has not generated that amount of surplus within the line, it borrows that amount from the corporate line and pays to the corporate line a required return on that surplus. You can break that out so that you can show a current operational fee, but you also show the effect of its borrowing, so you can have the retained earnings within the line but you show its components separately.

MR. PETER S. PALMER: In some cases, it makes sense to take the gross loss on bonds from, say, 1968 and to return the proceeds in a current coupon instrument. On the other hand, you would probably not sell a high yielding 1981 purchased bond at a gain unless you had offsetting capital losses. Do any of you have any experience or opinion regarding what percentage of the capital gains tax should be transferred from the group annuity line, which would own the 1981 bond, to the ordinary line, which would own the 1968 bond sold at a loss?

MR. DURAN: We would allocate the loss to ordinary and the gain to group pension, by pure ownership. That has created a lot of bickering among the lines of business in the past. I think it touches on the problem that Gary mentioned before of the sub-optimization that is inherent in some of these asset segmentation approaches. Asset segmentation is important, but it does bring with it some problems.

MR. POLLNOW: We are presently putting all of our capital gains in a corporate line, but I think we're going to have to start thinking about this. At this point, we really haven't taken any major capital gains or losses, except in the pension line. Otherwise, we have always tried to offset, and we have just put the residual in the corporate line so that no specific line got credit for them.

MR. ROBERTSON: We've come to the conclusion that we should use what essentially amounts to the Canadian method for handling capital gains and losses. In doing that, it reduces considerably the magnitude of the problem. The conclusion that we came to is we're going to allocate the tax on those capital gains as we allocate the capital gains and losses. I do not think the operating areas affected have quite yet figured out what that does to them, and it may not work quite so well, but at least that is our starting point.

MR. JOHN E. SMITH: On that last question, we're planning on doing the same thing. If we sell a bond in our segment and have a gain, we want to match it with a loss in the rest of the company and give a negative tax to ordinary and a positive tax to a segment.

MR. CARY O. LAKENBACH: I have a question for Peter. How do you account for developmental expenses in your earnings model? That is, at any point in time, do you have a measure of how much developmental expenses have yet to be amortized?

MR. DURAN: We combine all of our developmental expenses and allocate them as a maintenance expense. The general theory has been that we may have a big developmental expense this year, but we probably had one last year and we are going to have another one next year. So we do not really track the amortization of individual developmental expenses per se.

MR. POLLNOW: I know that ITT for a long time had a philosophy of not capitalizing any software, because they figured there was always something going on somewhere. Recently, however, they have started to rethink that because we're looking at different profit centers, and a particular profit center doesn't necessarily have a major project going on. So we have started capitalizing software, but our development expenses for products, etc., are considered to be a continuing thing, and we do not treat them separately.

MR. DANIEL J. KUNESH: Peter, in your discussion, you seem to imply that, under the gross premium valuation method, it was your objective to look at the present value of profit, and you made a comment that no matter which profit stream you were looking at, you'd come to the same present value. Obviously, that's not true if you start using different discount rates. I was wondering if you had given any thought to that.

MR. DURAN: The interest rate that we are using for discounting is the rate that we had assumed in the pricing of the products. And, you are correct, present values are not equal if you start using different interest rates. We didn't really get into what results would look like when discounting the various profit streams under, for instance, current market interest rates or rate-of-return type interest rates.

MR. KUNESH: Well, certainly different levels of discount rates would give you some indication of, obviously, timing of profits. Jan, in your discussion, you defined various sources of earnings, and one was the normal profit. I believe you defined normal profit as what profit would be if GAAP assumptions were realized. Is that correct?

MR. POLLNOW: Yes.

MR. KUNESH: Then you went through and defined a whole series of what I will refer to as the tabulation of variances, i.e., mortality, morbidity, persistency, and so forth. Do you have a computerized model that presents this data on a monthly basis?

MR. POLLNOW: What we've done is come up with some simple formulas for the present, and our data is tabulated manually. We are in the process of developing a system which, we believe, will give us that information on a monthly basis. We expect to have that next year.

MR. CORBETT: I'd like to make one comment on this first question regarding the use of the discount rate. We're pursuing an approach very similar to the one Peter mentioned, the value added concept, and of course, it really doesn't matter what reserve basis you use. I do see a problem, however, when you use dollars as a main measurement tool for how well a division is doing. When interest rates rise to where they were a couple of years ago, and you discount back at the earned rate, you end up with basically a zero present value at these rather high interest rates if pricing does not respond immediately. We've now fallen back to the situation where there is generally some present value of future profits at the current rates we are using today, so you could show that on the balance sheet. But if your discount rate is 14%, because that is what you are earning, you get very low leverage to show a division that they are earning any dollars, and this has always been a concern of mine. In my stock company days, I have wondered whether you wouldn't be better discounting at some lower rate, for motivational purposes as much as anything. Discounting at a standard 7% or 8% would show a higher present value of future profits, so when somebody busts their tail out there and produces business, it reflects in your statements as having a fair amount of value.

MR. SHAPIRO: One issue I am concerned about can be illustrated by assuming that 15% is a reasonable return on an investment, and one company has the capacity to write \$100 million of new premium every year with the 15% return

expectation, while another company has only a \$1 million capacity. Where, in the process, does the actuary attribute additional value to the high production company? With so many of our companies changing dramatically, the development of future business capacity is of vital importance. Hence, it would seem that the inability to reflect the value of future business capacity in a reasonable way is a major drawback of many value based systems. One approach that I've seen is to look at the residual return. If our operation allows me to invest \$100 million at 15%, and I would otherwise have to settle for a 12% return, then I'll look at the present value of the additional 3% return every year as a way to reflect the additional value of the organization.

On another item, I am interested in how some companies use return on capital. It seems to me that it's a very difficult measure to hold as a performance standard for a manager since it involves the allocation of things like surplus and taxes. Like Gary, I prefer dollars as an individual performance standard and look at return on capital as a means for evaluating different ventures.

MR. ROBERTSON: We use return on capital, as I believe Gary suggested, primarily as a planning tool. It is not as useful in evaluating current year's earnings, except to the extent that, once we have established earnings objectives, in part while looking at return on capital, it is implicitly in there. Return on capital does become a valuable tool, however, in allocating surplus. That is, we can question whether allocation of surplus to a particular operation is an efficient use of corporate resources. Once you do that, it becomes not only an allocation tool, but it becomes almost essential that operating areas use it as a pricing tool. That is, the pricing gets reflected in the projections that go into the plan, which become feedback and that's the way you tie your operating plans into the strategic plans.

MR. POLLNOW: I agree with Dick. As far as looking at your long term objectives, you generally do look at the ROTC's, and then once the current year is set, you do not look quite as closely. We had run into some problems, as Bob indicated, where, in a particular year, we have had a line that required a lot less benchmark surplus because some of the products we were selling developed a lot less risk than we had originally anticipated. As a result, we got lower benchmark surplus, lower investment income allocation, and as a result, their bottom line went down, but their ROTC jumped way up. Now, that wasn't too difficult to explain, but it illustrates how you can run into problems. We have an ongoing discussion as to how you can be consistent with your pricing and your reporting. And one of the questions that we have right now is, if you set up a separate segment, what do you put in the segment - just the cash flow or enough to cover the reserves? Are reserves left in a different segment? We do not know the answers to these yet, although Don Sondergeld suggests you have to put in the reserve, particularly on a product like universal life where you're paying current interest rates. In order to use your segment effectively to match your liabilities and assets, you almost have to put in enough assets to cover the reserves.

MR. SHAPIRO: Most of the discussion has focussed on the ordinary line. I am curious to see what approaches have been used for some of the other lines.

I'm thinking, for example, of the group health line which is certainly changing in character from what it was three or four years ago. Are any of you doing something similar in your group line financial performance measurement?

MR. DURAN: What we have done in group life and health is prepare quarterly internal statements on a statutory basis. This is the only area of the company where we do this. It's been felt, because the nature of the liabilities is, in many cases, not very long, that the statutory reporting has been relatively adequate for the group health line.

MR. CORBETT: In principle, if you are in the smaller group area, it has many of the same elements as the individual area. You have a persistency problem. You've certain deferred expenses out there. Typically, you have some form of graded first year commission, whatever it might be. From a management point of view, if you are going to work from your statements and reward by your statements, you have to apply consistent features, particularly on the smaller groups. Lapse rates, for instance, can be quite important. So conceptually, I think you have to measure group the same way as we do individual, and I think we are heading in that direction.

MR. POLLNOW: We certainly try to go in that direction. The particular line, where I had mentioned we had an interesting problem with the ROTC, was not the ordinary line. In the group lines, we do a lot of our pricing on the internal rate of return method, and it is very difficult if you do not have any benchmark surplus, because you usually get an infinite return. So we take the benchmark surplus and put it into the lines for financial reporting. We then develop an ROTC just like we do for any other line. So all of our lines are treated the same.

MR. SHAPIRO: Let's reflect on the internal financials as a primary communicator of change, a way to paint a picture of new directions and to get people doing the right things in anticipation of change. In the group health line, as the business turns into more administration and less risk protection, there is a need to change operations to be consistent with the economics of the future group health line. By merely trying to portray results more realistically, I'm not sure we deal with the problem the right way. Shouldn't we look ahead four or five years, paint a picture of the way it's going to be, and then design the financial performance management system to reflect the expected changed nature of the business.

MR. CORBETT: We are still talking about the first level of measuring value in a company, which is measuring the value of the inforce business and the increment to that from new business each year. There are at least two other increments that, at least some years ago, companies were talking about adding. One is the value of the agency plant. Certainly, there can be a value placed on that, i.e., some multiple of current production, the experience level of agents and so on. The third level, and I remember some companies talking about doing this, is the value of the home office plant and using such things as turnover to measure that. Companies were trying to determine the going concern value of the company and what it could be sold for. Bob, in your consulting period have you seen any extensions to these two levels?

MR. SHAPIRO: In an acquisition situation, a life company appraiser would essentially look at (1) the existing adjusted book value (essentially

capital and surplus) plus (2) the value of the existing block of business plus (3) the capacity to write and administer profitable new business in the future. The typical approach to (3) is not to put values on agents, but the premium that's likely to be produced, the profit margin that premium is likely to generate, and the present value of those profit margins. The result is the value attached to the home office staff and the agency force. This process is followed routinely in acquisition situations. The question I have is since the three step appraisal approach seems so logical and has widespread precedence in acquisition situations, why hasn't it been used more often in internal financials as a fundamental performance standard?

MR. CORBETT: I think by doing it, we are telling our field force that they are important and they have value, and we are telling our employees that the length of time they stay with us, the training they get, and so forth, also have value. But I think we are still struggling with the first level, which is where the biggest dollars are, and until we get a handle on that, we are not likely to move on to the other two stages. But I do suggest to do so would be in keeping with the culture or the message that many of us want to transmit to both our field force and our employees.

MR. SHAPIRO: The biggest dollars may not be in the existing business block because, in a typical life company, one-half of its current premium inforce was written in the last five years, and perhaps 75% or 80% was written in the last ten years. Hence, it's very important to keep a close eye on the future business capacity!