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## INDIVIDUAL DISABILITY INCOME

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MR. W. DUANE KIDWELL: There have been five different attitudes experienced in recent years by Disability Income insurers:

The first is optimism which occurred in the early 1970's when economic conditions were favorable, claims were light and profits high.

The second is frustration that occurred in the period from 1974-76 which logically followed from the very wild and somewhat unsound competition that developed during the optimistic period. The full effects were beginning to show up with rapid changes in definition, narrowing of margins for contingency, the slide of the economy and the heavy push for sales.

The third would have to be the pessimistic attitude which developed in the 1976 and 1977 period when the full impact of deterioration of profits was felt. The key words in that period were the changing work ethic, unwarranted pressure of the public and the courts, the changing of living standards and the pressures for greater regulation.

The fourth attitude, realism, was inevitable and is fostering a less aggressive competitive attitude, with restoration of a more realistic underwriting evaluation, an effort to control overinsurance, and a more sophisticated approach to claims handling. The regulatory authorities have now become interested in the adequacy of claim recognition with proper reserving standards and loss ratio measures. The fifth attitude is futurism, a word that is rapidly becoming over-used. Here we will speculate as to what may be just down the road or over the horizon that will help us to fulfill our purpose to the public while at the same time satisfying our stockholders.

Our program will:

1. Contrast the common definitions of disability (insuring clauses).
2. Review the 1978 experience.
3. Review valuation, reserve adequacy and claim recognition.
4. Comment on new products and practices.
5. Look at the problems of a recession.
6. Report on the HIAA Special Disability Committee.
7. Present the paper "Disability Termination Rates".

MR. GARY C. MOONEY: Definitions of disability. The goal of insurers in the disability income market is to replace earnings lost as a result of accident or sickness. This is a very simple concept and a very admirable goal but the implementation presents a very real problem. Accident or sickness may lead to unwillingness to work or to the loss of the opportunity to work, as well as to the inability to work. The first two of these are unpredictable and uninsurable and, as a result, insurers have focused on the inability to work, rather than focusing on replacing the earnings lost, in an attempt to find a risk that is insurable.

If we focus on the inability to work, there are several possible definitions that we could use. One definition might be that the insured is unable to be employed in any gainful occupation. I think we would agree that definition is too tough for any realistic situation. The insured may be covered for inability to perform the duties of an occupation, relating to any occupation for which he is reasonably suited by education, training, or experience. Many people would feel that definition is unrealistic in the early period of disability. There is an adjustment necessary in the early stage.

From there we moved into the area of own occupation. The insured is considered disabled if he is unable to perform the duties of his own specific occupation. We have developed a combination of an "own occupation" definition combined with a "reasonably suited" definition. The own occ definition is for a period of perhaps two years while the insured makes adjustments to a somewhat different lifestyle and a different environment. This was particularly appropriate in the blue collar classes. It is a rather limited definition of own occupation, in part because the emphasis remains on physical condition and the ability of the insured to be retrained into an occupation. After a period of perhaps two years you can expect that the insured might move into another occupation.

As we move from white collar to the professional occupation classes we find that the own occ period included in definitions has been increased from two years to five years, ten years and in recent years to age 65 and even for life in some companies. The expanding period was basically a question of competition. As the definition became more attractive, we discovered there was a real flaw in it; there had never been a prohibition in the definition against working at another occupation. You could be disabled in your own occupation and work at another occupation and still collect full benefits. This has very serious implications for the very long own occ definition. It has not been possible, competitively, to cut this period back. A few companies tried but the majority of companies felt that they could not for fear of losing their professional and white collar class market. In addition, there is the problem of getting the insured back into his own occupation under this definition because he is either totally disabled or not totally disabled. An insured who attempted to get back into his occupation might find himself off benefit with either a reduced capacity to work or perhaps a falling back into total disability. When we look at what has evolved in the own occ area, we find that we have moved away from the original goal of replacing earnings lost as a result of accident or sickness. We have found that instead, we are insuring an occupation and that is not really what we set out to do.

There is a solution to the problem with the insurance companies taking a positive approach to getting the person back to work. There were attempts at rehabilitation clauses but there was not really a very broadly based solution until the recently developed residual disability definitions. The definition called residual disability involved payment of the benefit for total disability for some period of time with payment for partial disability after that. In defining the benefit for total disability, or the entitlement to, this definition used phrases like "as a result of injury or sickness, the inability to perform each and every duty of his own occupation and not engage in any gainful occupation". The problem of people moving into another occupation was solved. That was a very negative feature relative to other definitions of total disability. Later, it was tied in with a definition

that involved partial payment if the claimant qualified under the phrase "as a result of injury or sickness the inability to perform all duties of his own occupation but able to perform one or more duties or is engaged in another occupation and income is reduced". Now, under the typical residual definition, the benefit is a percentage of the amount that would be payable on total disability, the percentage being the ratio of earnings lost to a base level of earnings. If you are 25% disabled as defined by loss of earnings, then you receive 25% of the benefit. This certainly is not a considerable improvement over the own occ definition. It does deal with the problem of working in other occupations and with the problem of trying to return to work in one's own occupation.

There are problems with it, however. For reasons of limiting claims costs there is generally a qualifying period of total disability required before any partial payments can be made. First you must be totally disabled, and then you can qualify for payments under the partial residual benefit. The benefits are not dollar for dollar offset, they are a percentage of lost income and there is a real problem potential with early disability retirement. If an insured feels he may want to work only part time he may well qualify for partial benefits long term.

Quite recently a few companies have developed a definition of disability called the "Loss of Earnings" definition. The goal of this definition is exactly what I described in the beginning, a replacement of earnings lost due to accident or sickness. The definition is that simple. If as a result of injury or sickness, income is reduced by 20% or more, you then qualify for benefits. The benefit is a dollar offset. A percentage of the loss of income is replaced.

However, we are now back into uninsurable risks again because this benefit does include the possibility of paying people who are unwilling to work or who have a lack of opportunity to work as well as those who are unable to work. There is a question as to whether this particular definition is unworkable in practical terms. I am not, myself, advocating it necessarily. I'm just saying there is some potential there and some real associated problems.

We are left with a number of questions. There has been a trend away from the long-term own occ to 65. One question is whether or not this particular definition is dead or in its last stages. A very real question is whether the residual product is manageable. There are considerable administrative and claims expenses associated with it. It is quite vague. The question on the Loss of Earnings definition is whether it is workable at all. Beyond that are the problems of how to reflect these definitions, the right definitions in pricing and in valuation. The final question is how to deal with the early disability retirement problem effectively. I think these are some very major questions and I think there is some evidence now that insurers are trying to come to grips with them.

MR. WILLIAM J. TAYLOR: I would like to comment on the loss of income definition. We are coming out with a loss of income type of definition in our "readable" contract and we certainly hope that we are not insuring people who are unwilling to work. We are filing this as insuring a loss of income that is caused by disability.

You might be interested in the reaction of three key states to this particular contract. We do not even define occupation in it. We thought we would have a problem in those states requiring a minimum own occ period. There are three states which require that currently, and Pennsylvania will require it in July. We submitted informally in typewritten drafts of this approach to those states and the three states which currently have the minimum requirement have approved this type of product. Pennsylvania is not sure about it and I have not had a chance to discuss it with them as yet. We can assure them that it is appropriate under their regulations. We may be overly optimistic but we think the contract is worded such that the person must be unable to work.

MR. PETER N. DOWNING - LONDON, ENGLAND: I am interested in this loss of earnings business. In your contract, have you provided for an adjustment of earnings from the level of earnings in relation to the level of benefits at inception to allow for the effect of inflation which is almost bound to have occurred between the inception of the policy and the date of claim?

Do you do this and, if so, what index do you build into your contract?

MR. TAYLOR: We do not, but I do not see any problem in this anymore so than in the case of total disability. If you purchased \$3,000 per month income and you become totally disabled 6 years later when that \$3,000 is inadequate you have just as much of a problem if you are collecting the \$3,000 in the event of total disability as you would if you were collecting \$1,500 if you have a 50% loss. There are other companies that are developing inflation riders.

MR. KIDWELL: There are a number of companies that have what we call "cost of living" riders that provide automatic increases. They are not necessarily tied to inflation but their purpose is to offset the increased cost of living.

MR. KENNETH J. CLARK: I might mention that if you index the benefit amount at perhaps 4% or 5% or even tie it to some index, it is important to inflate the base income that we are using as a measure of lost income by the same percentage, so that the insured would not be penalized by inflation when paying partial benefits.

MR. MOONEY: There really has not been much done in Canada in terms of inflation products at the moment. There are relatively few insurers in Canada that are active in the market. There are no earnings related products.

MR. JOHN H. MILLER: 1978 Experience. About a year ago last January I had the benefit of an informal opinion poll of leading companies as to what their 1977 experience was going to look like. It was quite a mixed bag but on balance it appeared that the consensus was that '77 would be a little better than '76. This, indeed, appeared to be the case. Subsequently we have seen the '78 experience which is somewhat improved over '77. It seems fairly clear that costs peaked out in '76. Some confirmation of that can be found in recent Report on the Actuarial Condition of Disability Insurance - 1978 by Bob Myers. It seems that Social Security claim rates peaked even earlier than the insurance companies, perhaps in '75. We hope we will not encounter a new, higher peak very soon.

MR. KIDWELL: John, one of the things you watch in addition to the loss ratios is the adequacy of reserves. Does it look to you as though our runoff is reasonable?

MR. MILLER: Yes, these results are very pleasing. For the 25 companies I reviewed there was still, as of the end of 1978, some overall deficiency but much less than it had been. For the 10 largest companies in the group there was actually a small redundancy. It looks very good. Up to now the usual situation was that several companies would get far behind in one year. In the following year they would catch up, but another group would get behind. It appears that insurers, generally, are getting their houses in order as to loss reserves.

MR. KIDWELL: One of the problems you have in looking at loss ratios is the relationship of the loss ratio to the claim reserve. If, for example, you are going through a period like 1976 when there are more claimants staying disabled than should be staying disabled, elongating the claims another month or two, you have a number of claimants that are not nearly so disabled as your disabled lives table predicted. In that case you are setting up a redundancy in reserves. In that particular year your statement loss ratio will look very high. In the following year, when the economic conditions pick up, you may not find these malingers to quite the same extent. That particular year you look like a hero because the excess reserve held for the preceding year is recovered. We must analyze this phenomenon carefully, lest we tend to strengthen the reserve base at the wrong time or pull back at the wrong time. As Mr. Miller mentioned, we have been through some pretty rough times and may now just be coming out of it. We seem to be doing the right things, but perhaps a little later than we should have. Ken Clark will give us his analysis of the actions that lead to this turnaround.

MR. CLARK: You mentioned, Duane, that this period of 1978-79 could be categorized as a time of realism. I like to think of that realism as being an awareness of our problem and a feeling of confidence that these problems can be solved without our really knowing, at this time, how to solve them. Certainly management has recognized, or accepted, the painful fact that there is a problem by recognizing the losses in their financial statements.

A number of companies have taken steps that were unpopular and could not have been taken 4 or 5 years ago, even though we were then telling management that some things being done were not sound and not wise. The success that the Disability Committee of the HIAA has had in its short life, the fact that it was organized to move very quickly as Bill Taylor will elaborate later, is proof that management now recognizes the need to make changes.

The press has had an important role. All of us have seen articles which cite the extreme cases of overinsurance. The fact that this has been given prominent press coverage is evidence that the people who edit these papers recognize the social harm such excessive benefits cause.

At the government level, they are considering amendments to Social Security which will offer increased protection against overinsurance by putting a cap on family benefits. We hope that the final cap will be even lower than the one that is in the current bill. At the state level I am very heartened by trends toward approving benefits that could be deemed contrary to the out-moded standard provisions. At this time only New York is objecting to the Social Security offset clauses. The fact that states are working with companies to approve these benefits is a sign that they too recognize that there is need for change.

The courts have become more rational. There seems to be less concern about punitive damage judgments in California. My company's claims administrators are now less concerned about this area.

At the same time there are trends and activities which give us ulcers. I refer to the readability standards, the minimum benefit disclosure standards, loss ratio guidelines, non-discrimination, privacy from A to Z - all of which, in the long run, are a benefit of both the customer and the industry. It is the huge volume and short timing that give us the ulcers.

Social Security benefits were again increased. We are going to continue to see increased dollar amounts of benefits. Issue limits keep going up higher and higher which makes underwriting more difficult, but in terms of constant dollars I would guess that today's limits are not much higher than those of the early 1970s.

MR. KIDWELL: The adequacy and reasonableness of reserves on disability income has become an increasing concern as products change to more speculative contingencies and larger indemnities. Time will be required to gain the experience for reliable statistics for the new insuring clauses. Longer elimination periods cause greater portions of our claim liability to be in the incurred but not reported element. Changes in claim ethics, with changes in economic conditions make it difficult to evaluate experience. The NAIC and the Society of Actuaries have addressed their concerns and Bill Taylor will report on their activities.

MR. TAYLOR: If you used two words to describe morbidity they would probably be variability among companies and volatility over time. Yet in this country we have always had a single rigid minimum valuation standard. Consequently, the valuation minimum standards are generally developed to initially be adequate for any company in the industry. Currently, with the deterioration of experience, we undoubtedly have a situation where the minimum is inadequate for some companies but still much more than adequate for others. Presumably this variability among the companies is due to the difference in mix in many of the variables that we do not recognize in the valuation process, such as elimination period, occupation class, standard risk vs. substandard, accident vs. sickness, sex, definition of disability and, probably, the renewability provision. Other differences could come from an individual company's financial underwriting, its marketing or its general claims administration.

We have a Society committee of which I am chairman, Duane is co-chairman and John Miller is consultant. So we have almost a quorum up here at the table. Let me give you a brief history of how the committee came about and a brief status report. You are probably not familiar with the fact that a little over two years ago the NAIC asked the Society to produce a replacement for the '64CDT. Many of you are probably aware of the fact that John Miller solicited your company for data to produce an ad hoc study while the Society was producing such a table. The Society decided to pick up the work that John had been doing and go on from there and that was why our committee was formed last fall. Actually we had formed a working group in the New England area and were working with John before the Society took action. We now have a very active Society Committee. We solicited additional data so that the data we are basing the new table on is from about 20 leading companies.

As you would expect, the data on terminations was substantial in the early durations but the volume drops off very rapidly. We will be using a variety of data sources to try to complete the termination rate tables and John Miller and Simon Courant's paper will discuss the subject. On the active life side we have asked the claims contributing companies for active life data. Don Pearsall is in charge of the sub-committee to get things moving in that direction so that we may develop the incidence rates to go along with the termination rates.

The NAIC requested that we develop separate tables by sex. This has given rise to some caution in our analysis of the data. As you all know, classification of risk is a very sensitive subject at the present time and we must be sure that any apparent differential by sex is not from some other factor. We are concerned that we quantify the impact on morbidity of all the factors that we are able to measure and that we do so on a very sound actuarial basis. We have now developed two different ways of measuring this, each of which reinforces the other. One method is easy for actuaries to understand and one method is easy for PhD statisticians to understand. We brought the two together and we think we have a sound basis. We are attempting to get more flexibility in the valuation process. The process would be initially to produce two tables, one for males and one for females, which would be traditional in nature. If we were to take those two tables and apply them to the company contributions to determine expected values and use the actual from each company to determine actual to expected ratios, we would anticipate a great deal of variability. In the process of developing the two tables by sex we will also have quantified the impact of a number of other variables. We hope to be doing this in a fashion such that each of these variables, or interdependent pairs of variables, will be expressed by a set of factors which are multiplicative in nature. In theory, if we were to employ all of the factors that we produce for the different variables, weighted them by the distribution of each within our study data and multiplied them together we would end up with "one", the average experience for the whole study. If we take the distribution of each contributing company and apply its distribution to each of these factors we will end up with factors that are not equal to "one", but unique factors for each company which will be used to modify the average experience of the entire group. Thereby we produce a table that is appropriate to the mix of business for each of these companies.

We are leaning towards a recommendation which would have three options with regard to the valuation process. First, we can take the average tables we started with and load them in the traditional fashion. There would be a pair of loaded tables which could be used for minimum valuation standards by any company that did not wish to take a more sophisticated approach to valuation. The only system change the company would have to make would be to accept sex-distinct tables. A company that wished to make minimum changes to its valuation system, but would like to use a valuation basis more representative of its business, would select the second option. That is, they would take the distribution of their business against each of these variables and apply such distribution to the published modifying factors and basic tables to produce sex-distinct tables unique to that company. Format-wise, the tables would look like the tables in option one. A company which wants to have its valuation system run along smoothly without constantly monitoring its mix of business and without constantly producing new tables, would select the third option which is to use the full n dimensional table for its valuation basis.

We met with the NAIC task force to go over this approach with them. They had minor concerns in understanding it, but they did not end up with any objections to it and appeared to be rather enthusiastic about the whole idea. We originally hoped this could be wrapped up by the fall meeting of the Society, but that is very doubtful. It looks like, at best, we will report out at the end of this year.

MR. DONALD M. PETERSON, BENEFIT TRUST LIFE INSURANCE COMPANY: With respect to Ken's comments, I do not believe the environment has changed at all, especially in California. We seem to have more lawyers trying to invent more punitive damage cases. I do not think the juries are getting any softer, I think they are getting harder and more illogical. If you were to read some of the background of some of the more recent cases in California, I think you will see that is the case. Actually what has happened is that we were awakened to what is going on in the world. We are responsible for the fact that the insurance industry is not suffering quite as bad punitive damage awards as in the early 1970's. With respect to claim handling we are far more cognizant of the consumer movement and our claim departments and our consumer relations areas are extremely careful with respect to the way we deny a claim and the processes which we go through. With respect to our products, as we get away from the lifetime accident, as we get away from the first day sickness, and as we get away from house confinement benefits, we avoid many problems.

What interest rate are you using for the valuation table for claim reserves? Should we be using  $2\frac{1}{2}\%$  or  $3\%$  or should we be using  $5\%$  or should the NAIC address a variable interest rate? Here we are talking about tremendous amounts of money with respect to long term disability claims and what could look like a loss leader valued at a  $2\frac{1}{2}\%$  reserve could be an extremely profitable block of business if it were to be valued at your current earnings rate of  $7\frac{3}{4}\%$ . Is your committee addressing this or has the NAIC remained flexible on the subject?

MR. MILLER: It has not yet been seriously addressed in our discussions, but it is a point that will be given very serious consideration.

MR. KIDWELL: In the past using an interest rate of  $3\%$  or  $3\frac{1}{2}\%$  was tolerated because it was conservative. It was a way to get the margin or the extra contingency you wanted. However, many of you now on GAAP accounting have probably gone to  $5\%$  or  $5\frac{1}{2}\%$ . That is still conservative but is necessarily so for using the CDT table. It is a primary concern because in the later durations, the interest rates become much more significant than the termination rate. John, this might be a good time to tell us about your paper on termination rates. As you know, John and Dr. Simon Courant collaborated on this paper which was presented for the Banff contest and which won first prize.

MR. MILLER: I would like to invite Dr. Courant to occupy my chair while I am standing and to make his comments about the paper. I do want to recognize Dr. Courant and the part he played in this paper. He, obviously, contributed the foreign data which were most important. His mathematical expertise and very deep understanding of the disability problems contributed much to the entire paper. Also, I would like to comment, very briefly, on the two papers that we had jointly written previously, particularly the one on the mathematical model, because I feel so indebted to him and some of the other mathematicians and EDP experts in Zurich. The concept of a mathematical



model is something that came to me very early in my association with disability insurance and from time to time I tried to develop one. However, we did not have computers and my mathematical background was not adequate to the task. When I had spent some time in Zurich and talked to Simon about it, he became interested and with my goal in mind and his competence in mathematics, statistics and the use of computers we produced this model which we have found to be quite useful.

DR. SIMON COURANT, SWISS REINSURANCE COMPANY: I just have one brief comment. There are a lot of discussions of influences in the paper; influence of sex, occupation, benefit period and deferment period. One should not overlook the basic message in the paper which is that in the last 10 years or so termination rates have come down drastically in North America and in Europe. I believe this is not just a fluctuation, something which will be corrected by the developments in the next few years, but that it is going to stand permanently because underlying basic factors have changed. It is, of course, not merely mortality which has affected this, but the recovery rate. More liberal definitions, more casual claims handling, more concern about court actions leads to more healthy people being accepted as disabled and so there will be a certain reduction in claimants mortality. But, nevertheless, what has basically changed is the recovery rate, as a result of more liberalism but to a very large extent as a result of higher replacement ratios. This, I believe, is the most important single factor affecting disability terminations. This ratio is going to stay as high as it currently is with Social Security and other benefits. Accordingly my belief is that termination rates will stay as low as they are now.

MR. MILLER: Before we hear the first oral discussions I want to mention that the authors would appreciate written discussions. Our paper did not go through the regular procedure because of its lateness. We felt that it was so german to this meeting that we distributed it personally. I would like to suggest that those submitting written discussions, send them to the editor, Mr. Spano, and a copy to me as well. If in discussing the paper, you have a message for Bill Taylor and Duane Kidwell and their committee, I will see that the message gets to them directly instead of waiting for the Transactions to be printed. Your discussion can serve a dual purpose; it can enhance whatever is printed in the Transactions, and it can also be very helpful to the Committee.

MR. E. PAUL BARNHART: There is a very brief description in the paper of the technique of standardization used. It might be helpful if there was an appendix or some expansion with more illustration to explain the technique of standardization in greater detail.

MR. MILLER: Basically, we were referring to the same procedure, conceptually, as is used in comparing census data. For example by use of an age-adjusted average you can make a valid comparison of mortality in a state where a lot of old people go to die with that in a state like Iowa. To some extent this procedure has been replaced, or at least modified, by the methods that Bill Taylor described of dealing with identifiable active influences so that the final tables will probably not be derived by the standardization procedure. Rather, they may be developed by one of the various techniques of isolating the effect of elimination period, occupational classification and other parameters. These techniques permit comparisons of levels of termination experience unaffected by differences in the underlying distribution of exposures.

MR. TAYLOR: The method that we are using has been developed for us by Dr. Tapan Roy at the Travelers. I would also give considerable credit to Ed Seligman of CNA who is not a member of the committee but has been very interested in our activity and has been very helpful. Recently, statisticians have been developing a branch of statistics to deal with qualitative as opposed to quantitative. We are hopeful that Tapan Roy will write a paper on this subject for the research conference in September. I would also be very pleased if the Society should choose to run a seminar on this particular branch of statistics.

MR. WILLIAM BURNES, NEW YORK INSURANCE DEPARTMENT: To Mr. Taylor: With regard to the valuation table for income disability you mentioned that you are going to provide basically two separate valuation tables, one for males and one for females. I do not recall your having addressed the question of occupational variations. Will there be a separate table for each of 2, 3, or 4 occupational groupings or will there be an average by distribution of business, or simply for the first or second most favorable occupations. To Mr. Miller and Dr. Courant: In regard to the termination rates, you both expressed the view that replacement ratios was the main problem, the fact that they are so high, and related to a great variety of sources, mainly Social Security. Suppose that replacement problems are gradually improved in the future, would you expect the termination rates after that would significantly improve?

MR. TAYLOR: We are going to be providing three options that will allow for class effect. The first of those options would be the traditional minimum table. It would be sufficiently conservative as to represent the worst kind of occupational class mix that you normally would find. The other two options address a whole new valuation system. The valuation system would consist of other tables plus a set of factors. The first way to use the factors for an individual company is to modify the two tables, male and female, to produce a unique set of tables for that company's valuation purposes. The third option is to rather use that whole valuation system as a multi-dimensional table, one of the dimensions of which would be occupation class.

MR. MILLER: We find in general that you cannot just look at the termination rate by itself with respect to some of these variables. You also have to look at the claim incidence rate. One example is this: We have no basis for differentiating the experience by replacement ratio in the analysis of individual disability income insurance. Fortunately the group data yield a lot of information which we consider to be applicable to individual insurance as well. It does give us rates of claim by group benefit ratio, which is essentially the replacement ratio. The group claim rates, published in the Society Reports, become very much higher as the replacement ratio goes up.

There is another published group table showing the claim rate according to whether income loss during the elimination period has been fully covered or partially covered by salary continuance or other insurance. If there is full coverage during the elimination period the claim rate is about 20% above average. We asked Simone Matteodo, Chairman of the Committee on Group Life and Health Insurance, and George Polino, who oversees the computer work of the Group Committee, if they could break down the termination data in the same manner and they have done so. We have not finished analyzing it. The individual with 6 months deferment period group coverage, whose employer replaces the entire salary during the 6 months, actually has a zero day elimination period. Nevertheless, the termination rates after the 6 months

are somewhat higher than average. Looking at the termination rates alone, you might conclude that the claim costs should be lower than average, but when you take the higher termination rates in combination with 20% more claims you have a significantly higher annual claim cost. One should not look at the termination rate in isolation.

MR. CLARK: Recent new products all suggest that activity is focusing back on the basic fundamental goal of offering maximum needed protection. This is in sharp contrast to the same kind of discussion we would have had 5 or 10 years ago when the gimmicks being talked about were his occ for 10 years or life. There is evidence of this in two areas: One area is in the definition of disability. New products contain some form of residual clause or loss of earnings clause. The other area is the attempt to integrate with the various government programs: Social Security, Workers' Compensation and state programs. For the professional market where we are writing a non-can product and, because of the competition, offering very large amounts with long term guarantees, it seems that the all-or-nothing type of Social Security offset rider best fits the need. The bulk of the need is for full protection and that is provided by the traditional benefit. Insurance benefits are supplemented at the front end by use of a rider with a long waiting period equal to the Social Security waiting period combined with benefits payable only in the event Social Security does not pay. This allows a higher ratio of total benefits to earnings than would otherwise be possible. Such riders have gained wide acceptance and are sold by a number of companies with minor variations in details. In the blue collar market the situation is a little bit different in that there may be no need for traditional full protection. The only insurable risk is the waiting period in front of Social Security and then only for non-occupational claims. What is most needed are benefits payable if Social Security or Workers' Comp does not pay. A dollar for dollar offset contract is probably more suitable for that clientel, because the bulk of the benefits are uncertain. If you do write a large portion of benefits on a contingent basis, how do you price long term guarantees when you do not know what benefits will be 5, 10 or 20 years from now? This raises the question of periodically revalidating the amount of insurance protection and changing the amount of benefits and the premiums appropriately. We think it is possible to develop a product that utilizes periodic validation, which uses a dollar for dollar offset and avoids the criticism of locking the insured to premiums which may be for protection that he cannot use when he becomes disabled. We hope to have this product out very soon.

The need to recognize dual income and dual net worths in our current society must be dealt with and solved. The obvious difference in tax rates, for two incomes vs. one income, must be allowed for in benefit limits. We all talk about financial underwriting, but I know of no actuary that is satisfied with what his company is doing. Those that have rules do not really follow them, and most rules describe a subjective approach on a case by case basis.

Despite the variety of definitions of disability we have today, they may not be appropriate 10 or 20 years from now. Look at the changes we have had in the last 10 years in the insuring definition. We have recently extended mandatory retirement and at the same time we have observed trends towards earlier optional retirement. We must find a way to tie our renewability and payment of benefits to early or extended retirements.

MR. MOONEY: Our interest in Canada is somewhat different. As far as new product development, most of the major writers in Canada also operate in the states and tend to follow developments and products in the states. We have not had the problems of Social Security that you do in the states. Our benefits are much lower. I do not think that the disability benefits get above \$4,000 per year. One interesting development in Canada currently relates to the integration of benefits, all benefits. We have in Canada an integration clause that really applies only to insurance benefits but it has been totally ineffectual. It provides for reductions only after benefits exceed 100% of gross income and these benefits are not taxable. The Canadian Association of Accident and Sickness Insurers (CAASI) has made a proposal to the Superintendent of Insurance for an integration provision that would be compulsory in all contracts that would provide proportionate reduction to replace only 80% of net income. All benefits, government and private, would be included. The reaction so far is not totally pessimistic.

MR. MILLER: The effects of the great depression of the 30's is something all of you are aware of from your studies. It is very clearly portrayed in the 1952 Reports number, a study of the 1930's to 50's disability experience on benefits provided in ordinary life policies. In a superficial analysis which I made of this experience a few years ago, I noticed that the claim rate had on the average doubled, and at the younger ages it had tripled, whereas the termination rate had fallen only about 17%. From that I mistakenly concluded that the thing you wanted to watch was the claim rate. I was a little puzzled a few years ago when the experience reported on loss of time, and conversations with friends, indicated quite a different picture, that there was very little if any increase in the frequency of claims but that they were lasting a lot longer.

Thinking about that a bit I realized that we were talking about the experience on two very different types of coverage. The 1930-50 experience study was based entirely on 90 day elimination periods and lifetime benefits, not just to age 65, whereas, with the loss of time experience, about 90% is on elimination periods of one month or less and benefit periods of two years or less. So the comparison, without taking that into account, is completely invalid. It was then evident that the doubling of the claim rates during the depression of the 30's did not mean more sickness or accidents; it simply meant that more and more people were hanging on through that 90 day deferment period to qualify for benefits at the end of it. The claim rate, though we may think of it as frequency of disability, is nothing of the kind. The claim rate is actually the frequency of disability compounded with the probability of continuance of claims to the end of the elimination period.

One other comment about the Great Depression - there were only four companies that continued to write non-cancellable disability insurance through the depression and into the current decade. They all happened to be located in Massachusetts. They came through with very little difficulty. Loss ratios went from the 50s to the 60s. Companies were able to deal with that. The four had this in common - none of them paid for more than two years on any one continuous disability. They were not seriously affected by people who were retiring on their disability policies. As we try to look at past experience and project it into the future, we must consider not only the pattern of economic conditions and unemployment but the character of the policies that are being issued. I would expect that, if we had a serious recession now, the experience on the one or two year benefit policies would not be disastrous. It could be much worse on the long term benefits. There

is, however, one thing that would affect all policy types, that, whereas in the 30's the insurance policy was the only protection that anyone had, unless it was a Workers' Compensation case, virtually everyone now has Social Security, or Railroad Retirement coverage, or something similar.

It is also very important to recognize the full impact of the two-income family. Generally, in the 1930's if a woman married she lost her job. Today more than half the married women are working. If you have not already done so, I urge you to determine the net replacement ratio, based on the maximum coverage that you now offer, by looking only at the income and coverage of one spouse, after allowing for income tax and Social Security benefits. Then recalculate the net replacement ratio, taking both incomes into account. Even though the other spouse does not have any insurance you may find that the maximum amount you can safely issue has been greatly reduced. One study that I have seen indicated that for incomes over \$20,000 per year there is practically no place for insurance in these two-income families. I recently saw a reference to an HEW study which takes into account the Social Security alone. It showed that the existence of an income-earning spouse can augment the net replacement ratio by as much as 60%, e.g. 90% replacement ratio goes up to about 140%.

MR. TAYLOR: Everybody here must know of the existence of the HIAA special disability income committee. I would like to highlight some current activity which they can act upon. There is a seminar being sponsored by this committee in Chicago, June 21-22. Paul Barnhart is on the panel. The invitation was addressed to the chief executive officers of the members companies. I urge you to make sure your company is being represented. At that seminar there will be distributed a catalog of all the various disability compensation systems which the research subcommittee has identified. This will be published later in a printed booklet form. Just a little over a month ago companies writing disability income were solicited by a proposal to participate in an underwriting index. I would suggest that you see what happened to that particular item in your company. The shining star in this HIAA disability committee has been the work of the Federal affairs committee and the influence that they have had on the Social Security staff, or the subcommittee of the House Ways and Means Committee. They were effective on the 1977 amendments and they have been very effective on the current amendments which are now in the Congress.

MR. WILLIS W. BURGESS - BANKERS LIFE & CASUALTY - The Social Security amendments, to which Mr. Taylor referred, is a House bill which was approved by House Ways and Means which would cut the replacement ratio to 80% of AIME or 150% of PIA if lower. An amendment which would have cut it even more, which the federal affairs subcommittee would have liked to have seen, was narrowly defeated in the House Ways and Means but it is expected to go to the full floor of the House. That amendment would cut the replacement ratio to 80% of AIME or 130% of PIA.

