### **RECORD OF SOCIETY OF ACTUARIES** 1991 VOL. 17 NO. 3A

### INDIVIDUAL DISABILITY INCOME --VALUATION AND TAX ISSUES

Moderator: WILLIAM J. THOMPSON Panelists: JUDITH JUSTIN DONALD C. STRAFFIN Recorder: MONA J. WASSERMAN

The panelists will present the results of an intercompany study of disability income reserve practices, dealing with issues such as:

- Typical reserve bases
- Reserve margins
  - Active lives
    - Disabled lives
- Adequacy testing
- Valuation of Common Rider Benefits
  - Cost of Living Adjustment (COLA)
  - -- Residual
  - Social insurance
- Tax reserves

MR. WILLIAM J. THOMPSON: I am a consulting actuary with Milliman and Robertson, Inc. With me on the panel are Judy Justin, who is the vice president in charge of disability income reinsurance at North American Reassurance Company, and Don Straffin, Assistant Vice President and Associate Actuary at Union Central Life. Our recorder is Mona Wasserman of Milliman and Robertson.

It is probably no surprise to anyone that profit margins in individual disability income lines have sharply declined over the past few years. As a result, companies are closely managing their operations with a variety of product, pricing, underwriting, claim management, and other changes. Among the areas being examined are valuation methodologies: Are our claim reserves adequate? How much margin do we have in our reserves? Are we holding too much in reserves?

Our objective in this session is to discuss ways in which companies establish, manage, and monitor their disability income reserves, and to point out some common problems and pitfalls that should be avoided. To do this, we conducted a survey of reserve practices among disability income companies. Each of the panelists will address some of the topics covered by the survey.

We sent surveys to 36 companies with individual disability income lines of business. Twenty-nine companies responded to part or all of the survey. These companies represent nearly two-thirds of the total noncancelable disability income premium in force. Consequently, the practices and methods addressed in the survey should be generally representative of the industry at large.

The survey requested information on the following:

- 1. A description of the statutory valuation basis for active life and claim reserves;
- A discussion of any recent changes or contemplated changes in valuation basis;

- 3. Modifications made for tax reserves;
- 4. An estimate of the cost of the new deferred acquisition cost (DAC) tax;
- An explanation of reserve methodology for certain benefits, specifically, premium waiver, residual, cost of living, and social insurance substitute (SIS);
- An explanation of how the AIDS risk is being addressed;
- 7. A discussion of reserve adequacy testing; and
- 8. An estimation of margins contained in the reserves.

Twenty-five companies responded to our questions about active life reserves. Just under half of the companies have moved from the 1964 Commissioners Disability Table (1964 CDT) to the 1985 Commissioner's Individual Disability Table A (1985 CIDA) as their morbidity basis. Four companies converted to CIDA for 1988 issues and later; two for 1985, and one each for 1991, 1990, 1986 and 1982 issues. Two companies did not specify the year of their change.

Most companies are valuing active lives at 5.5% interest regardless of which morbidity basis they are using. Two-year preliminary term is by far the most common method in use today with all but one of the companies surveyed using that method.

The formulas used vary somewhat, though midterminal plus either gross or net unearned premiums is the most common approach.

With the change from the 1964 CDT table to the 1985 CIDA table, what happened to active life reserves? Chart 1 compares terminal reserves for each table at 5.5% interest on a two-year preliminary term basis for a class 1 male, issue age 35, with benefits to age 65 after a 30-day elimination period. As you can see, the CIDA reserves are substantially less than the corresponding CDT reserves. If an increase in the valuation interest rate accompanied the change in morbidity basis, the reduction in reserves would be even greater.

Chart 2 shows a similar comparison for issue age 45. In this particular case with the claim costs that we have, given the age 65 benefit, you would actually end up with negative reserves under CIDA at the last durations. They are shown as zero on the chart.

Before using the 1985 CIDA tables as our standard, we must assure ourselves that it is a reasonable basis. How does recent industry experience compare to the CIDA table?

Based on a survey I conducted of a number of companies as well as my own analysis of experience of a few companies, it appears that actual incidence rates are better than the 1985 CIDA valuation table. Actual-to-expected numbers in the 80-90% range seem to be the norm. However, some companies have indicated that incidence rates have begun to creep up over the past six months or so. This may be attributable to the economic recession that has hit many parts of the country. Therefore, it appears that margins in incidence rates relative to CIDA may be diminishing somewhat.

Claim termination rates are a different story. The CIDA valuation table termination rates appear to be deficient during the first two to three years of claims with actual



---- 85 CIDA CLASS 1 ---- 64 CDT



PANEL DISCUSSION

CHART 2

----- 85 CIDA CLASS 1 ----- 64 CDT

terminations being as low as around 75-85% of CIDA in the first year, and then gradually moving toward 100% of CIDA. Some companies say that it is even worse than that in the first year.

Combining these two pieces, we get claim costs under the 1985 CIDA valuation table that may be deficient by as much as 30-35% for some common plans of benefits. Therefore, using an unadjusted CIDA table for active life reserves may be somewhat liberal as a valuation basis.

However, statutory reserves computed on this basis might still be viewed as somewhat conservative since the assumed interest rate is less than that rate at which funds can be invested. The statutory reserves ignore policy lapses. What happens to the active life reserves if we use more realistic assumptions for lapses and interest?

Chart 3 shows the same CIDA and CDT reserves that we looked at earlier for age 35. It now introduces reserves based on 7.5% interest, and it incorporates lapses starting about 10% per year, grading to 5% after ten years. I refer to this as the "economic" reserve. Some others call it a "management" reserve. For the first 18 policy years, this "economic" reserve is less than the statutory minimum using CIDA. However, it then exceeds the statutory minimum in this example.

Looking at age 45 in Chart 4, we find a very interesting situation. The "economic" reserve is never less than the statutory minimum reserve. This phenomenon may be surprising, but in this case, the result is attributable to the decrease in claim costs at older ages as the effect of the limiting age of 65 for benefits causes the value of the benefits to diminish.

In other claim cost situations, the statutory minimum reserves (5.5% without lapses) may exceed the economic reserve at all durations. The important point to note is that unusual changes in reserves can arise when assumptions are changed; therefore, it is necessary to closely test the effect of those modifications and not just assume the effect they are going to have on reserves.

MR. DONALD C. STRAFFIN: Active life reserves exist because of the level premium principle. The "high" premium at the early durations is absorbed by the active life reserve and released as needed later. No such principle, to my knowledge, applies to the claim reserves. Instead, the active life reserves produce an expected amount of claims which in theory should be sufficient to cover the cost of new disability claims. If you go back to basics and set up a reserve built on a single active life policy, you will readily refresh your memory that this interaction between active life and claim reserves holds true – at least in theory.

In practice, the contribution of the active life reserves towards the new claim reserves seldom is in balance. I know of one company that has had plans for several years to measure its contribution from the active life reserves versus the cost of new claims. It has yet to complete the project.

Claim reserves for disability income were set up for many years using the 1964 CDT at 3.5% using the 1958 Commissioners Standard Ordinary (CSO) Table. The 3.5% interest rate has risen at most companies to a higher rate – in the 4.5-5.5% range.



PANEL DISCUSSION

---- 85 CIDA CLASS 1 ---- 64 CDT ---- ECONOMIC



The survey results we recently ran show that 17 of the 26 responding companies have also moved to the 1985 CIDA tables.

There were 19 companies covered by this survey that were known to be using the 1964 CDT table with interest between 2.5% and 3.5%. Of these 19 companies, 11 are now valuing their claim reserves using the CIDA table with interest between 5% and 5.5%. The remaining eight companies are still using the 1964 CDT as the morbidity basis for their claim reserves.

Summarizing for the 26 responding companies, 17 are currently using the 1985 CIDA table. Almost half the companies in this survey that have remained on the 1964 CDT are from states where the 1985 CIDA is not an approved valuation standard. It would have been interesting to have asked the companies why they have not switched.

It was a surprise to me that the survey did not uncover any company using the Commissioner's Individual Disability Table B (CIDB table) as its valuation basis.

What about the validity of the valuation tables currently in use? The survey did not address this issue directly. However, several companies indicated the modifications they found necessary. In fact nine such companies responded.

We should make note here that the 1985 paper "New Disability Tables for Valuation," which introduced the DTS table, the precursor for the 1985 CIDA, stated that no valuation table could reasonably be so strong as to cover all possible levels of company experience. Hence, the company modifications reported here are an attempt to bring the valuation tables closer to the various companies' need to provide for experience as each company sees fit. Let us remember also at this point that the CIDA table contains a 5% margin in its termination rates during the first year of disablement.

Most of the modifications reported consist of a percentage increase in the reserve factors applicable, usually during the first two years of the claim. Among the five companies using this method, the adjustments applicable to the first six months of claim were in the range of 25-40% additional reserve. For the next 18 months, the reported adjustments reflected company experience and were in the range of -10 to +15%. Not all companies quantified their adjustment.

It can be said that almost all nine adjusting companies were attempting to apply company experience during the first two years following disablement.

One recommended way of adjusting CIDA for more conservative claim reserves, may be shown in Charts 5 through 8.

Chart 5 shows the monthly claim reserve for an average 48-year-old claimant on a "to age 65" plan and a 30-day elimination period. The bottom line is the regular CIDA reserve. The upper line reflects a 20% additional margin in the first-year termination rates and 10% in the second year. Of course, this means the weekly and monthly termination rates in CIDA have been lowered. Chart 6 illustrates the same

# DISABLED LIFE RESERVES MALE AGE 48 30 DAY EP TO AGE 65



- 100% CIDA - ADJUSTED CIDA

CHART 5

# DISABLED LIFE RESERVES MALE AGE 48 90 DAY EP TO AGE 65



PANEL DISCUSSION

CHART 6

---- 100% CIDA ---- ADJUSTED CIDA

information for a 90-day elimination period. The values in these two charts are not important here. Both have similar patterns.

In Chart 7 where the ratio of the conservative reserve to the 100% CIDA reserve is shown, we can see that the conservatism during the first six months falls from almost 50% at time of claim to a little under 15% by the end of six months. This fact could be used to justify an extra 25-30% (flat) during those first six months. This chart could also justify an extra 3-5% during the next 18 months.

Chart 8 is similar for 90-day business. It could justify 20-25% for six months, and again, perhaps 3-5% for the next 18 months.

This approach produces results very similar to those modifications to the 1985 CIDA that are currently in use by the responding companies.

The next item to be covered involves the question, "When are companies setting up their claim reserves?" Twenty-four companies responded, and 16 of these reported that they set up their claim reserves upon notice. Five, however, set reserves up upon first payment; two after the elimination period; and one upon the later of elimination period and three months of disability.

The next question raised by this survey asks whether reserves are adjusted for pending claims or claims in litigation. Ten companies reported they make no special adjustments for pending or litigated claims. Nine companies reported they hold all or a part of litigated claims in reserve. Eight companies make special provisions for their pending claims.

The question on how the incurred but not reported (IBNR) claims are determined generated a wide variety of responses. Eight companies reported using a percentage of either premiums in force, premiums, claim reserve, cash claims, or incurred claims. The remaining 16 companies reported 16 more methods. Perhaps with more detail, some of these various methods may involve some similarities.

What changes have been made recently in reserve methods? Are any changes contemplated? The answers given indicate many recent and proposed changes to the CIDA table. Some companies indicated a tax motive here. The change was being made because the CIDA table gave higher claim reserves and accordingly higher tax deductions. Three companies reported they were working on their rider reserves, especially the residual rider.

What modifications are made to produce the tax reserves? By far, the most common method used is to adjust the statutory reserves for the federally prescribed interest rate. The prescribed interest rate varies by inception year for claim reserves, and issue year for active life reserves.

No company reported any methods for saving tax using their disability income reserve.

What was the estimate of the effect of the DAC tax? The responses varied from less than 1% to as high as almost 8%. Although 10 companies reported they have not

## RATIO OF ADJUSTED CIDA TO 100% CIDA RESERVES MALE AGE 48 - 30 DAY EP TO AGE 65



960

- ADJUSTED / 100% CIDA

CHART 7

# RATIO OF ADJUSTED CIDA TO 100% CIDA RESERVES MALE AGE 48 - 90 DAY EP TO AGE 65



---- ADJUSTED / 100% CIDA

CHART 8

yet determined the DAC tax effect, 13 felt it would land between 1% and 4%. For those who have not tackled the DAC tax calculation, you may be in for an unpleasant surprise at the extent and complexity of this tax.

MS. JUDITH JUSTIN: I am going to talk about the supplemental benefits that are attached to disability income policies. We looked at four supplemental benefits: premium waiver, residual, cost of living increases, and SIS benefits.

I would like to define a couple of these just to make sure everyone understands the terminology I am using. COLA benefits are increases that occur after an insured is on claim, and they begin either after one year of disability or one year of benefit. The increases can be simple or compound, and they can be a set interest rate or depend on Consumer Price Index (CPI) increases.

The SIS benefit is a benefit that pays if the insured is denied Social Security benefits. This runs for the full benefit period but usually not beyond age 65.

We saw quite a bit of variation in the reserves for these benefits, both in the methods and the amounts that were being held. One comment that many companies made was that they are using the margins in the 1964 CDT table to cover the liability for these additional benefits.

As I discuss these benefits, you will notice that the number of companies responding to each question is not the same. This is because some of the companies did not answer the question or the answer was not in a form that I could use. Some companies just do not offer these additional benefits.

The first benefit is premium waiver. This is probably the most straight-forward additional benefit. For active lives, there are 22 companies accounted for. Twenty of the companies are holding an active life reserve and two are not. Sixteen of the 20 are calculating reserves by applying factors to the monthly premium with 14 using the gross premium, and two using net premium. For this calculation, the benefit period will be the premium paying period not the benefit period on the policy. The elimination period may also be different than the basic policy. If there are retroactive benefits, they need to be included in the cost as well. The remaining four companies are estimating the cost relative to the basic reserve and adding it via a factor ranging from 2.5-5%.

For disabled life reserves, 22 out of 23 companies are holding a reserve. Twenty out of the 22 companies are using gross monthly premium as a benefit amount. Again, the benefit period will be to age 65. The other two companies are using a loading. One is using 4.5% and the other is using 2%. The company that is using 2% said that it feels this needs to be reviewed.

For active life reserves on residual claims, out of 21 companies, approximately half of them are holding no active life reserve. However, one of these companies plans to add it in 1991. Another is not holding it because it has a built-in residual. However, when the company goes to a rider form, it plans to add the active life reserve.

Eight of the companies that do hold reserves are using a loading. Six of these eight are loading their reserves by a factor ranging from 10-20%. The majority of them use a factor toward the higher end of that range. The remaining two companies are loading claim costs and deriving reserve factors. One of these companies uses loadings of 20%. The other company assumes that 10% of recoveries go onto residual, and then it sets 70% of the benefit amount. Three other companies that hold reserves do so by prorating the reserve by the gross premium.

On disabled lives there is a lot more consensus. All 21 respondents said they were holding claim reserves. Valuing on the last payment amount is the most common method. Fourteen of the companies are using last payment, and three are valuing on the total disability benefit amount. Two of these three said that they preferred last payment, but they have some system constraints which make it impossible to do it right now. Four companies are using an estimate of 50% or 60% of the total benefit. Here also, you can use age 65 for the termination of these benefits.

Interestingly, one company is holding a residual reserve for total disability claims if the policy has a residual benefit for the possibility of the insured going from total to residual.

There has not been a lot of data on residual claims in the industry. The Society is planning to do a residual study, but it is having difficulty getting companies to contribute data. I urge anyone who can to contribute data that will help to gather statistics on this.

On cost of living claims, for active life reserves 23 companies responded. All but one are holding active life reserves for COLA. The majority, 15 of them, are calculating reserve factors using different assumptions for different rider forms. The assumed increases range from 4-10% or an estimate of future CPI increases. Several companies said they are assuming the maximum possible increases in these calculations.

Four companies are using factors to estimate the reserve. One of these companies has a factor that is applied to premium. This factor is 80%. The other three companies are using factors that apply to reserves; for example, 24% for a 5% COLA; 59% for a 10% COLA. One of these four companies is changing to specific reserve factors in 1991.

Two other methods were given. Two companies are prorating on gross premium, and one company is using a zero interest rate assumption in calculating the reserve factor.

On disabled lives, every company that responded was making some adjustment for COLA reserves. The amounts varied quite a bit though. Fourteen are deriving reserve factors, but the interest assumptions are lower than what they are using for the active life reserves. The range was 3-6.5%, with 5% being fairly common.

Four companies are using a zero interest rate assumption. Three companies are using the current benefit payment, but they are not making any provision for future increases. One of these companies is going to a zero interest assumption this year.

Other methods utilize various things such as increases for just the first three years. One company is using a last payment plus 5% of its reserve amount, and another company has percentage loadings for different COLA percentages.

These numbers indicate the COLA benefit increases the reserve very significantly. Charts 9 and 10 illustrate this. Chart 9 shows the **1985** CIDA, with and without COLA, for an age-65 benefit with a 90-day elimination period. It is a 5.5% COLA benefit and a 5.5% interest assumption. The age at disability is 47. The COLA reserve starts out at 30% higher, and at five years it is **60%** higher.

Chart 10 shows COLA with disabilities beginning at different ages for a \$1,000 per month benefit. The lowest line is for disability beginning at age 57. This reserve peaks at \$57,000 in two years, and then decreases as it nears the end of the benefit period. The next highest line is age 47, which levels off at about \$140,000. The age 30 line gets up to \$200,000 at the end of five years, and it looks like it is still climbing. The age 27 line does not rise as steeply in the beginning because of the recoveries that are built into this age group, but at five years it is up to \$230,000 and still climbing pretty steeply. It would be interesting to run that out and see when it does peak.

The last supplemental benefit we looked at was SIS. For active life reserves, 22 companies responded. Twelve of these companies are calculating reserve factors that take into account the probability of Social Security payments. Three companies are applying reserve factors to the full benefit. Two are using a percentage load; one is using 55% and the other is using 71%. One company is prorating on gross premium, and the remaining four are holding no active life reserves for SIS.

For disabled lives, 24 companies responded. Two are not holding any disabled life reserve. When Social Security pays, all but three companies are taking their reserve down to zero. Those three are still holding something for the possibility of the award being reversed. Conversely if Social Security is denied, the full reserve is held. Before the Social Security determination is made, 16 companies are holding benefits on the full amount, and six companies hold a reduced benefit which reflects the probability of paying.

Those are the special benefits we looked at. We also asked a question on AIDS claims. We wanted to know what companies were doing, if anything, to change the reserve basis for AIDS. The answer is that companies are doing very little. The majority are using the tabular reserves, and most of the companies said that the AIDS risk that they are seeing is very minimal. For active life reserves, only one company is holding an extra liability for AIDS claims. Some companies cited the margins in the CDT, but half of the companies quantified the amount of AIDS claims they are seeing. The amounts based on claim reserves ranged from less than two-tenths of 1% to 4%. Some expressed the amount in terms of total claims and the range was about the same from almost nothing to 3% or 4%.

On disabled lives, 21 out of the 26 companies responding are holding the tabular reserve. These companies feel that this is conservative. The remaining five companies are making some adjustment to the tabular reserve. Two of them are basing it on their own experience on AIDS claims, and one is considering going to this basis.





One company holds a 22-month liability for claims less than two years old and the regular reserve after that. Another company holds the lower of the tabular reserves and a 24-month liability. One holds a four-year liability. At North American Reassurance, we looked at holding a three-year liability for AIDS claims, and we found that our AIDS reserves would be lower in aggregate than the tabular reserve. In the beginning of the claim the three year liability is higher, and then for longer durations it is lower.

MR. THOMPSON: The last couple of questions that were covered in the survey asked companies how they test the adequacy of their reserves. First we asked about claim reserves. Not surprisingly, 16 of the companies surveyed performed routine runoff or Schedule H and Schedule O testing. Nine companies perform actual-to-expected studies, and three companies mentioned gross premium valuations. We also found responses like "we perform aggregate testing with other lines of business." Unfortunately, we found some companies that said that they do little or no testing of the adequacy of their claim reserves. Multiple answers were allowed, so the results do not add up to the number of companies that were in the survey.

I would like to spend a minute on Schedule H and Schedule O testing since it is such a common practice. First, Schedule H looks only at a one-year development of reserves across all claim durations. It provides a very general macro test of reserve adequacy over a short period of time, but it does not identify where problems might be arising if the reserves appear to be deficient.

Schedule O looks at a two-year runoff, and it tests the adequacy of reserves for the first two years of claims. However, it does nothing to test the adequacy of the tail of the claim reserve.

Both Schedule H and Schedule O tests, as presented in the statutory statement, ignore the effect of required interest. If that interest were included, the results would be more favorable than shown in the statements.

What sort of aggregate testing of reserves do companies perform? It is necessary to look both at active life and claim reserves. We have seen that some companies consciously assume that the margins in their active life reserves will cover certain claim reserve liabilities that may not be explicitly covered in the company's valuation system. However, to the extent possible, it is best to have the active life and the claim reserve each stand on its own since it is possible that margins that are assumed in one area might erode over time or valuation basis changes may affect the margins in each component of the reserve so that assumed margins may no longer continue to hold.

The last question we asked dealt with reserve margins. Two companies felt that their margins had improved over the past few years; three thought they were about the same; and two thought they were thinner. Two companies said they thought they had some margins; two others felt that the active life reserve provided sufficient margins; one company said that it included no explicit margin; and another company felt that its reserves were sufficient. Another 13 companies either did not respond to the question, or said that the information was not available.

It is important to remember that reserves are not intended to be a 50/50 proposition. Some reserve margin is appropriate and necessary. Statutory reserves are to be "adequate," implying that they should be sufficient in the vast majority of situations. GAAP reserves should be "reasonable," including a margin for adverse deviation. Consequently, knowing how much margin you have above the "best estimate" reserve is a necessary condition for the prudent management of your disability income reserves and profitability.

This summarizes the survey that we have conducted.

MR. W. DUANE KIDWELL: In your survey you did not cover the reserve for claim expense reserve. One of the requirements of the new model law is that a company should be holding a claim expense reserve. I wondered if anybody on the panel or the audience had any information as to what companies were doing in that regard?

When we do our study of disability income every year, we look at Exhibit 5 and try to determine from the trailing numbers on Exhibit 5 (I believe it is called Unpaid Expenses) what companies may be doing in health insurance in total. We cannot single out disability income from that because Exhibit 5 is not broken down that closely. I wondered if anybody had any information on what is happening there and whether we have adequate reserves? One concern that we do have in some of our analyses is that we do not have adequate expense reserves.

MR. THOMPSON: I am aware of a number of companies that are concerned about the need to establish claim settlement expense reserves, but I know very few that are establishing any at the moment. My sense is that the inclusion of that reserve will probably increase overall claim reserves by somewhere probably in the 5-7% range.

Claim settlement expenses can be looked at in two different components. One component would be the ongoing repetitive payment process for claims that are open and known. In those cases most of your big expenses have already taken place. You have gone through the process of determining that you have a valid claim, getting the basic necessary medical information (in some cases financial information depending on residual or total disability). You have established all of your files and put things in your systems. So those big, up-front expenses that are part of your aggregate expenses have already taken place. Therefore, your ongoing expense for maintaining that claim on the books, may be relatively small. I have seen numbers 3%, 4%, and 5% of claim.

The second component is the IBNR claims. They are out there. You do not know where they are, but you know they are going to come in. Those are the claims that you have got your full expense to go through when they do appear. Some companies are looking at establishing a second higher percentage of the IBNR reserve as a claim settlement expense reserve for that item, and that number may well be over 10-12%. Other companies are taking a single number approach. Most companies are just beginning to think about or worry about it from what I have seen.

MR. JOHN I. HOWARTH: I wonder if anybody knows the regulatory situation with regard to 1964 CDT and CIDA as far as approval goes? The CIDA claims table is a lot stronger than the 1964 CDT, but that is not true of the active life reserves. I

wonder if we have the latitude of holding the CIDA in all states for active life reserves?

MR. THOMPSON: I tried to find that information, but could not get a current status. The most recent thing I have seen published shows that Wisconsin has approved the revised model law allowing the use of the 1985 CIDA table. I think at most it is a handful of companies, but I do not have the exact count.

An interesting thing to note is that the 1964 CDT was never an accepted basis as defined by the NAIC. The number of states that approved it was somewhere in the low 20s, I believe. More than anything, it appears that a practice that is commonly accepted by companies seems to be acceptable in most states. I think you would have a difficult time staying with the 1964 CDT for your claim reserves and using 1985 CIDA for active lives. I think if you go to CIDA it should be for both active life and claim reserves at the same time. There has been some debate on when you go to it as well. Those that have made the change, have typically done it for issue years for active lives, or incurred years for claim reserves. This is an approved method as adopted by a majority of states.

MR. MARK E. LITOW: I will just pick up on your last comment in a general observation. In the charts you showed that some companies did not hold reserves for certain items. I think we are all a little concerned in those areas. You also brought up the question of the good and sufficient test, and what is an adequate level of sufficiency for reserves. I would be interested to hear comments from the panelists as to what they believe are good and sufficient tests, given what was found in the survey?

MR. STRAFFIN: Basically companies are using the claim runoff methods. They each have their own unique tests, but the claim runoff methods have worked at companies I have been at for a long time. I do not think I have ever seen active life reserves tested.

MS. JUSTIN: I would say that the claim runoff method is probably a little bit dangerous right now because of the way the benefits have changed. There are a lot of new benefits that really are not going to show up in that pattern.

When we looked at the active life reserves on the CDT, the margin was sometimes as much as 50%. That probably covers a lot of these benefits. But when companies go to the new table, I think they have to be very careful to look at all the benefits separately and make sure they have the adequate reserves.

MR. THOMPSON: Here is one way that you might look at margins. I have never seen anyone try to do a statistical analysis of disability income reserves for determining how much beyond a 50/50 number is going to give you a two-thirds confidence and how much beyond to give you a 95% confidence. One shortcut might be if you are working from a runoff type of test for your claim reserve; for example, assume that at least two-thirds of the time or more you have adequate reserves. You should take a look over a period of time and find out how many years your reserve testing has shown that you have been sufficient, and how many years it has not.

It seems to be the nature of disability income business to do many of these things on feel. It is a matter of having experience, having some expertise, having done it for a number of years, and a certain sixth sense that comes along after you have been at it for a while. There is no uniform process that I have ever seen to really perform adequacy testing.

I think it is imperative for any company that is in the business to be looking at its own numbers to have a sense of where it thinks it is. Whether the margin is 5% over a 50/50, or 10% over; whether that covers two-thirds or three-quarters of the time for the reserve to be adequate is difficult to say. I find it somewhat disturbing how few companies have any idea how much margin they have or if they have a margin at all. It is very difficult to be on top of things and to really manage the business if you do not have that information. Doing routine studies and actual-to-expected termination rate studies on claim reserves, running some actual-to-expected types of analysis on active life reserves, testing the margins on each of those separately, and then looking at the total are things that everybody should be doing as a matter of course.

MR. KIDWELL: If you want a good test you would do a gross premium valuation. In GAAP accounting, each year you are supposed to do a recoverability test which is akin to a gross premium type of valuation. So I would think that you have the tools, particularly now that pricing is being done on a somewhat more scientific basis. The tools are there to do better testing, and the best test I can think of would be to keep a close tab on actual-to-expected incidence rates, termination rates, persistency, and expenses, and for overall testing to be done as a gross premium valuation.

The requirement of the model bill does not single out a particular reserve for adequacy testing. You should test each reserve, but the true test, according to the bill, is the overall adequacy. So you might have offsetting sufficiencies and deficiencies, and they are perfectly acceptable.