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LONG-TERM DISABILITY BENEFITS

Underwriting

A. What are the underwriting considerations which enter into a determination of the amount of disability income benefit from all sources combined in terms of take-home pay that can be safely offered?
B. What deductions from the basic long-term disability benefit are being made for disability benefits from Social Security, total and permanent disability benefits under group life insurance, early retirement benefits and disability benefits from other sources?
C. What formulas in terms of gross earnings have been developed for group long-term disability benefits in the light of such considerations?
D. In the premium rate for a long-term disability plan, what methods are used to evaluate benefits, such as those referred to in B above, which are contractually deductible?

MR. RAY D. ALBRIGHT: Group LTD is a line that has only recently become prominent. It is a rapidly growing coverage and may easily become as commonplace as group life or group hospitalization. The growth of group LTD resembles the growth of group major medical of about 8 or 10 years ago.

Reliable statistics are quite slow to emerge (much slower than on major medical) for these reasons:

1. The relatively long waiting periods. Typically a waiting period would be six months.
2. The low frequency. Three to six claims per year per thousand insured employees would be typical.
3. The extremely long benefit periods, perhaps 20 to 30 years on some claims.
4. We know very little of the incurred claim liability paid within the year of the claim.

The absence of a generally accepted morbidity table which could be employed as a standard for expected claims, makes it extremely difficult to compare the experience of one company with that of another. Loss ratios in themselves have little meaning since premium scales vary tremendously. Possibly the 1964 Commissioners Disability Table might serve as a useful base for reference until something can be developed from group experience.

MR. SIMONE MATTEODO, JR.: Many factors are involved in establishing a relationship of an employee's disability benefits to net earnings after all deductions for federal income taxes, state income taxes, Social Security taxes, transportation, union dues, and other miscellaneous business expenses. First, it is not practical to write disability benefits in terms of take-home pay, since even for two employees with the same gross earnings, it is highly unlikely that they will have the same net earnings. In addition, the disability benefits themselves will have different values under different conditions. For example, under employee pay-all plans, the LTD benefits are tax free. However, if employer-purchased LTD benefits are in the picture, such as group life total and permanent disability or disability benefits under a pension plan, there might be a tax liability on some of the disability benefits.

We are still a long way from being able to measure accurately take-home pay and disability benefits for underwriting purposes. At the Equitable, we approximate net earnings by deducting estimated federal income tax. This will overstate net earnings because there are bound to be other deductions. On the other hand, for disability benefits we use gross benefits. This may also be an overstatement if there are any taxes incident to the disability benefits or medical expenses not provided elsewhere. Such disability benefits should generally be kept within 65–75 per cent of such net earnings for most employees.

The following table illustrates a 60 per cent LTD formula. Deductions are made for all forms of disability and retirement benefits.

Monthly Gross Income	Net Earnings*		60 Per Cent of Gross Income	Ratio of 60 Per Cent of Gross Income to Net Income	
	Single	Married†		Single	Married
$ 400	$ 353	$ 376	$ 240	.68	.68‡
800	681	715	480	.70	.67
1,200	982	1,043	720	.73	.69
1,600	1,262	1,365	960	.76	.70
2,000	1,523	1,675	1,200	.79	.72

* Net earnings is gross income less estimated federal income tax.

† "Married" assumes a family of an employee and wife with one child under age 18 filing a joint return.

‡ Assumes $254 Social Security benefits.

For the higher paid single employees, benefits are more liberal than might normally be considered safe.

Caution should be used even though only a very few lives seem to get a high disability benefit in relation to net earnings because this coverage has a very low claim frequency and only one extra disability per thousand will turn an average claim experience into a poor one.

The Equitable's standard plan provides that the LTD benefit shall be reduced by the following:

1. Any remuneration the employee receives from the employer.
2. Any retirement benefit provided by a plan covering employees of the employer.
3. Any Social Security or railroad retirement benefits, including dependency benefit.
4. Any disability benefits from
   a) any group plan provided by the employer;
   b) the Veterans Administration or any federal, state, municipal or other government agency, or any workmen's compensation;
   c) any policy or contract issued to the employee by an insurance carrier or any governmental agency except that only payments made after 24 months will be counted.

The policy also provides that unless we are furnished proof otherwise, we will make a maximum deduction for Social Security benefits. We also deduct for total and permanent disability benefits under a group life plan unless we are furnished proof that the employee's claim was declined.

Since a cost credit is given for the estimated probable value of these benefits, we feel that we should use these provisions in order to persuade the employee to file for benefits.

In cases which provide total and permanent group life disability income benefits where we are quoting LTD, we first suggest deleting the disability income provision from the group life contract in order that the death benefit be left intact in event of disability.

The table on page D195 shows the relationship of benefits to earnings for various benefit formulae which have recently appeared in the market place. For net earnings we used gross less estimated federal income taxes. For married we assumed a family of employee, wife, and child under age 18 filing a joint return.

The first three formulae illustrated the fact that under a benefit formula providing a flat per cent of earnings from the first dollar offset for all forms of disability benefits, the benefits are most liberal for the higher paid single employee. The fourth formula shows that when Social Security benefits are added to LTD benefits (even if only on a partial basis) the married get the advantage, generally, and the lower paid married are treated most liberally. The fifth formula illustrates the fact that when Social Security benefits are added in full to an LTD benefit formula which seems to be a reasonable per cent of gross earnings, the lower paid married employee is better off not working but being disabled. The sixth formula brings the benefits of the fifth formula back into line. The table also shows that the 66⅔ plan produces disability benefits in excess of 75 per cent of net earnings for all single persons and for married persons earning $1,000 a month and greater.

In evaluating a plan of benefits, it is important to look at not only the relationship at certain points as above but also what percentage of the employees get disability benefits exceeding 70 per cent of net earnings, 75

RATIO OF DISABILITY BENEFITS TO NET EARNINGS

Monthly Gross Income	Net Earnings	50 Per Cent of Gross Less All Other Disability Income	60 Per Cent of Gross Less All Other Disability Income	66⅔ Per Cent of Gross Less All Other Disability Income	50 Per Cent of Gross Less Primary Social Security*	40 Per Cent of Gross, Not Reduced†	40 Per Cent of Gross Not Reduced, but Total Benefit Not Greater than 70 Per Cent of Gross†
				Single			
$ 400...	$ 353	.57	.68	.76	.57	.81	.79
800...	681	.59	.70	.78	.59	.66	.66
1,200...	982	.61	.73	.82	.61	.62	.62
1,600...	1,262	.63	.76	.84	.63	.61	.61
2,000...	1,523	.66	.79	.88	.66	.61	.61
				Married			
$ 400...	$ 376	.68‡	.68‡	.71	.87	1.10	.74
800...	715	.56	.67	.74	.74	.80	.78
1,200...	1,043	.58	.69	.77	.70	.70	.70
1,600...	1,365	.59	.70	.78	.68	.65	.65
2,000...	1,675	.60	.72	.80	.67	.63	.63

* $127 dependency Social Security added for married.
† $127 primary Social Security added for single and $254 dependency Social Security added for married.
‡ Assumes $254 Social Security benefit.

per cent of net, 80 per cent of net, etc. I have made calculations using a typical group distribution and an approximate method to produce a table showing the percentage of employees by range of ratio of disability benefits to net earnings. This method relies on age and sex specific factors to take account of federal income tax and Social Security benefits.

By applying these factors to the group's age, sex, and earnings distribution and the benefit formula involved, it is possible to construct a table showing a frequency distribution of the ratio benefits to net earnings. We have also been able to apply age and sex specific cost factors to the net benefits for the employees in each range to produce a frequency distribution based on cost. This type of table is a very important step forward in showing the risk characteristics of different groups and different benefit formulae.

The following table illustrates the frequency distributions of a $66\frac{2}{3}$ benefit formula.

This table shows that nearly one-quarter of the employees have disability benefits of 75 per cent or greater, and nearly one-half of the cost of benefits is for these employees. More than 4 per cent of the cost of benefits are for employees whose benefits exceed 80 per cent of net earn-

$66\frac{2}{3}$ OF EARNINGS PLAN REDUCED
BY ALL OTHER DISABILITY INCOME

Total Disability Income as Per Cent of Net Earnings	Per Cent Distribution of Employees (1)	Per Cent Distribution of Cost of Net Benefits for Employees in Column (1) (2)
Ages 49 and under:		
At least 70% but less than 75%	80.0%	59.5%
At least 75% but less than 80%	19.8	39.0
At least 80% but less than 85%	0.2	1.4
At least 85% but less than 90%	*	0.1
Total	100.0%	100.0%
Ages 50 to 59:		
At least 70% but less than 75%	68.6%	45.8%
At least 75% but less than 80%	30.4	49.5
At least 80% but less than 85%	0.9	4.3
At least 85% but less than 90%	0.1	0.4
Total	100.0%	100.0%
Ages 60 to 64:		
At least 70% but less than 75%	67.8%	44.1%
At least 75% but less than 80%	29.8	44.6
At least 80% but less than 85%	2.3	10.6
At least 85% but less than 90%	0.1	0.7
Total	100.0%	100.0%
All ages combined:		
At least 70% but less than 75%	76.8%	50.2%
At least 75% but less than 80%	22.7	45.3
At least 80% but less than 85%	0.5	4.1
At least 85% but less than 90%	*	0.4
Total	100.0%	100.0%

* Less than $\frac{1}{2}$ of 1 per cent.

ings. For the sensitive age range, 60 and greater, the benefits are highest in relation to net earnings. For these reasons, this is a very unsafe plan.

MR. DAVID R. KASS: It is important to distinguish between economically induced disability and medically induced disability. Unfortunately, published statistics cannot possibly differentiate between the two.

Underwriting rules which try to achieve a proper relationship between benefits and earnings are attempts at curtailing economically induced disability claims. However, should tomorrow's earnings levels be reduced without prompt adjustment in benefit levels, the effort will be to no avail.

The most extensive study of long-term disability available is the 1952 Intercompany Study, which unfortunately relates to experience from 1930 to 1950. The only relevance these statistics have for rate-making in 1965 is the obvious indication that incidence and continuance of disability depend greatly upon the economic value of the benefits. The figures shown in that study are of limited applicability in today's economic climate, which is so much more favorable than the best of the periods studied.

The Society's annual reports of individual "loss-of-time" experience follow continuance of disability for one year only, and are thus of little assistance in rate-making for longer term disability benefits.

I have reviewed the rates of 10 companies offering a standard LTD benefit (6-month elimination with benefits to 65 in event of either accident or sickness). Three are priced at about the same level, which I will refer to as 100 per cent. Two companies are about 20 per cent higher, for cluster at about 50 per cent higher, with the remaining company about 80 per cent higher. There is obviously room for much difference of opinion. The more optimistic rates presumably anticipate an absolute minimum of economically induced disability under current conditions. Of the ten companies surveyed, three are casualty and seven are life.

The life companies tend to be more sensitive to differences in age than the casualty companies. The flattest rates are found primarily in the casualty-oriented companies.

Experience

A. What has been the recent experience under long-term disability benefits and what claim statistics are available; e.g., frequency of claim and termination rates? What is the trend by policy year, giving due regard to the waiting period?

B. What has been the experience on groups in areas with local economic depressions; where employers have had financial setbacks with resulting decreases in work force; or in defense industries where there have been severe cutbacks in employment?

C. What factors should be taken into account in establishing reserves for these benefits? Are claim fluctuation reserves or stabilization reserves necessary and desirable?

MR. TED L. DUNN: In the absence of an acceptable morbidity table from which expected group LTD claim costs could be computed, there is a lack of a good measuring rod on which the experience of various plans can be compared.

One basis of comparing LTD experience between plans is to relate the claims to covered salary. This has been done for four of the larger group LTD plans that the Provident Life and Accident has in force. The results are shown in the following table.

Policy Year	Amount of Actual Claims Paid Expressed as Per Cent of Covered Salary				Amount of Total Claim Charge Expressed as Per Cent of Covered Salary			
	Company				Company			
	A	B	C	D	A	B	C	D
First	0.001%	0.001%	0.01%	0.02%	0.54%	0.78%	0.49%	1.01%
Second	0.08	0.06	0.11	....	1.20	0.09	0.80	....
Third	0.32	0.14	....	....	1.09	1.20	....	....
Fourth	0.42	0.30	....	....	0.92	−0.11	....	....
Fifth	0.61	0.32	....	....	1.62	0.12	....	....

The number of employees covered under the plans for companies A, B, and D is about 1,500 to 2,000 employees at each company. At company C, about 7,500 employees are covered. In each instance, the class of employees covered consists of salaried and supervisory employees.

The waiting period is six months for all four companies. The benefit formula is on the basis of 50 per cent of covered salary or 50 per cent of the first $1,000 of covered salary plus a smaller percentage of covered salary in excess of $1,000. The maximum benefit duration is to age 65 in most instances, but employees at two of the companies that have not fulfilled the length of service requirement for benefits to age 65 have a maximum benefit duration related to their length of service.

Companies A and B are in the same industry and have plans which are identical. Both groups have quite similar age, sex, and salary distributions. The variation in their claim levels reflects the volatile nature of long-term disability benefits.

The amount of actual claims paid has increased steadily during each of the first five policy years for Companies A and B.

The Total Claim Charge figures include the actual amount of claim payments, the reserve for incurred but unreported claims and the disabled lives reserve. Our disabled lives reserves are based on the disability study published in *TSA*, 1952. It may be noted that the Total Claim Charge was negative in the fourth policy year for Company B due to the release of disabled lives reserves on recoveries and deaths.

The emerging level of actual claim payments on Companies A and B indicates that current premium levels being quoted on similar group long-term disability plans may prove to be inadequate.

One of our large industrial policyholders having an LTD plan covering their top-salaried people found it necessary to close one of its divisions. There were a substantial number of claims filed by the employees affected, and several of the claims are still being paid even though the division was closed down over five years ago.

Our experience has been that somewhat over 50 per cent of the long-term disability claimants are approved for Social Security disability benefits. This percentage will increase somewhat if some claims presently being appealed are approved. If the proposed change in the definition of total and permanent disability is written into law, almost all claimants would be approved for Social Security disability benefits.

MR. CHARLES W. JACOBY: Experience studies at the Prudential seem to show rates of disability about as expected, rates of termination of disability somewhat less than expected, and Social Security disability approvals far below those expected. At this time speculation as to the effect of the proposed Social Security amendments included in the Medicare legislation on future disability approvals is both widespread and controversial.

On the broader front is the Society's proposed intercompany study of LTD experience. Mr. Stanley W. Gingery of the Prudential has been chairman of an LTD subcommittee. Its parent group morbidity committee has felt for some time the need for an LTD study and the obligation to conduct it. Now that a substantial volume of experience is beginning to emerge, such a study will begin shortly, probably by the end of 1965.

The instructions will probably call for experience to date in order that the results can be most meaningful. Additional periods of experience will be published as they become available, although the form of study could well change if the results so dictate.

The study will be of the basic elements in claim costs: frequency and continuation of disability. Thus fairly detailed data will be requested.

In the hopes of collecting data which will be as meaningful as possible, invitations to contribute will be extended well beyond the circle of major group writers. It *should* not be necessary to plead with all to contribute in view of the dire need for facts—but it probably *is* necessary, so I am doing so.

Rehabilitation

What contract provisions are included to encourage rehabilitation? In the absence of specific provisions, what practices are followed to encourage claimants to gradually return to full-time employment?

MR. RAY D. ALBRIGHT: Rehabilitation is a relatively new feature in LTD coverage. Generally, the wording of the rehabilitation provision states that the insured may be earning and working under a trial rehabilitation program and that the contract will not then be interpreted by the company to mean that the insured has recovered. A rehabilitation program might include the following objectives:

1. Early recognition of the claimant who can benefit from rehabilitation.
2. The establishment of a proper working relationship with the attending physician or specialized facility to evaluate the case and recommend a proper program.
3. Selection of the insured person who is properly motivated to take advantage of the program (perhaps the most difficult of the three).

Because of the large sums involved in the individual claims, potentially several hundred thousand dollars, insurers have a very strong motivation to be successful in getting their insureds back to work. If it means spending money to accomplish it, the fruits of success on a large enough scale would more than justify the cost and effort.