

Group Long-Term Disability Benefit Offset Reserving Practices Survey

**Sponsored by
Society of Actuaries Health Section**

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Section I: Introduction

In July of 2009, the Society of Actuaries (“SOA”) released a report prepared by Milliman that discussed the results of an inter-company study of group long-term disability (“LTD”) benefit offsets. The study investigated the percentage of LTD claimants who are receiving disability benefits from other sources that offset their LTD benefits and how this percentage is affected by the duration of disablement, age at disablement, gender, industry, state of residence and medical conditions causing the disability.

As a follow-up to this study, Milliman has conducted a survey of LTD carriers in the United States with respect to how they reflect benefit offsets in the valuation of their reserves. This report presents the results of this survey. Table I shows the 12 LTD carriers that participated in the survey.

Table I Contributors to the Group LTD Benefit Offset Reserving Practices Survey
Assurant
CUNA Mutual
Guardian
Hartford
Liberty Mutual
Lincoln Financial
MetLife
Mutual of Omaha
Principal Financial
Reliance Standard
Standard
SunLife

In conducting our analysis, Milliman relied upon the survey responses submitted by the 12 LTD carriers. Unless otherwise described in this report, Milliman did not audit or independently verify any of the information furnished, except that we did review the data for reasonableness and consistency. To the extent that any of the data or other information supplied to us was incorrect or inaccurate, the results of our analysis could be materially affected.

This report is intended for the benefit of the Society of Actuaries. Although the author understands that this report will be made available to third parties, Milliman does not assume any duty or liability to such third parties with its work. In particular, the results in this report are technical in nature and are dependent on certain assumptions and methods. No party should rely upon these results without a thorough understanding of those assumptions and methods. Such an understanding may require consultation with qualified professionals. This report should be distributed and reviewed only in its entirety.

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Section II: Summary of Results

The methods and assumptions chosen to reflect benefit offsets in LTD reserves can have a significant impact on the adequacy of the reserves and the financial results of the line of business. This survey sheds light on the various practices that LTD companies use to reflect benefit offsets, particularly estimated offsets, in the calculation of their reserves. The following points summarize key findings from the survey. Section III provides more detail.

1. All 12 participating companies reduce LTD reserves for known benefit offsets and estimated Social Security disability benefits. Only a few companies estimate other benefit offsets.
2. All but 1 of the participating companies base estimated benefit offsets on their own company experience, rather than other sources, such as industry or government statistics.
3. Generally, companies estimate Social Security benefit offsets for claims that have not received approval up to the 3rd or 4th year of disablement.
4. All of the participating companies estimate Social Security disability benefit offsets using the probabilities of receiving approval and approximating the Social Security disability benefit amounts. Some of the companies also estimate the retroactive lump-sum payment and/or use separate end dates for the primary and dependent Social Security disability benefits.
5. Most participating companies estimate the primary and dependent Social Security benefit offsets separately. However, 3 companies estimate the primary and dependent benefit offsets together, while 2 companies only estimate the primary benefit.
6. Most companies reflect the estimated Social Security disability benefit offset in the LTD reserves by multiplying the estimated Social Security disability benefit by the probability of approval and then subtracting the product from the gross benefit.
7. Three of the participating companies use different methods or assumptions for estimating the Social Security disability benefit offsets for statutory and GAAP reserves.
8. One of the participating companies differentiates claim termination rates between claimants who have been approved for Social Security disability benefits and those who have not.
9. There is a wide range of reserving practices among LTD companies with respect to reflecting the estimated future recovery of overpayments of LTD benefits due to the Social Security retroactive lump-sum payments at the time of approval.

Section III: Survey Results

This section presents the results of the survey.

Reduction in LTD Reserves Due to Known Benefit Offsets

Table 2	
<i>Does your company reduce its claim reserves for the following LTD benefit offsets when known?</i>	
Types of Benefit Offsets	Yes Responses
Primary Social Security Disability	12
Dependent Social Security Disability	12
Worker's Compensation	12
Pension DI Benefits	12
PERS & STRS	11
Railroad DI or Retirement Benefits	11
State Cash Sickness Benefits	9
Earned Income During Disablement	12

All 12 participating companies offset (i.e., reduce gross LTD benefits) for known benefits received from Social Security (primary and dependent), worker's compensation, pension disability plans, and earned income during disablement. All but one carrier offset for benefits received from public retirement systems (PERS) and state teachers retirement systems (STRS). Three of the LTD companies do not offset for state cash sickness benefits, which are short-term disability benefits. Two companies specifically stated that they will reduce LTD benefits for any known contractual offsets.

Benefit Offset Estimates

Table 3	
<i>Does your company estimate the following benefit offsets in the calculation of claim reserves where the offset has not yet been approved?</i>	
Types of Benefit Offsets	Yes Responses
Primary Social Security Disability	12
Dependent Social Security Disability	10
Worker's Compensation	1
Pension Disability Benefits	1
PERS & STRS	2

It is a common practice for LTD companies to reduce LTD reserves assuming estimates of some of the major types of benefit offsets where these benefits had not been approved at the time of the valuation. All 12 of the participating companies estimate the primary Social Security disability benefits if approval has not been received, and 10 of the 12 participants estimate dependent Social Security disability benefits. Only a few companies will estimate benefit offsets from sources other than Social Security. One carrier estimates all non-Social Security disability benefit offsets in total.

Many of the remaining survey questions explore the assumptions used to estimate LTD benefit offsets and how they are used to reduce LTD claim reserves.

Experience Basis of Benefit Offset Estimates

Table 4 <i>If your company estimates a benefit offset prior to approval, what is the experience basis of the estimate?</i>	Offset Type (Yes Responses)				
	Primary Social Security Disability	Dependent Social Security Disability	Worker's Compensation (WC)	Pension DI Benefits	PERS & STRS
Experience Basis					
LTD Industry Experience	1	1	0	0	0
Soc. Sec. Government Experience	1	0	0	0	0
WC Industry Experience	0	0	0	0	0
Own Company Experience	11	9	1	1	2

For the most part, LTD companies base their estimates of benefit offsets upon their own experience. Several companies mentioned that benefit offsets are estimated by claims examiners based on available data for a given claim. In a few cases, an LTD company indicated that it uses two of the listed experience bases to estimate benefit offset amounts.

Earliest Duration of Disablement When Benefit Offsets are Not Estimated

Table 5 <i>What is the earliest duration of disablement at which your company no longer estimates a benefit offset in the claim reserve, if the claim has not been approved for benefit by that time?</i>					
Type of Benefit Offset	Number of Responses by Earliest Claim Duration				
	Year 4	Year 5	Year 6	Years 11+	No Set Duration
Primary Social Security DI	3	4	1	1	1
Dependent Social Security DI	3	3	0	1	1
Worker's Compensation	0	0	0	1	1
Pension DI Benefits	0	0	0	1	1
PERS & STRS	0	1	0	1	1

In general, companies estimate Social Security disability benefit offsets for claims that have not received approval for the benefit offset by their 3rd or 4th year of disablement. One company will estimate benefit offsets up to claim durations 11 and later. Another company indicated that they had no set duration at which they no longer calculate benefit offsets.

Assumptions Used to Estimate Social Security Disability Benefit Offsets

Table 6 <i>Does your company's method of estimating Social Security DI offsets take the following assumptions into account?</i>	
Assumptions	Yes Responses
Probability of SSDI approval in the future	12
Probability of receiving dependent SSDI benefits	6
Retroactive lump-sum payment amount	6
Estimated primary SSDI benefit amount	12
Estimated dependent SSDI benefit amount	10
Estimated primary SSDI end date	4
Estimated dependent SSDI end date (separately from primary)	5

All companies develop estimates with respect to Social Security disability approval rates and the offset benefit amounts. However, there is a significant variance in assumption types utilized and the number of factors used to develop the estimated values.

Table 6 <i>Indicate if the assumptions used to estimate SSDI benefits vary by the following factors.</i>	Number of Yes Responses by Assumption Type						
	Probability of SSDI Approval in the future	Probability of receiving dependent SSDI benefits	Retroactive lump-sum payment amount	Estimated primary SSDI benefit amount	Estimated dependent SSDI benefit amount	Estimated primary SSDI end date	Estimated dependent SSDI end date
Age at disablement	9	5	3	5	2	2	3
Attained age	1	0	0	0	0	1	2
Duration of Disablement	11	6	4	0	0	0	0
Gender	7	5	2	4	3	0	1
Diagnosis	2	1	1	0	0	0	0
Industry	1	0	0	0	0	0	0
State of residence	0	0	0	0	0	0	0
Gross benefit amount	1	0	0	1	1	0	0
Pre-disability income	1	0	0	4	3	0	0
Estimated AIME	1	0	2	4	3	0	0
Elimination period	1	1	1	0	0	0	0
Benefit period	1	0	1	0	0	3	2

The probability of receiving Social Security disability approval in the future, the probability of receiving dependent Social Security disability benefits (if receiving primary benefits), and/or the estimated retroactive lump-sum payment amount more commonly vary by duration of disablement, age at disablement and gender. The estimated primary Social Security disability benefit amounts more commonly vary by age at disablement, gender, pre-disability income or estimated Average Indexed Monthly Earnings (AIME). The companies that estimate end dates for the Social Security disability benefits more typically base those estimates on age at disablement, attained age and/or benefit period.

The next table gives some sense of the degree of sophistication that LTD companies employ in their estimate of offsets, in particular in the probability of obtaining SSDI approval in the future. The table groups the participating companies by the number of factors (among the 11 factors listed in the above table) they use in deriving the probability of SSDI approval in the future.

Table 7 Grouping of Participating LTD Companies By the Number of Factors Used to Derive the Probability of SSDI Approval in the Future	
Number of Factors Used	Number of LTD Companies
0	1
1	2
2	1
3	5
4	0
5	1
6	2
Total	12

In general, the factors listed in Table 6 and referenced in Table 7 are used in formulas to estimate the probabilities of SSDI approval in the future. However, at least one of the LTD companies bases its estimate of the probability of future approval on the judgment of claim examiners, who take some of these factors into account in their determination. The most typical situation is represented by 5 participating companies who use 3 of the listed factors to derive the probability of SSDI approval in the future.

Primary and/or Dependent Social Security Disability Benefit Offsets

Table 8	
<i>Do you calculate estimated SSDI benefits for primary benefits only, primary and dependent benefits separately or primary and dependent benefits combined?</i>	
Combinations	Yes Responses
Primary only	2
Primary & dependent combined	3
Primary & dependent separately	7

All three combinations are used among the 12 participating companies, but a majority of the companies estimate the primary and dependent Social Security disability benefits separately.

Method of Calculating Estimated Social Security Benefit Offsets

Companies were asked to describe their method of calculating Social Security benefit offset estimates for claims that are pending a Social Security decision. The various descriptions are provided below.

Table 9
If a Social Security Analyst determines a claimant is likely to qualify for SSDI, an estimated Primary Benefit offset amount is determined based on an internally developed table. If the claimant has dependents the assumed offset is increased by 50%.
The SSDI benefit offset is determined based on the ultimate probability of SS approval for each claim that is in unapproved SS status at the valuation date, and the estimated SSDI benefit amount.
We first calculate the present value of the estimated SSDI amount where the present value is based on the gross reserve termination tables and interest rate. The estimated SSDI amount is based on the current salary with adjustments to account for Social Security's use of historical average salary. The estimated SSDI benefit offsets are then calculated as the present value of estimated SSDI amount multiplied by the probability of SSDI approval in future.
Current salary is used to infer an AIME, which is then used in the SSA formula for PIA. We calculate two reserves, with and without the estimated offset, and weigh the reserves using the probability of approval.
= SS Amount * Probability * Probability * Dependent Factor (sic)
Our SSDI offset is the product of: (1) the prospective claim reserve annuity factor (PV # payments), (2) the estimated PIA modified by a Family Offset multiplier (the size per payment offset), and the SSDI approval probability (the percentage of potential SS offset dollars we expect to realize). Estimation of the approval probability by claim duration considers the ultimate approval rate of claims pending in the current duration month and the likelihood of recognizing prospective offsets resulting from SS benefits awarded retroactively on approval.
Estimate SS offset amount using salary and SS bend-point formula. Use probability of getting SS derived from company experience, using reducing scale based on duration of claim. We calculate 2 LTD reserves, with and without estimated offset, and weigh the reserves using the probability of approval.
The probability of receiving SSDI benefits is calculated (using prior experience) by gender, age at disablement, and duration. These probabilities are multiplied by award amounts, which are calculated from prior experience. The dependent SS offset is limited to an assumed number of months.

Table 9 (continued)

Using company experience, SSDI benefit offsets are estimated for the first 48 months of claim duration, if the claim has not yet been approved. Approval percentages are based upon age and claim duration. Benefit percentages are based upon amount of gross benefit. We calculate two LTD reserves, with and without the estimated offset, and weigh the two reserves using the probability of approval.
Approval rate * estimated social security benefit
Build into estimated cash flows. Develop an estimated SS award amount and multiply times a factor. That factor is the probability of SS approval adjusted some for time value of money and overpayment impacts.
Currently we have a look up table which provides an estimated primary offset amount based on the claimant's income. If there are children, the dependent offset amount is estimated as 50% of the primary amount. The table is based on a study that used actual award data by income category. The estimated offset was set at 90% of the estimated actual amount.

From the above responses, there appear to be two general approaches for taking the estimated benefit offset into account in the LTD reserves.

The first approach, which is more prevalent, is to set the estimated offset benefit equal to the probability of approval times the expected offset amount with the following subtleties:

1. The probability of approval is conditional on not having been approved to date, so it falls rapidly with claim duration, i.e., if a claimant has not been approved by year 4, it is not likely that he or she will be approved ever.
2. The actual offset amount is based on the claimant's Average Indexed Monthly Earnings (AIME), which is most likely not known by the company. The company may need claim specific data or a table to translate salary to AIME.
3. The estimate typically factors in dependents based on averages or claim specifics and for how long dependent benefits will be paid.

The second approach, which is used by 3 of the participating companies, calculates the reserve with and without the benefit offset, taking the minimum benefit into account in the first reserve. The final reserve would then be the reserve with the benefit offset times the probability of approval plus the reserve without the benefit offset times 1 minus the probability of approval. This approach is designed to better recognize the impact of the minimum benefit in the reserve calculation than the first approach does.

Differences in the Estimation of Benefit Offsets Between Statutory and GAAP Reserves

Table 10	Yes Responses
<i>Does your company's method of estimating SSDI benefit offsets vary between statutory and GAAP reserves?</i>	3

Three participating LTD companies said that their method for estimating benefit offsets was different for statutory and GAAP reserves. One of the three companies adopted a new basis for statutory reserves, which it applies regardless of incurral years, but only uses the new basis for GAAP reserves where the incurral years are 2006 and later. Another company indicated that their statutory method of estimating Social Security benefit offsets was more conservative than the GAAP method. For example, for statutory reserves, they estimate benefit offsets if the claim is less than 4 years old; for GAAP reserves, they estimate benefit offsets if the claim is less than 6 years.

Differentiation of Claim Termination Rates Based on Social Security Approval

Table 11 <i>Does your company vary claim termination rates between those who are receiving (or have been approved for) SSDI benefits and those who are not?</i>	
	Yes Responses
Yes	1
No	11

Only 1 of the 12 participating companies varies its claim termination rates (for basic benefits as well as the offsets) between claims receiving Social Security disability benefits and those who are not.

Overpayments Due to Retroactive Social Security Disability Approvals

The following question addresses reflecting the expected recovery of actual overpayments of LTD benefits due to the Social Security retroactive lump-sum payments at the time of approval in the LTD reserves.

<i>What is your company's practice regarding LTD reserve adjustments for overpayments arising from retroactive SSDI approvals?</i>	Yes Responses
We always reduce the claim reserve by the full amount of the overpayment that has not been recovered at the time of valuation.	1
We reduce the claim reserve by a percentage (between 0% and 100%) of the remaining overpayment, which is determined on a seriatim basis by claim examiners.	2
We reduce the claim reserve by a percentage (between 0% and 100%) of the remaining overpayment, which is determined from tables.	3
The claim reserve is calculated using the current net benefit, which includes any current overpayment recovery amount.	3
We do have an overpayment asset, which is on the GAAP balance sheet.	1
We never reduce the claim reserve for any amount of the overpayment.	2
Total	12

Two of the 12 participating companies never reduce the reserve for the outstanding overpayment.