

Group Long-Term Disability Benefit Offset Study

**Sponsored by
Society of Actuaries' Health Section**

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Section I: Introduction

The Society of Actuaries (“SOA”) Health Section engaged Milliman, Inc. to study group long-term disability (“LTD”) benefit offsets. In particular, the study investigates 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. We also investigated the relationship of certain key benefit offsets to pre-disability earned income. The results of our analysis are presented in this report.

Data on over 267,000 claims were submitted to Milliman for this study by the nine group LTD carriers listed in Table I(a). Requested claim data were provided on all claims in a pay status as of a given date selected by each submitting company. These dates ranged from 3/31/2008 to 8/12/2008.

Table I(a) Contributors to the Group LTD Benefit Offset Study
Fort Dearborn Life
Guardian Life
Hartford Life
Liberty Mutual
Mutual of Omaha
Principal Financial Group
Reliance Standard
Standard Insurance
Unum

Data contributed by the three largest LTD carriers comprised 81% of the total data received. Because of the large impact that these three companies would have had on the study’s results, we multiplied their claim data by factors that reduced the effective claim count for each of the three companies to 15% of the total study. As a result of this reduction, the database compiled for this study effectively consists of 90,680 claims.

The specific data for each claim that was requested is as follows:

- Date of disability
- Date of birth
- Gender
- Gross monthly benefit
- Net monthly benefit
- Benefit percent (e.g., 60%)
- Plan maximum monthly benefit
- Plan offset methodology, e.g., primary, family, all sources integration
- Minimum monthly benefit
- Elimination period
- Benefit period
- Pre-disability income
- Industry code
- State code
- Occupation code (if available)
- Diagnosis code, e.g., ICD9
- Actual offset benefits – by type, e.g., SSDI primary, family, SS retirement, WC, Retirement DI, state STD, etc.
- For each offset type, the date that benefit was first received and the actual end date (if available)

Some contributors were unable to submit all of the requested data. However, the submitted data that was common to all contributors was sufficient to allow us to study the prevalence of Social Security, Workers’ Compensation and pension benefits among LTD claimants in considerable detail.

In conducting our analysis, Milliman relied upon the claim data submitted by the nine 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 authors understand that this report will be made widely 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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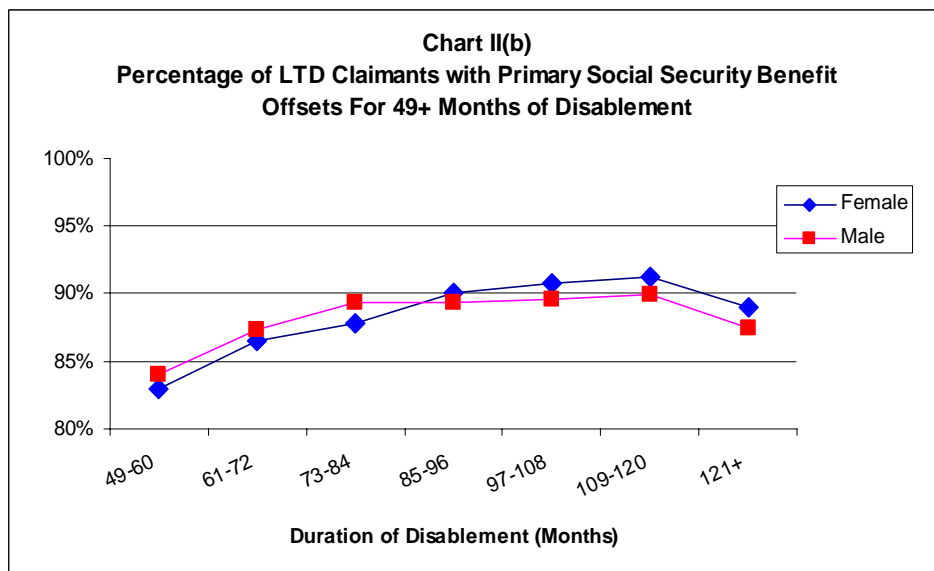
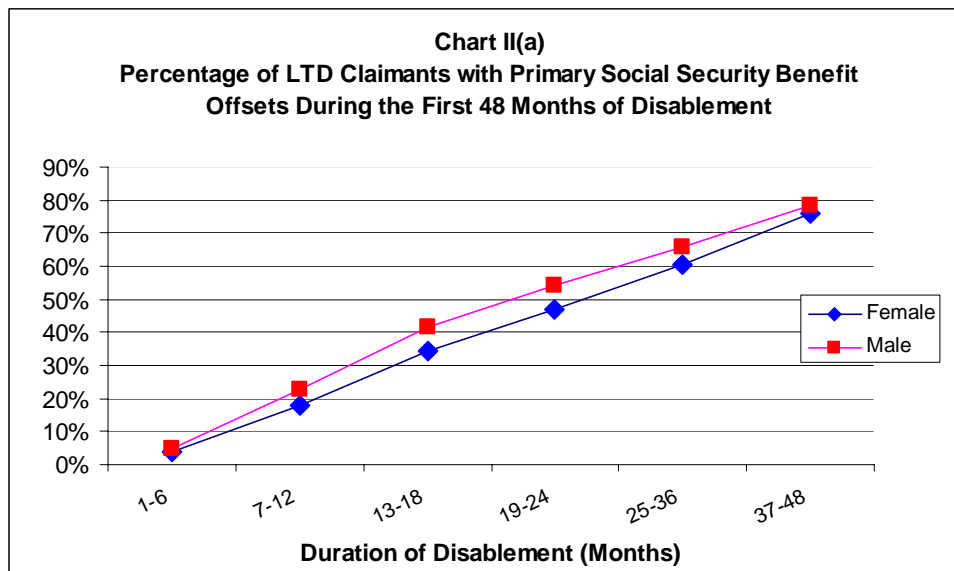
Section II: Summary of Results

This section summarizes the results discussed in Sections III and IV.

Please note that tables appearing in the report which contain blank cells indicate unavailable or insufficient data was available to provide results for those cells.

Social Security Benefit Offsets

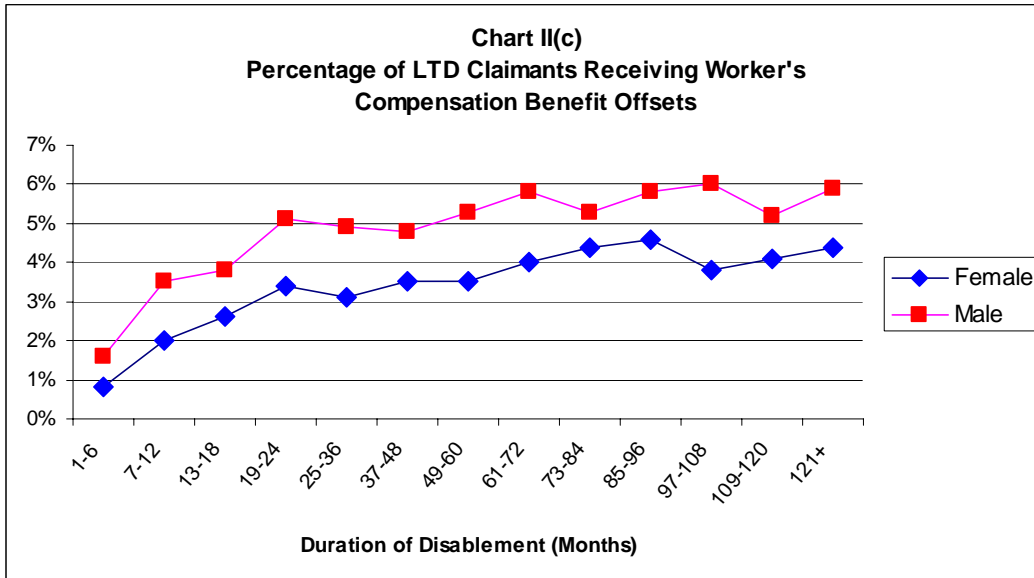
Charts II(a) and II(b) show the percentage of claimants by gender and duration of disablement whose LTD benefits are being offset by Primary Social Security benefits.



The percentage of LTD claimants with Primary Social Security benefit offsets increases relatively linearly for the first 48 months of disablement, exceeding 85% after the 72nd month. For the first 8 years of disablement, a smaller proportion of females than males qualify for Primary Social Security benefits.

Workers' Compensation Benefit Offsets

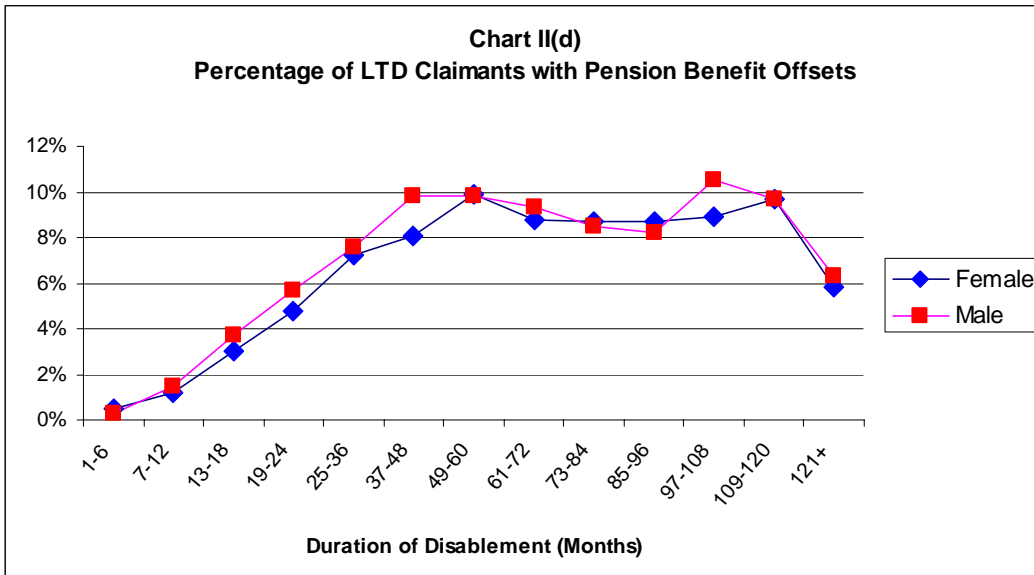
Chart II(c) shows the percentage of claimants by gender and duration of disablement whose LTD benefits are being offset by Workers' Compensation benefits.



The percentage of LTD claimants with Workers' Compensation benefit offsets slowly increases by duration of disablement after the first 24 months and is higher for males than females.

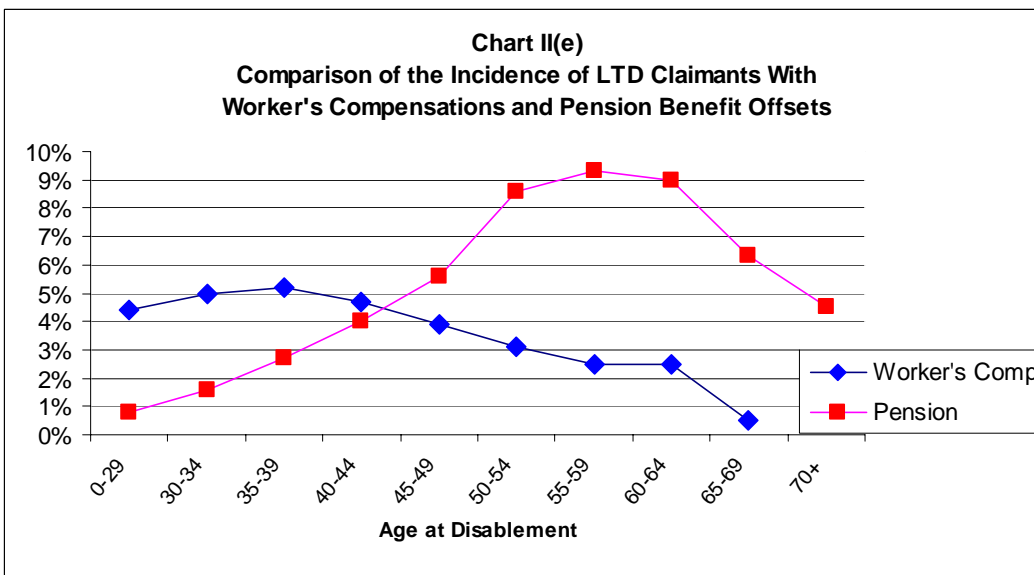
Pension Benefit Offsets

Chart II(d) shows the percentage of claimants by gender and duration of disablement whose LTD benefits are being offset by pension benefits.



For years 4 to 10, the average percentage of LTD claimants with pension benefit offsets lies in the 8-10% range. The incidence of pension benefits among LTD claimants increases sharply with age, unlike the incidence of Workers' Compensation benefits that noticeably decrease after age 44. Industries such as Educational Services, Public Administration and Electric, Gas & Sanitary Services exhibit very high proportions of LTD claimants with pension benefit offsets.

Chart II(e) compares the incidence of Workers' Compensation and pension benefits among LTD claimants by age at disablement.



Whereas the percentage of LTD claimants with Workers' Compensation benefit offsets decreases with age of disablement after age 40, the percentage of LTD claimants with pension benefit offsets increases with age at disablement, peaking around ages 50-59.

Conclusions

Sections III, IV and V provide considerably more detail about factors affecting the percentage of LTD claimants receiving Primary Social Security, Workers' Compensation or pension benefits, which offset LTD benefits. This study reflects the incidence of these benefits for all claims submitted as of mid-2008 and does not follow cohorts of claims over time. This difference should be taken into account when using the results.

The results presented in this report highlight key factors that can affect the proportion of LTD claimants receiving these other disability benefits and the levels of these other benefits compared to pre-disability income. In addition, the results provide useful information to valuation actuaries for estimating future benefit offsets and pricing actuaries who are trying to refine differences in LTD claim costs.

Section III: Social Security Benefit Offsets

This section discusses the proportion of LTD claimants whose LTD benefits are being offset by Primary and Dependent Social Security benefits by claim duration. The section also analyzes the ratio of the Primary Social Security benefits to pre-disability earned income, as well as the ratio of the Dependent Social Security benefits to Primary Social Security benefits.

Social Security Disability Benefits

Workers are eligible for Social Security disability income (SSDI) benefits under the Old-Age, Survivors, Disability Insurance (OASDI) program if they acquire sufficient work credits and are disabled as defined in the Social Security Act. Social Security work credits are based on a person's total annual wages and self employment income. The number of work credits needed to qualify for SSDI benefits depends upon the person's age at the time he or she is disabled. Generally, 40 work credits, of which 20 are earned in the last 10 years, are required, but younger workers may qualify with fewer credits.

A strict definition of disability is used to qualify for SSDI benefits. *The worker must have a medically determinable physical or mental condition that (1) prevents him or her from engaging in any substantial gainful work, and (2) is expected to last (or has lasted) at least 12 months or is expected to result in death.* The impairment must be so severe as to prevent the person from not only doing his or her previous work but prevents the worker from engaging in any substantial gainful work in the national economy taking into account his or her age, education and work experience. After qualifying for SSDI benefits (i.e, the date of qualifying for disability, not the date of approval by the Social Security administration), the worker must wait five full calendar months before receiving benefits.

A disabled worker under the normal retirement age can receive a benefit equal to 100% of the primary insurance amount (PIA). A spouse of a disabled worker receiving SSDI benefits will also receive benefits if caring for a child who is under the age of 16. Unmarried children of a disabled worker under the age of 18 may also qualify for benefits. The maximum of all dependent SSDI benefits (e.g., spouse and dependent children) is 50% of the PIA. If the disabled worker receiving SSDI benefits is also receiving workers' compensation benefits or other disability payments from certain federal, state or local government plans, the maximum monthly benefit to the worker or family is limited to 80% of the workers' "average current earnings", as defined by the OASDI program.

Most group LTD plans offset (i.e., reduce) the disability benefits paid under these plans by any SSDI or retirement benefits received by the disabled worker. For some plans, disability benefits are offset only for the primary SSDI benefit received by the disabled worker, although more commonly, disability benefits are offset by all SSDI benefits, including those that are paid to the spouse and dependent children.

Primary Social Security Benefits by Gender, Age and Pre-Disability Income

Table III(a) shows the proportion of claimants whose LTD benefits are being offset by primary Social Security disability or retirement benefits, by gender and duration of disablement. In creating this table, we excluded any claims from plans with non-integrated benefits. We did not exclude claims where claimants may not have been eligible for SSDI benefits. However, some contributors may have excluded such claimants in the data they submitted for this study.

Table III(a) Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets By Gender and Duration of Disablement			
Duration of Disablement (Months)	Female	Male	Total
1-6	3.9%	4.8%	4.3%
7-12	18.0%	22.7%	20.2%
13-18	34.5%	41.6%	37.9%
19-24	46.9%	54.2%	50.3%
25-36	60.3%	65.9%	62.9%
37-48	76.0%	78.3%	77.1%
49-60	83.0%	84.0%	83.5%
61-72	86.5%	87.3%	86.8%
73-84	87.8%	89.4%	88.5%
85-96	90.1%	89.3%	89.7%
97-108	90.8%	89.6%	90.3%
109-120	91.3%	90.0%	90.7%
121+	89.0%	87.4%	88.3%
Total	64.1%	66.2%	65.1%
# Claimants	48,901	41,572	90,473

Table III(a) shows an increasing pattern of percentages of LTD claimants with Primary Social Security benefit offsets by duration of disablement, exceeding 83% by the fifth year of disablement and ultimately reaching 90%. Male claimants have higher percentages with primary Social Security benefit offsets during the first 84 months of disablement than female claimants, with the differences growing smaller as the duration lengthens.

Table III(b) shows the variability in the proportion of claimants whose LTD benefits are being offset by Primary Social Security disability or retirement benefits among the nine contributors.

Table III(b) Percentage of Group LTD Claimants With Primary Social Security Benefit Offset Variability Among the Nine Contributors					
Duration of Disablement (Months)	Average	Median	Minimum	Maximum	Standard Deviation
1-6	4.3%	4.5%	0.8%	11.3%	3.4%
7-12	20.2%	19.9%	14.8%	29.3%	4.8%
13-18	37.9%	36.8%	32.7%	49.7%	5.2%
19-24	50.3%	50.6%	44.3%	56.9%	4.4%
25-36	62.9%	63.7%	56.9%	70.9%	4.6%
37-48	77.1%	74.7%	71.0%	87.7%	6.0%
49-60	83.5%	83.8%	75.7%	93.0%	6.0%
61-72	86.8%	86.5%	79.7%	92.3%	4.4%
73-84	88.5%	87.4%	81.7%	94.7%	5.2%
85-96	89.7%	92.1%	81.5%	96.0%	5.4%
97-108	90.3%	92.2%	81.6%	96.2%	4.9%
109-120	90.7%	92.2%	81.5%	97.1%	4.7%
121+	88.3%	90.1%	78.8%	97.0%	5.8%
Total	65.1%	65.2%	55.1%	70.6%	4.9%

The range of results among the contributing companies reflects differences in company-specific SSDI assistance programs and in distribution of their LTD claimants by age, gender, income levels, industry, state and medical diagnoses.

Table III(c) shows the proportion of claimants with Primary Social Security benefit offsets by age at disablement and duration of disablement. In this table, as well as in all other tables in this report, where there are less than 10 LTD claims in a cell, the results are left blank.

Table III(c)
Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets
By Age at Disablement and Duration of Disablement

Duration of Disablement (Months)	0-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
1-6	0.0%	0.9%	1.0%	1.7%	2.0%	2.7%	6.6%	9.4%	16.7%	13.1%
7-12	6.6%	8.1%	10.2%	11.1%	14.0%	17.6%	28.1%	36.6%	29.0%	11.2%
13-18	16.6%	19.6%	19.8%	23.3%	27.5%	37.5%	51.2%	62.5%	24.8%	13.8%
19-24	26.4%	27.1%	28.6%	33.5%	38.1%	50.3%	65.0%	73.9%	37.3%	42.7%
25-36	40.4%	41.8%	40.8%	44.7%	50.7%	64.0%	77.3%	83.6%	42.2%	
37-48	52.6%	62.2%	60.5%	64.8%	70.6%	80.2%	85.9%	87.4%	72.3%	
49-60	76.1%	73.0%	75.1%	75.7%	80.0%	85.0%	89.4%	92.0%		
61-72	78.5%	78.7%	79.3%	82.6%	86.2%	89.2%	91.0%	88.9%		
73-84	78.7%	82.9%	82.4%	85.6%	88.1%	90.0%	93.3%	98.0%		
85-96	85.7%	83.5%	86.7%	88.2%	89.3%	91.7%	91.8%			
97-108	91.4%	86.7%	89.0%	90.9%	89.4%	90.1%	94.2%			
109-120	89.7%	90.3%	88.0%	90.5%	91.6%	91.3%	90.4%			
121+	88.1%	88.6%	87.5%	87.2%	88.5%	91.3%	69.4%			
Total	52.4%	60.1%	61.9%	63.7%	64.5%	68.0%	70.6%	67.0%	30.1%	15.6%
# Claimants	2,994	4,599	7,989	12,462	16,830	19,586	16,675	7,979	1,057	302

During each of the first eight years of disablement, the percentage of LTD claimants with Primary Social Security benefit offsets generally increases with the age at disablement until age 65.

Table III(d) shows the percentages of LTD claimants with Primary Social Security benefit offsets by pre-disability annual earned income level and duration of disablement. Please note that the pre-disability annual earned income submitted by eight of the nine contributors represents actual income and is not restricted by the LTD plans' maximum benefits. For one contributor, the submitted pre-disability earned income represented covered income, i.e., actual income capped at the maximum amount insured by the LTD plan.

Table III(d) Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets By Pre-Disability Annual Earned Income and Duration of Disablement									
Duration of Disablement (Months)	Under \$30,000	\$30,000 – 49,999	\$50,000 - 69,999	\$70,000 - 99,999	\$100,000 - 124,999	\$125,000 - 149,999	\$150,000 - 199,999	\$200,000 - 249,999	\$250,000 & Over
1-6	4.3%	3.2%	5.6%	4.6%	6.6%	6.6%	5.1%	0.0%	7.6%
7-12	21.1%	19.4%	20.4%	20.4%	16.2%	15.2%	20.2%	8.7%	21.2%
13-18	36.7%	38.0%	38.6%	42.7%	35.5%	39.2%	37.1%	46.3%	36.2%
19-24	48.5%	51.1%	53.7%	52.0%	46.0%	55.5%	51.4%	34.1%	44.0%
25-36	61.3%	63.5%	65.5%	68.1%	61.3%	69.6%	64.7%	47.2%	45.3%
37-48	77.1%	78.1%	76.9%	81.0%	82.5%	75.8%	71.3%	61.7%	55.6%
49-60	84.1%	85.1%	84.4%	81.7%	86.1%	79.2%	82.1%	80.7%	46.4%
61-72	87.9%	88.3%	86.8%	86.8%	85.4%	85.1%	82.9%	54.3%	56.0%
73-84	88.8%	89.5%	89.4%	90.0%	93.4%	82.2%	83.7%	82.5%	64.3%
85-96	91.8%	90.8%	90.0%	92.5%	87.1%	80.4%	67.7%	85.7%	55.3%
97-108	92.4%	92.5%	88.5%	90.2%	87.0%	87.2%	80.0%	62.2%	52.3%
109-120	93.4%	92.4%	88.4%	89.9%	86.9%	88.7%	63.3%	69.9%	37.7%
121+	89.6%	90.0%	88.5%	88.8%	82.1%	76.2%	74.9%	74.2%	51.6%
Total	67.6%	65.3%	63.3%	63.3%	61.4%	61.0%	60.8%	52.7%	42.7%
# Claimants	35,763	31,977	12,194	5,818	1,546	755	708	335	622

The percentages of LTD claimants with Primary Social Security benefit offsets do not vary materially by pre-disability annual income levels until annual income levels exceed \$200,000. For annual income levels of \$200,000 and higher, significant reductions in the percentages of LTD claimants with Primary Social Security benefit offsets occur in durations after 18 months of disablement.

Table III(e) shows the ratio of Primary Social Security Benefits to pre-disability monthly earned income by gender and duration of disablement.

Table III(e) Ratio of Primary Social Security Benefits to Pre-Disability Monthly Earned Income For Claimants With Primary Social Security Benefit Offsets By Gender and Duration of Disablement			
Duration of Disablement (Months)	Female	Male	Total
1-6	0.376	0.300	0.329
7-12	0.367	0.385	0.377
13-18	0.358	0.333	0.343
19-24	0.364	0.354	0.358
25-36	0.351	0.352	0.352
37-48	0.303	0.322	0.313
49-60	0.349	0.338	0.343
61-72	0.345	0.333	0.339
73-84	0.337	0.316	0.325
85-96	0.334	0.301	0.317
97-108	0.327	0.298	0.312
109-120	0.333	0.314	0.323
121+	0.323	0.290	0.307
Total	0.337	0.326	0.331
# Claimants	31,350	27,524	58,874

The average ratio of Primary Social Security Benefits to pre-disability earned income for LTD claimants with Social Security benefit offsets is 33%. There are no material differences in this ratio between male and female claimants on average and no significant pattern in the ratios by duration of disablement.

Table III(f) shows the ratio of Primary Social Security Benefits to pre-disability monthly earned income by age at disablement and duration of disablement.

Table III(f) Ratio of Primary Social Security Benefits to Pre-Disability Gross Monthly Earned Income For Claimants With Primary Social Security Benefit Offsets By Age at Disablement and Duration of Disablement										
Duration of Disablement (Months)	0-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
1-6		0.621	0.652	0.206	0.316	0.386	0.290	0.362	0.300	0.438
7-12	0.400	0.403	0.338	0.391	0.370	0.367	0.402	0.358	0.374	0.569
13-18	0.408	0.420	0.307	0.331	0.358	0.343	0.320	0.371	0.288	0.466
19-24	0.411	0.346	0.341	0.350	0.356	0.367	0.360	0.356	0.326	0.455
25-36	0.412	0.384	0.371	0.359	0.350	0.349	0.352	0.344	0.323	0.478
37-48	0.399	0.387	0.349	0.344	0.346	0.243	0.345	0.331	0.323	
49-60	0.386	0.343	0.333	0.338	0.355	0.340	0.339	0.353	0.324	0.205
61-72	0.375	0.360	0.345	0.335	0.342	0.333	0.337	0.347		
73-84	0.373	0.340	0.345	0.313	0.328	0.333	0.311	0.291		
85-96	0.355	0.296	0.334	0.305	0.319	0.319	0.312	0.128		
97-108	0.369	0.339	0.340	0.312	0.311	0.298	0.315	0.154		
109-120	0.347	0.353	0.334	0.323	0.327	0.318	0.295	0.110		
121+	0.373	0.336	0.311	0.303	0.298	0.292	0.165	0.338	0.317	
Total	0.380	0.347	0.330	0.323	0.330	0.317	0.339	0.350	0.328	0.508
# Claimants	1,568	2,765	4,948	7,933	10,858	13,320	11,771	5,345	318	47

The ratios of Primary Social Security benefits to pre-disability earned income are generally higher at ages of disablement under 35.

Table III(g) shows the ratio of Primary Social Security Benefits to pre-disability monthly earned income by pre-disability annual income level and duration of disablement.

Table III(g)
Ratio of Primary Social Security Benefits to Pre-Disability Gross Monthly Earned Income
For Claimants With Primary Social Security Benefit Offsets
By Pre-Disability Annual Earned Income and Duration of Disablement

Duration of Disablement (Months)	Under \$30,000	\$30,000 – 49,999	\$50,000 - 69,999	\$70,000 - 99,999	\$100,000 - 124,999	\$125,000 - 149,999	\$150,000 - 199,999	\$200,000 - 249,999	\$250,000 +
1-6	0.539	0.398	0.331	0.378	0.206	0.195	0.135		0.049
7-12	0.652	0.425	0.350	0.295	0.282	0.182	0.155	0.114	0.054
13-18	0.613	0.421	0.337	0.272	0.219	0.177	0.143	0.103	0.032
19-24	0.590	0.420	0.341	0.273	0.214	0.183	0.142	0.110	0.050
25-36	0.535	0.414	0.332	0.268	0.211	0.169	0.137	0.102	0.052
37-48	0.499	0.403	0.326	0.255	0.202	0.174	0.140	0.106	0.020
49-60	0.485	0.398	0.320	0.273	0.197	0.162	0.134	0.102	0.053
61-72	0.475	0.393	0.324	0.249	0.201	0.166	0.129	0.096	0.055
73-84	0.469	0.385	0.315	0.245	0.181	0.158	0.124	0.097	0.059
85-96	0.457	0.375	0.301	0.229	0.180	0.153	0.117	0.091	0.047
97-108	0.439	0.366	0.289	0.228	0.170	0.143	0.110	0.091	0.041
109-120	0.435	0.355	0.279	0.234	0.161	0.143	0.106	0.086	0.050
121+	0.400	0.324	0.252	0.187	0.146	0.118	0.093	0.077	0.044
Total	0.477	0.385	0.315	0.252	0.195	0.161	0.127	0.097	0.040

The decreasing ratios of Primary Social Security benefits to pre-disability monthly earned income as incomes rise reflect the cap on Social Security benefits.

Primary Social Security Benefits by Industry

Tables III(h) and III(i) show the percentages of LTD claimants with Primary Social Security benefit offsets by industry. Appendix A describes the SIC codes that comprise the illustrated industries. These industries represent the 20 top industries ranked by the number of claims in the database.

Table III(h)
Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets
By Industry and Duration of Disablement – Part 1

Duration of Disablement (Months)	Business Services	Educational Services	Eng. Acctg, Res & Rel Services	Finance	Health Services	Insurance	Manufacturing	Public Administration	Retail Trade	Wholesale Trade
1-6	3.2%	3.1%	10.0%	5.1%	6.7%	3.3%	7.8%	4.5%	7.1%	1.7%
7-12	20.1%	20.3%	21.6%	20.3%	24.2%	18.1%	24.7%	14.5%	20.1%	23.5%
13-18	34.6%	35.7%	34.8%	42.6%	38.9%	41.9%	39.9%	26.0%	39.4%	38.4%
19-24	48.8%	49.0%	42.5%	45.4%	52.6%	57.7%	54.0%	35.8%	53.9%	54.5%
25-36	65.0%	63.3%	59.5%	64.5%	67.3%	62.8%	65.1%	46.8%	67.4%	65.0%
37-48	80.3%	75.5%	70.6%	78.6%	80.9%	84.9%	79.5%	58.4%	80.8%	83.7%
49-60	82.8%	79.7%	84.9%	87.6%	85.5%	92.9%	88.5%	65.0%	86.7%	88.5%
61-72	86.2%	82.6%	85.0%	90.6%	89.0%	91.6%	90.3%	70.8%	87.4%	89.4%
73-84	89.4%	85.6%	89.0%	92.1%	90.9%	91.8%	92.1%	69.9%	87.7%	91.3%
85-96	93.0%	86.3%	93.2%	92.6%	92.9%	96.0%	93.4%	71.5%	91.2%	94.0%
97-108	90.9%	84.3%	90.0%	95.8%	94.4%	93.9%	92.9%	71.8%	94.8%	94.6%
109-120	90.9%	86.9%	93.7%	95.8%	90.3%	97.8%	95.2%	71.1%	89.8%	95.6%
121+	92.2%	85.8%	93.8%	94.7%	90.7%	94.1%	94.8%	62.2%	94.3%	94.6%
Total	68.8%	66.7%	64.2%	72.9%	71.4%	73.2%	69.8%	49.2%	60.7%	70.3%
# Claimants	2,775	7,299	2,787	2,896	8,527	2,677	13,528	5,837	3,578	3,264

Table III(i)
Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets
By Industry and Duration of Disablement – Part 2

Duration of Disablement (Months)	Communica-tions	Construction	Elec, Gas & Sani Services	Entertainment Services	Hospitality Services	Legal Services	Membership Organizations	Real Estate	Social Services	Transportation
1-6		4.8%	7.1%		0.0%	6.2%	11.4%	5.7%	3.6%	5.9%
7-12	16.1%	20.0%	21.2%	19.2%	24.0%	18.6%	19.9%	27.9%	18.9%	19.9%
13-18	31.0%	35.9%	43.8%	26.7%	55.3%	32.0%	41.3%	42.9%	42.1%	41.9%
19-24	54.4%	37.6%	49.4%	55.5%	54.4%	49.4%	59.9%	59.7%	52.7%	50.0%
25-36	67.0%	56.7%	59.2%	62.2%	63.1%	62.0%	70.1%	62.6%	71.8%	58.8%
37-48	72.9%	74.8%	81.3%	83.1%	81.9%	70.6%	83.3%	80.4%	80.3%	70.1%
49-60	87.9%	86.4%	84.3%	85.0%	84.6%	77.8%	91.1%	85.0%	81.6%	70.5%
61-72	76.1%	93.9%	94.2%	82.1%	86.6%	76.4%	89.8%	84.7%	88.9%	82.4%
73-84	95.0%	91.7%	95.8%	94.0%	87.5%	75.8%	89.2%	96.5%	82.3%	88.5%
85-96	95.2%	89.9%	95.3%	96.8%	95.4%	70.6%	91.3%	89.8%	92.6%	85.1%
97-108	93.2%	89.4%	97.0%	95.4%	92.6%	87.0%	92.9%	99.4%	96.5%	85.0%
109-120	93.7%	94.0%	97.2%	96.9%		77.6%	94.5%	100.0%	97.1%	90.8%
121+	89.3%	94.2%	86.1%	92.1%	96.0%	86.6%	85.8%	95.1%	92.3%	83.6%
Total	57.2%	61.3%	77.7%	68.8%	61.3%	65.9%	69.4%	70.5%	66.3%	60.1%
# Claimants	844	1,066	1,088	387	684	1095	914	686	1,158	1,317

Public Administration stands out with generally lower percentages than most other industries. This is most likely due to a number of states that have retirement and disability programs within Public Administration that do not participate in the Social Security program.

Appendix B provides a distribution of the LTD claimants in the study by diagnosis and industry. Table III(j) compares the percent of LTD claimants with more acute diagnoses (defined as Back, Other Injury or Other Musculoskeletal) to the percent of LTD claimants with Primary Social Security Benefit Offsets, by industry. Public Administration is excluded from this comparison because many such plans do not participate in the Social Security program.

Table III(j) Comparison of Industries % of LTD Claimants with Acute Diagnoses Versus % of LTD Claimants with Primary SS Benefit Offsets		
Industry	% with Primary SS Benefit Offset	% with Acute Diagnoses
A. Communications	57.2%	31%
B. Transportation	60.1%	33%
C. Retail Trade	60.7%	38%
D. Construction	61.3%	37%
E. Hospitality Services	61.3%	30%
F. Eng, Acctg, Res & Rel Services	64.2%	35%
G. Legal Services	65.9%	27%
H. Social Services	66.3%	30%
I. Educational Services	66.7%	35%
J. Business Services	68.8%	33%
K. Entertainment	68.8%	34%
L. Membership Organizations	69.4%	29%
M. Manufacturing	69.8%	40%
N. Wholesale Trade	70.3%	38%
O. Real Estate	70.5%	33%
P. Health Services	71.4%	39%
Q. Finance	72.9%	30%
R. Insurance	73.2%	28%
S. Electric, Gas & Sanitation Services	77.7%	36%
All Industries	65.1%	37%

Lower incidence of acute conditions among LTD claimants might correlate with higher percentages of LTD claimants receiving Primary Social Security benefit offsets. This is the case for some industries such as Membership Organizations, Real Estate, Finance and Insurance, but clearly just the opposite for some other industries such as Communications, Transportation, Hospitality Services and Legal Services, for which both percentages are relatively low. Overall, it does not appear that a significant correlation exists between the percent of LTD claimants with acute conditions and the percent of LTD claimants receiving Primary Social Security benefit offsets, as illustrated in the following graph.

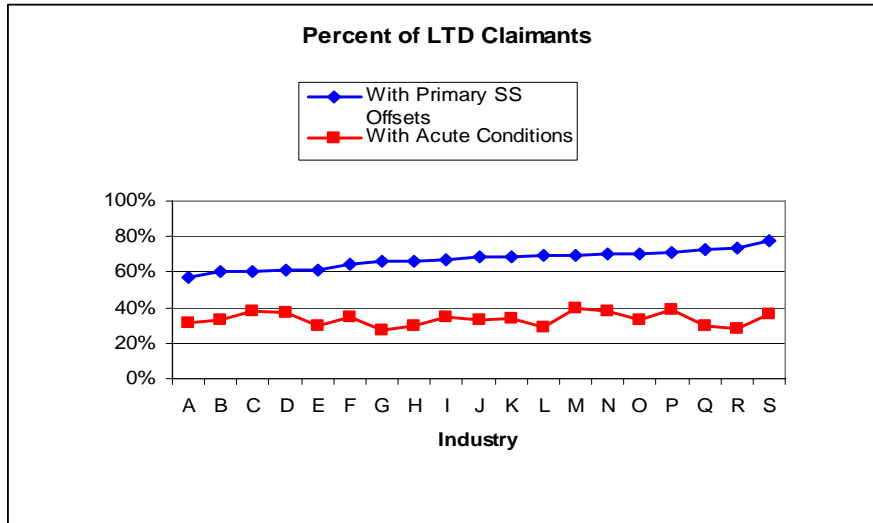


Table III(k) compares the ratios of the Primary Social Security benefits to the pre-disability monthly earned income and the average pre-disability earned annual income for the twenty industries.

Industry	Primary Soc Sec Benefit / Pre-Disability Earned Income	Average Pre- Disability Earned Income	Total # Claimants
Social Services	0.400	29,572	768
Manufacturing	0.371	41,319	9,436
Public Administration	0.367	34,905	2,872
Wholesale Trade	0.367	41,040	2,296
Retail Trade	0.363	37,921	2,170
Hospitality Services	0.362	38,839	419
Elec, Gas & Sani Services	0.359	46,662	845
Construction	0.348	48,630	653
Real Estate	0.339	42,297	484
Communications	0.336	43,924	483
Entertainment Services	0.333	41,952	267
Transportation	0.328	47,935	791
Educational Services	0.326	40,257	4,868
Membership Organizations	0.320	41,229	634
Health Services	0.318	41,163	6,085
Insurance	0.311	46,589	1,960
Eng, Acctg, Res & Rel Services	0.307	49,234	1,790
Finance	0.279	49,122	2,110
Business Services	0.250	61,322	1,909
Legal Services	0.214	69,788	722

The differences in the ratios of Primary Social Security benefits to pre-disability monthly earned income among the twenty industries in Table III(k) generally reflect differences in average incomes among the claimants in these categories. Higher average pre-disability earned incomes produce lower ratios. Legal Services has the lowest ratio (0.214) and highest average income, and Social Services has the highest ratio (0.400) and lowest average income.

Primary Social Security Benefits by Diagnosis

Tables III(l) and III(m) show the percentage of LTD claimants with Primary Social Security benefit offsets by diagnosis category and duration of disablement.

Table III(l) Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets By Diagnosis Category and Duration of Disablement – Part 1										
Duration of Disablement (Months)	Other Musculoskeletal	Circulatory	Nervous System	Back	Cancer	Mental Disorder	Respiratory	Other Infectious Diseases	Endocrine, Nutr & Metabolic	Digestive
1-6	2.8%	6.4%	4.7%	1.7%	7.9%	4.1%	8.2%	3.9%	2.8%	2.8%
7-12	13.1%	26.5%	26.1%	11.5%	30.1%	11.1%	35.4%	15.4%	21.8%	20.7%
13-18	27.2%	48.4%	48.1%	21.3%	56.4%	27.5%	58.3%	33.8%	40.9%	33.5%
19-24	40.9%	63.8%	55.0%	35.6%	69.4%	38.3%	68.6%	54.4%	52.1%	50.5%
25-36	54.9%	73.9%	68.9%	48.9%	76.8%	52.2%	78.4%	66.6%	70.8%	58.3%
37-48	71.4%	84.7%	81.3%	66.4%	84.6%	73.5%	85.7%	84.5%	81.1%	77.0%
49-60	80.6%	89.4%	86.0%	77.6%	87.4%	81.0%	89.9%	87.2%	88.5%	82.1%
61-72	84.6%	90.4%	88.5%	82.9%	86.7%	87.3%	92.5%	89.8%	91.8%	84.9%
73-84	86.1%	92.9%	90.3%	83.1%	91.0%	89.0%	93.9%	90.3%	91.1%	88.1%
85-96	89.5%	91.4%	91.4%	85.8%	92.8%	86.6%	92.1%	92.8%	90.9%	88.6%
97-108	89.7%	92.2%	90.1%	88.5%	93.6%	92.4%	92.3%	94.8%	93.9%	89.5%
109-120	90.9%	90.7%	90.9%	90.4%	91.4%	89.1%	96.1%	94.4%	92.0%	90.5%
121+	86.9%	89.8%	90.0%	85.2%	91.0%	82.4%	89.1%	94.4%	90.2%	87.8%
Total	59.8%	74.6%	75.8%	57.4%	62.1%	48.5%	75.9%	64.5%	73.4%	63.9%
# Claimants	18,805	12,820	12,562	12,511	8,094	5,113	3,111	2,486	2,259	2,109

Table III(m) Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets By Diagnosis Category and Duration of Disablement – Part 2										
Duration of Disablement (Months)	Other Injury	Genitourinary	AIDS	Diseases of Skin	Congenital - Perinatal	Unspec Eff External Causes	Diseases of Blood	Mental Disorder - Dementia	Complications of Pregnancy	Normal Pregnancy
1-6	0.7%	3.6%		5.9%	6.1%	0.0%			0.0%	0.0%
7-12	17.0%	35.1%	22.1%	10.2%	24.7%	16.2%	32.9%	42.0%	1.0%	0.8%
13-18	31.8%	55.8%	43.6%	41.1%	29.8%	50.5%	43.8%	64.4%	1.8%	
19-24	46.8%	72.3%	65.9%	57.0%	46.0%	55.7%	34.6%	69.9%		
25-36	62.4%	77.1%	77.2%	63.5%	65.0%	68.6%	75.2%	74.9%		
37-48	74.4%	86.6%	83.2%	82.7%	73.5%	79.3%	75.6%	87.8%		
49-60	80.2%	86.7%	86.9%	85.0%	84.8%	88.0%	81.1%	94.7%		
61-72	85.4%	91.3%	87.9%	93.4%	86.2%	89.2%	97.9%	97.6%		
73-84	87.4%	94.0%	88.7%	87.5%	81.4%	91.8%	96.2%			
85-96	91.0%	94.1%	92.9%	98.6%	93.7%		92.2%	90.5%		
97-108	86.5%	94.1%	97.4%	96.3%	94.0%		79.6%			
109-120	87.5%	93.8%	92.6%	95.4%	85.7%					
121+	87.8%	92.3%	93.5%	88.1%	94.2%	83.4%	95.1%	90.5%		
Total	66.9%	75.6%	87.2%	66.5%	65.3%	63.6%	70.4%	79.4%	8.0%	4.4%
# Claimants	2,014	1,923	924	712	622	276	258	209	244	93

For most diagnoses, the percentage exceeds 80% by the 5th year of disablement, and the biggest differences among the various illustrated diagnoses are in the first 4 years. As expected, some diagnoses exhibit significantly higher percentages of claims with Primary Social Security benefit offsets, e.g., circulatory, nervous system, cancer, respiratory, genitourinary, and dementia.

Primary Social Security Benefits by State

Tables III(n) and III(o) show the percentages of LTD claimants with Primary Social Security benefit offsets for the top fifteen states ranked by their number of claims in the database. All other states are grouped into the Other category.

Table III(n) Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets By State and Duration of Disablement – Part 1								
Duration of Disablement(Months)	CA	FL	GA	IL	MA	MI	NC	NY
1-6	3.8%	0.7%	1.7%	7.2%	4.3%	3.1%	3.7%	0.5%
7-12	18.5%	18.7%	17.3%	21.0%	19.4%	16.6%	16.9%	21.3%
13-18	33.8%	32.9%	27.6%	41.0%	42.6%	35.2%	35.0%	42.3%
19-24	47.1%	47.9%	38.6%	57.9%	47.6%	41.1%	41.7%	54.4%
25-36	62.3%	61.5%	50.4%	63.7%	69.2%	54.4%	57.9%	68.6%
37-48	74.4%	78.6%	65.5%	80.7%	84.3%	75.4%	76.4%	81.7%
49-60	80.9%	85.3%	79.8%	83.9%	82.5%	85.3%	86.5%	88.3%
61-72	83.1%	90.8%	85.3%	84.9%	83.5%	89.1%	92.9%	91.8%
73-84	85.9%	93.3%	85.3%	87.6%	85.5%	91.4%	93.5%	90.5%
85-96	87.0%	93.7%	90.3%	85.5%	86.4%	92.7%	95.9%	94.5%
97-108	85.1%	93.5%	91.3%	88.5%	87.9%	95.5%	95.7%	93.8%
109-120	88.5%	91.6%	91.4%	93.6%	90.5%	95.1%	94.0%	93.1%
121+	79.3%	91.4%	88.0%	91.4%	92.7%	91.2%	94.4%	94.2%
Total	66.5%	65.2%	57.0%	64.3%	66.0%	60.2%	65.0%	73.0%
# Claimants	7,820	4,853	3,307	2,977	2,707	2,869	3,263	4,233

Table III(o) Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets By State and Duration of Disablement – Part 2								
Duration of Disablement (Months)	OH	PA	SC	TN	TX	VA	WA	Other
1-6	5.4%	4.3%	3.6%	8.8%	3.5%	4.7%	5.4%	4.8%
7-12	20.7%	21.1%	15.5%	20.9%	20.8%	23.2%	15.6%	21.5%
13-18	34.6%	38.6%	29.7%	32.1%	47.6%	35.9%	30.9%	40.2%
19-24	47.5%	55.2%	39.5%	49.1%	58.7%	53.1%	46.0%	52.7%
25-36	53.0%	74.4%	46.4%	58.1%	69.7%	69.0%	52.9%	65.0%
37-48	65.7%	83.1%	70.5%	78.4%	78.9%	84.0%	66.0%	78.6%
49-60	68.9%	87.2%	83.2%	85.6%	83.1%	89.9%	73.1%	84.3%
61-72	75.9%	90.3%	86.2%	91.9%	85.5%	92.7%	75.7%	87.5%
73-84	79.8%	93.4%	86.9%	91.5%	87.4%	91.1%	75.8%	89.3%
85-96	85.3%	93.9%	91.0%	93.8%	91.3%	93.7%	76.9%	88.9%
97-108	90.9%	94.7%	91.0%	95.4%	89.7%	93.7%	76.3%	90.3%
109-120	90.5%	92.5%	93.2%	96.0%	88.7%	94.6%	74.6%	90.8%
121+	88.3%	91.9%	90.2%	95.5%	87.6%	93.5%	72.3%	88.9%
Total	57.5%	70.0%	57.8%	64.6%	68.0%	66.4%	57.3%	65.6%
# Claimants	3,500	4,724	2,697	2,422	5,829	2,691	2,567	33,933

Noticeable differences in the percentage of LTD claimants with Primary Social Security benefit offsets by state occur in the durations in excess of 60 months. Some states such as Florida, Michigan, North Carolina, Pennsylvania and Tennessee have ultimate percentages consistently in excess of 90%, while for many other states, the ultimate percentages fall between 80% and 90%. Washington has the lowest percentages among the 15 illustrated states for all duration groupings after the first six months of disablement, with ultimate percentages falling between 72% and 77%.

Table III(p) compares the ratios of Primary Social Security benefits to pre-disability earned income for these key states.

Table III(p) Ratio of Primary Social Security Benefits To Pre-Disability Gross Monthly Earned Income And Average Pre-Disability Earned Income For Claimants With Primary Social Security Benefit Offsets All Durations of Disablement Combined By State			
State	Primary Soc Sec Benefit / Pre-Disability Earned Income	Average Pre-Disability Earned Income	Total # Claimants
SC	0.383	34,526	1,560
NC	0.371	36,843	2,122
PA	0.356	38,399	3,306
MI	0.351	40,558	1,727
OH	0.349	39,779	2,014
GA	0.348	40,083	1,886
Other	0.346	40,361	22,303
VA	0.343	41,881	1,787
TX	0.336	42,400	3,966
TN	0.333	40,290	1,577
WA	0.329	42,453	1,472
FL	0.322	43,472	3,166
MA	0.316	45,612	1,786
NY	0.293	50,296	3,092
CA	0.283	53,434	5,188
IL	0.272	52,608	1,913
Total	0.331	42,581	58,874

The differences in the ratios in Table III(o) are largely attributable to differences in the average income levels among the states.

Dependent Social Security Benefits by Gender and Age

Table III(q) shows the percentages of LTD claimants with Primary Social Security benefit offsets who are also receiving Dependent Social Security benefits, by gender and age at disablement. When tabulating these results, we excluded claims that offset only Primary Social Security benefits or were non-integrated.

Table III(q) Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets Who Are Also Receiving Dependent Social Security Benefits By Gender and Age at Disablement			
Age at Disablement	Female	Male	Total
0-29	30.7%	26.2%	28.9%
30-34	34.4%	31.8%	33.4%
35-39	26.7%	30.3%	28.2%
40-44	15.1%	24.5%	19.2%
45-49	6.6%	14.9%	10.3%
50-54	2.2%	7.6%	4.7%
55-59	0.6%	4.5%	2.6%
60-64	0.5%	3.2%	2.0%
65-69	0.9%	2.9%	2.0%
70+	0.0%	0.0%	0.0%
# Claimants	26,354	22,809	49,163

The percentage of LTD claimants with Primary Social Security benefit offsets who also receive Dependent Social Security benefits decreases as the age of disablement increases. The younger claimants are more likely to have children at ages who qualify for Dependent Social Security benefits. The reductions in this percentage are largest for male ages 45+ and female ages 40+. The percentages for female claimants are higher than male claimants until the mid-30's.

Table III(r) shows that the percentages of LTD claimants with Primary Social Security benefit offsets who are also receiving Dependent Social Security benefits noticeably decrease as the duration of disablement increases, depending upon the age at disablement. These percentages may be more a function of the attained age of the claimant rather than the age at disablement.

Table III(r) Percentage of Group LTD Claimants With Primary Social Security Benefit Offsets Who Are Also Receiving Dependent Social Security Benefits By Age at Disablement and Duration of Disablement										
Duration of Disablement (Months)	0-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
1-6						0.0%	0.9%	0.0%	0.0%	
7-12	14.5%	33.4%	32.2%	24.0%	14.7%	5.0%	2.3%	1.2%	3.4%	0.0%
13-18	18.5%	34.8%	31.6%	22.1%	17.4%	6.8%	2.6%	1.0%	1.3%	0.0%
19-24	24.8%	35.2%	44.7%	25.7%	15.6%	5.5%	2.3%	1.5%	0.2%	0.0%
25-36	24.2%	40.0%	36.2%	28.3%	16.1%	6.1%	2.0%	1.9%	1.2%	
37-48	26.8%	45.3%	38.4%	26.6%	14.4%	5.4%	2.8%	2.3%	0.0%	
49-60	27.6%	36.9%	38.1%	25.0%	11.4%	4.7%	2.4%	1.9%		
61-72	40.3%	40.0%	36.2%	22.4%	10.5%	4.3%	1.8%	1.7%		
73-84	34.7%	40.5%	29.2%	21.0%	9.1%	3.3%	1.8%			
85-96	39.4%	39.8%	31.6%	17.2%	7.1%	2.7%	1.7%			
97-108	35.9%	35.5%	29.5%	11.1%	4.7%	1.9%	1.4%			
109-120	34.7%	36.5%	24.2%	15.4%	3.7%	1.6%	0.4%			
121+	16.6%	15.9%	10.4%	5.4%	2.5%	1.7%	1.5%			
Total	23.7%	27.5%	23.5%	15.9%	8.6%	4.0%	2.2%	1.7%	1.6%	0.0%
# Claimants	1,568	2,765	4,948	7,933	10,858	13,320	11,771	5,345	318	47

Conclusions Pertaining to Social Security Benefit Offsets

The following are conclusions from our analysis of Social Security benefit offsets:

- The percentages of LTD claimants with Primary Social Security benefit offsets increases by duration of disablement, exceeding 83% by the fifth year of disablement and ultimately reaching 90%.
- During each of the first eight years of disablement, the percentage of LTD claimants with Primary Social Security benefit offsets generally increases with the age of disablement until age 65.
- The percentages of LTD claimants with Primary Social Security benefit offsets do not vary materially by pre-disability annual income levels until annual income levels exceed \$200,000.
- Percentages of LTD claimants with Primary Social Security benefit offsets exhibit similar increasing patterns among many industries.
- There are material differences by diagnosis in the percentage of LTD claimants with Primary Social Security benefit offsets during the first 60 months of disablement with disabilities related to circulatory, the nervous system, respiratory, genitourinary, dementia and AIDS exhibiting the highest percentages. The differences tend to narrow among the various diagnoses for disabilities lasting longer than 5 years.
- Noticeable differences in the percentage of LTD claimants with Primary Social Security benefit offsets by state occur in the durations in excess of 60 months. Florida, Michigan, North Carolina, Pennsylvania and Tennessee have high percentages in these later durations.
- The average ratio of Primary Social Security benefits to pre-disability earned income for LTD claimants receiving Social Security benefits is 33%. There appear to be little material differences in this ratio among ages of disablement 35 and older, except there is considerable variation based on the amount of pre-disability earned income.

Section IV: Workers' Compensation Benefit Offsets

This section discusses the proportion of LTD claimants with Workers' Compensation benefit offsets. The section also analyzes the ratio of Workers' Compensation benefits to pre-disability income. When tabulating these results, we excluded all claims from one contributor who was only able to provide Social Security offset information for this study. We also excluded claims with non-integrated benefits.

Workers' Compensation Benefits

Workers' Compensation is a form of insurance that provides compensation for medical care and loss of income for employees who are injured in the course of employment, in exchange for relinquishment of the employee's right to sue his or her employer for negligence.

Specifically, the benefits provided are:

- Medical benefits, which are usually provided without dollar or time limits. In the case of most workplace injuries, this is the only benefit provided.
- Rehabilitation benefits, which include both medical rehabilitation and vocational rehabilitation for those cases involving severe disabilities.
- Cash benefits, which include impairment benefits and disability benefits. The former are paid for certain specific physical impairments, while the latter are available when the injury causes a wage loss.

Four classifications of disability are used for cash benefits, which replace an employee's loss of income or earning capacity due to occupation injury or disease.

- Temporary total
- Permanent total
- Temporary partial
- Permanent partial; which is divided into "nonscheduled" and "scheduled" disabilities

Most cases involve temporary total disability, i.e., the employee is totally disabled, but is expected to recover and return to employment. Permanent total disability generally indicates that the employee is regarded as totally and permanently unable to perform gainful employment.

Income or cash benefits payable under either temporary total or permanent total disability are generally expressed as a percentage of wages. In most states, limitations are placed on maximum and minimum benefits payable weekly; some states also limit the total number of weeks and total dollar amount of benefit eligibility. Where there is permanent total disability, most states provide payments extending through the employee's lifetime.

The wage-replacement percentages are generally the same for temporary total and permanent total disability benefits; however, for permanent total disabilities the time limits tend to be longer and the total dollar amounts higher. Some states also provide additional amounts or other benefits for dependents.

Most states provide temporary or permanent partial disability payments on a nonscheduled basis, i.e., similar to total disability. Certain states define "scheduled" benefits for loss of use of specified body parts; these benefits may replace or be in addition to other payments.

Most group disability plans offset disability benefits by any disability benefits received by the disabled worker under Workers' Compensation.

Workers' Compensation Benefits by Gender, Age and Pre-Disability Income

Table IV(a) shows the proportion of claimants with Workers' Compensation benefit offsets by gender and duration of disablement.

Table IV(a) Percentage of Group LTD Claimants With Workers' Compensation Benefit Offsets By Gender and Duration of Disablement			
Duration of Disablement (Months)	Female	Male	Total
1-6	0.8%	1.6%	1.2%
7-12	2.0%	3.5%	2.7%
13-18	2.6%	3.8%	3.2%
19-24	3.4%	5.1%	4.2%
25-36	3.1%	4.9%	4.0%
37-48	3.5%	4.8%	4.1%
49-60	3.5%	5.3%	4.3%
61-72	4.0%	5.8%	4.8%
73-84	4.4%	5.3%	4.8%
85-96	4.6%	5.8%	5.2%
97-108	3.8%	6.0%	4.7%
109-120	4.1%	5.2%	4.6%
121+	4.4%	5.9%	5.0%
Total	3.4%	4.9%	4.1%
# Claimants	43,942	36,970	80,912

The percentage of LTD claimants with Workers' Compensation benefit offsets increases most significantly during the first 12 months of disablement. Male claimants generally have higher percentages with Workers' Compensation benefit offsets than female claimants.

Table IV(b) shows the variability in the proportion of claimants whose LTD benefits are being offset by Workers' Compensation benefits among eight contributors.

Table IV(b) Percentage of Group LTD Claimants With Workers' Compensation Benefit Offset Variability Among Eight Contributors					
Duration of Disablement (Months)	Average	Median	Minimum	Maximum	Standard Deviation
1-6	1.2%	1.1%	0.7%	2.2%	0.5%
7-12	2.7%	2.6%	1.8%	4.1%	0.7%
13-18	3.2%	2.9%	1.9%	4.2%	0.8%
19-24	4.2%	4.4%	2.5%	4.9%	0.7%
25-36	4.0%	4.1%	2.3%	5.8%	1.1%
37-48	4.1%	3.8%	2.3%	5.7%	1.0%
49-60	4.3%	3.9%	2.3%	6.4%	1.3%
61-72	4.8%	4.6%	1.7%	7.0%	1.5%
73-84	4.8%	4.9%	2.3%	6.6%	1.4%
85-96	5.2%	5.3%	1.1%	7.5%	2.0%
97-108	4.7%	4.5%	0.4%	8.4%	2.5%
109-120	4.6%	4.8%	0.5%	7.1%	2.1%
121+	5.0%	5.2%	0.7%	7.5%	2.1%
Total	4.1%	4.1%	1.9%	5.5%	1.1%

The range of results among the contributing companies reflects differences in the distribution of their LTD claimants by age, gender, income levels, industry, state and medical diagnoses.

Table IV(c) shows the ratio of the Workers' Compensation benefit to the pre-disability earned income by gender and duration of disablement.

Table IV(c) Ratio of Workers' Compensation Benefit to Pre-Disability Earned Income By Gender and Duration of Disablement			
Duration of Disablement (Months)	Female	Male	Total
1-6	0.808	0.593	0.667
7-12	0.754	0.708	0.725
13-18	0.556	0.615	0.591
19-24	0.581	0.545	0.560
25-36	0.500	0.492	0.495
37-48	0.486	0.401	0.436
49-60	0.376	0.405	0.394
61-72	0.340	0.379	0.362
73-84	0.405	0.477	0.445
85-96	0.368	0.363	0.365
97-108	0.347	0.396	0.376
109-120	0.298	0.285	0.291
121+	0.291	0.308	0.301
Total	0.448	0.459	0.454
# Claimants	1,495	1,798	3,292

The ratios in Table IV(c) show a downward trend as the duration of disablement increases. The male ratios are generally similar to the female ratios with some volatility.

Table IV(d) shows the proportion of claimants with Workers' Compensation benefit offsets by age at disablement and duration of disablement.

Table IV(d) Percentage of Group LTD Claimants With Workers' Compensation Benefit Offsets By Age at Disablement and Duration of Disablement										
Duration of Disablement (Months)	0-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
1-6	1.0%	0.2%	1.0%	0.8%	1.3%	1.8%	1.6%	0.8%	0.2%	0.0%
7-12	3.2%	3.1%	3.4%	2.4%	3.0%	2.8%	2.1%	2.9%	3.7%	0.3%
13-18	4.5%	4.4%	3.8%	4.1%	3.9%	3.3%	2.7%	2.0%	1.1%	0.8%
19-24	5.5%	5.9%	4.7%	6.0%	5.4%	4.3%	2.8%	3.1%	3.4%	0.8%
25-36	4.1%	5.3%	5.5%	5.1%	5.1%	3.9%	3.1%	2.6%	2.0%	
37-48	5.0%	4.2%	6.7%	5.0%	4.5%	4.1%	3.6%	2.6%	10.1%	
49-60	4.6%	4.9%	5.3%	5.7%	5.2%	4.7%	3.2%	2.4%		
61-72	4.3%	7.0%	6.5%	6.2%	5.9%	3.8%	3.8%	3.5%		
73-84	4.8%	5.9%	6.4%	6.7%	5.3%	3.8%	3.7%	1.2%		
85-96	7.6%	4.3%	6.0%	6.8%	5.1%	4.7%	4.0%			
97-108	7.4%	5.8%	5.3%	5.1%	4.1%	4.5%	4.5%			
109-120	5.9%	2.2%	6.9%	5.4%	4.8%	3.6%	3.9%			
121+	4.2%	4.4%	4.8%	5.9%	5.2%	4.6%	2.5%			
Total	4.2%	4.4%	5.0%	5.2%	4.7%	3.9%	3.1%	2.5%	2.5%	0.5%
# Claimants	2,701	4,129	7,180	11,155	15,048	17,555	14,768	7,097	979	300

The percentage of LTD claimants with Workers' Compensation benefit offsets decreases after age 44 at most durations of disablement. Disabilities at the younger ages may be more likely due to injuries affecting the back or muscles. Disabilities due to cancer and circulatory, which are more likely to occur at the older ages, are less likely to be attributable to events at the worksite.

Workers' Compensation Benefits by Industry

Tables IV(e) and IV(f) show the percentages of LTD claimants with Workers' Compensation benefit offsets by Industry.

Table IV(e)
Percentage of Group LTD Claimants With Workers' Compensation Benefit Offsets
By Industry and Duration of Disablement – Part 1

Duration of Disablement (Months)	Business Services	Educational Services	Engineering, Accounting, Research & Related Services	Finance	Health Services	Insurance	Manufacturing	Public Administration	Retail Trade	Wholesale Trade
1-6	0.2%	2.4%	0.5%	0.0%	0.6%	0.0%	0.7%	2.3%	0.1%	1.8%
7-12	3.9%	3.4%	2.5%	1.4%	3.4%	1.1%	2.6%	3.9%	1.9%	1.7%
13-18	2.4%	3.4%	2.5%	1.1%	3.3%	2.4%	2.6%	6.6%	1.8%	5.5%
19-24	4.7%	4.3%	4.3%	0.7%	4.7%	1.2%	3.9%	9.4%	2.0%	5.4%
25-36	2.6%	3.9%	2.3%	1.8%	4.1%	1.4%	4.6%	8.4%	2.9%	5.8%
37-48	1.8%	3.6%	2.4%	2.0%	3.3%	3.5%	5.5%	7.2%	4.6%	4.6%
49-60	3.9%	3.5%	3.7%	2.8%	4.7%	1.4%	5.4%	7.6%	7.1%	3.9%
61-72	4.5%	4.2%	5.7%	2.7%	5.4%	3.2%	5.3%	8.4%	5.3%	7.5%
73-84	3.2%	3.9%	4.1%	2.7%	5.2%	2.8%	5.1%	7.0%	4.2%	6.5%
85-96	3.6%	3.9%	8.6%	4.9%	6.8%	4.0%	5.5%	7.4%	4.1%	6.4%
97-108	2.4%	4.0%	4.3%	3.0%	4.8%	6.3%	5.2%	7.5%	4.2%	7.6%
109-120	2.9%	4.2%	8.7%	3.8%	5.2%	3.5%	6.0%	4.6%	3.8%	8.7%
121+	2.9%	6.0%	4.1%	5.0%	5.6%	3.5%	5.9%	5.9%	8.7%	7.7%
Total	3.1%	4.1%	3.8%	2.8%	4.5%	2.6%	4.6%	6.7%	3.5%	5.5%
# Claimants	2,054	6,895	2,052	2,527	6,924	2,440	11,448	5,707	3,192	2,704

Table IV(f)
Percentage of Group LTD Claimants With Workers' Compensation Benefit Offsets
By Industry and Duration of Disablement – Part 2

Duration of Disablement (Months)	Communications	Construction	Electric, Gas & Sanitary Services	Entertainment Services	Hospitality Services	Legal Services	Membership Organizations	Real Estate	Social Services	Transportation
1-6		1.0%	8.2%		0.0%	1.3%	0.0%	0.0%	0.0%	0.0%
7-12	14.5%	1.3%	4.9%	4.8%	0.4%	1.8%	0.7%	2.3%	1.2%	1.1%
13-18	5.2%	2.4%	1.8%	4.1%	2.5%	0.7%	4.8%	5.5%	2.5%	4.8%
19-24	3.2%	5.2%	17.0%	4.2%	3.0%	0.4%	3.6%	3.3%	2.9%	7.8%
25-36	4.7%	5.1%	9.7%	6.3%	0.5%	2.2%	1.5%	1.8%	1.9%	3.4%
37-48	7.9%	4.6%	6.8%	8.3%	2.2%	1.4%	3.4%	2.0%	3.0%	7.0%
49-60	3.7%	3.7%	10.5%	4.6%	2.5%	3.9%	2.6%	2.0%	2.4%	6.3%
61-72	5.1%	3.8%	6.8%	8.5%	0.0%	1.3%	3.1%	8.1%	7.7%	7.6%
73-84	3.7%	4.5%	12.1%	8.9%	1.5%	2.7%	2.4%	9.9%	5.5%	2.8%
85-96	13.3%	5.0%	13.4%	5.7%	11.4%	3.8%	1.5%	10.6%	2.9%	4.9%
97-108	2.8%	0.5%	8.9%		0.0%	2.1%	2.4%	11.4%	0.9%	8.1%
109-120	3.1%	9.1%	8.9%			2.3%	1.0%	0.8%	10.1%	2.6%
121+	5.9%	8.3%	3.9%	8.5%	0.6%	3.6%	2.4%	3.2%	3.5%	9.6%
Total	6.8%	4.2%	8.0%	6.1%	1.8%	2.5%	2.5%	4.4%	3.0%	5.4%
# Claimants	783	857	1,032	322	608	993	752	500	921	1,098

There are wide variations in the incidence of Workers' Compensation claims by Industry reflecting in large part differences in the level of manual labor involved. Communications and Public Administration have the highest overall incidence of LTD claimants with Workers' Compensation benefit offsets (6.8%), while Hospitality Services has the lowest (1.9%).

Table IV(g) compares the percent of LTD claimants with more acute diagnoses (defined as Back, Other Injury or Other Musculoskeletal) to the percent of LTD claimants with Workers' Compensation Benefit Offsets, by industry.

Table IV(g) Comparison of Industries % of LTD Claimants with Acute Diagnoses Versus % of LTD Claimants with Workers' Compensation Benefit Offsets		
Industry	% with WC Benefit Offset	% with Acute Diagnoses
A. Hospitality Services	1.8%	30%
B. Membership Organizations	2.5%	29%
C. Legal Services	2.5%	27%
D. Insurance	2.6%	28%
E. Finance	2.8%	30%
F. Social Services	3.0%	30%
G. Business Services	3.1%	33%
H. Retail Trade	3.5%	38%
I. Eng, Acctg, Res & Rel Services	3.8%	35%
J. Educational Services	4.1%	35%
K. Construction	4.2%	37%
L. Real Estate	4.4%	33%
M. Health Services	4.5%	39%
N. Manufacturing	4.6%	40%
O. Transportation	5.4%	33%
P. Wholesale Trade	5.5%	38%
Q. Entertainment	6.1%	34%
R. Public Administration	6.7%	41%
S. Communications	6.8%	31%
T. Electric, Gas & Sanitation Services	8.0%	36%
All Industries	4.1%	37%

A higher percent of LTD claimants with acute conditions is often associated with a higher percent of claimants with Workers' Compensation Benefit offsets. However, there are some clear exceptions such as Transportation and Communications where the percent of LTD claimants with acute conditions is relatively low but the percent of claimants with Workers' Compensation Benefit offsets is relatively high. Electric, Gas & Sanitation Services has the highest percent of claimants with Workers' Compensation Benefit offsets although the percent of claimants with acute conditions is close to average. The following graph suggests some level of positive correlation between the percent of LTD claimants with acute conditions and the percent of claimants with Workers' Compensation benefit offsets, although the relationship becomes less clear for industries having higher levels of claimants with Workers' Compensation benefit offsets.

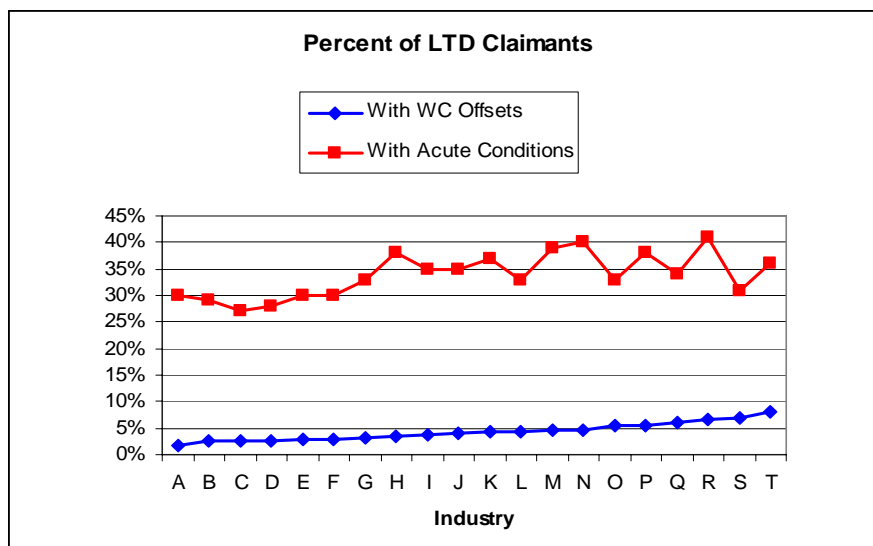


Table IV(h) compares the ratios of Workers' Compensation benefits and Primary Social Security benefits to pre-disability monthly earned income by industry for all durations of disablement combined.

Table IV(h) Comparison of the Ratios of Workers' Compensation Benefits And Primary Social Security Benefits to Pre-disability Monthly Earned Income By Industry			
SIC division	Primary Social Security	Workers' Compensation	Total # Claimants
Business Services	0.250	0.612	64
Communications	0.336	0.481	53
Construction	0.348	0.538	36
Educational Services	0.326	0.449	283
Electric, Gas & Sanitary Services	0.359	0.376	83
Engineering, Accounting, Research & Related Services	0.307	0.393	79
Entertainment Services	0.333	0.467	20
Finance	0.279	0.307	70
Health Services	0.318	0.433	314
Hospitality Services	0.362	0.649	11
Insurance	0.311	0.321	65
Legal Services	0.214	0.631	25
Manufacturing	0.371	0.398	521
Membership Organizations	0.320	0.408	18
Public Administration	0.367	0.531	383
Real Estate	0.339	0.554	22
Retail Trade	0.363	0.371	112
Social Services	0.400	0.535	28
Transportation	0.328	0.444	59
Wholesale Trade	0.367	0.490	150
Total	0.314	0.454	2396

On average, Workers' Compensation benefits are over one third higher than Primary Social Security benefits, relative to pre-disability earned income. The Workers' Compensation ratios in Table IV(f) vary considerably more by industry than the Primary Social Security ratios.

Workers' Compensation Benefits by Diagnosis

Tables IV(i) and IV(j) show the percentage of group LTD claimants with Workers' Compensation benefit offsets by diagnosis category.

Table IV(i) Percentage of Group LTD Claimants With Workers' Compensation Benefit Offsets By Diagnosis and Duration of Disablement – Part 1								
Duration of Disablement (Months)	Back	Other Injury	Other Musculo-skeletal	Other Infectious Dis	Congenital - Perinatal	Nervous System	Mental Disorder	Respiratory
1-6	2.0%	3.8%	3.5%	0.0%	0.0%	0.1%	0.2%	0.0%
7-12	5.8%	7.6%	6.7%	3.5%	2.8%	1.1%	1.0%	0.9%
13-18	7.0%	9.4%	7.1%	2.4%	3.2%	1.9%	1.2%	0.6%
19-24	8.7%	11.8%	9.2%	5.9%	1.7%	2.7%	0.8%	0.9%
25-36	9.7%	10.7%	7.4%	2.5%	4.7%	2.2%	1.4%	1.8%
37-48	10.0%	12.5%	7.1%	2.3%	1.1%	2.7%	3.0%	1.8%
49-60	10.6%	10.4%	7.8%	1.9%	4.3%	2.9%	3.1%	0.8%
61-72	12.8%	13.6%	7.2%	8.1%	5.0%	2.6%	2.5%	1.6%
73-84	12.6%	8.4%	7.5%	5.9%	1.2%	2.9%	2.9%	3.2%
85-96	13.0%	10.8%	7.8%	8.5%	1.7%	3.4%	3.3%	2.6%
97-108	14.3%	10.9%	7.7%	0.9%	1.3%	2.0%	3.1%	1.9%
109-120	13.5%	9.2%	6.2%	5.1%	1.2%	3.2%	2.5%	2.9%
121+	14.7%	6.8%	6.5%	3.7%	4.6%	3.3%	3.0%	3.0%
Total	10.4%	9.7%	7.1%	3.7%	2.9%	2.6%	1.7%	1.6%
# Claimants	12,169	1,806	15,950	2,320	539	11,182	4808	2,758

Table IV(j)
 Percentage of Group LTD Claimants With Workers' Compensation Benefit Offsets
By Diagnosis and Duration of Disablement – Part 2

Duration of Disablement (Months)	Endocrine, Nutr & Metabolic	Digestive	Diseases of Skin	Diseases of Blood	Circulatory	Mental Disorder Dementia	Genito-urinary	Cancer
1-6	0.0%	0.0%	0.5%		0.0%		0.0%	0.0%
7-12	1.2%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.1%
13-18	0.2%	0.5%	0.7%	0.0%	0.5%	0.0%	0.0%	0.2%
19-24	1.0%	1.3%	0.9%	0.0%	0.3%	0.0%	0.0%	0.3%
25-36	0.8%	1.5%	0.2%	0.0%	0.7%	1.1%	0.2%	0.2%
37-48	0.4%	0.4%	1.9%	4.9%	0.5%	0.0%	0.1%	0.1%
49-60	0.7%	2.1%	2.0%	0.0%	0.4%	0.0%	0.2%	0.1%
61-72	1.5%	0.4%	2.6%	0.0%	0.5%		0.2%	0.2%
73-84	2.4%	1.3%	1.5%	1.2%	0.9%		0.9%	1.0%
85-96	0.3%	2.1%	0.4%	1.8%	0.6%	0.0%	0.7%	0.6%
97-108	1.6%	0.7%	0.6%	0.0%	0.4%		0.7%	0.2%
109-120	2.2%	2.3%	1.4%		0.3%		0.0%	0.0%
121+	2.0%	1.0%	0.4%	0.0%	0.8%	1.5%	1.1%	1.3%
Total	1.2%	1.0%	1.0%	0.7%	0.5%	0.3%	0.3%	0.3%
# Claimants	1,962	1,870	647	214	11,280	169	1,695	7,099

Certain diagnosis categories such as Other Musculoskeletal, Back and Other Injury have significantly higher percentages of LTD claimants with Workers' Compensation benefit offsets, while others such as Circulatory, Cancer and Genitourinary have very low percentages.

Workers' Compensation Benefit by State

Tables IV(k) shows the percentage of LTD claimants with Workers' Compensation benefit offsets by state.

Table IV(k) Percentage of Group LTD Claimants With Workers' Compensation Benefit Offsets By State		
State	Percentage	Total # Claimants
NY	8.5%	3,692
SC	6.5%	2,462
WA	6.1%	2,422
MA	5.9%	2,476
CA	5.8%	7,071
GA	5.2%	2,878
MI	4.2%	2,647
NC	3.8%	2,864
FL	3.7%	4,308
PA	3.6%	4,088
Other	3.4%	30,490
VA	3.0%	2,354
IL	2.6%	2,607
TN	2.6%	2,166
TX	2.6%	5,292
OH	2.2%	3,094
Total	4.1%	80,912

The differences in the percentages of LTD claimants with Workers' Compensation benefit offsets by state reflect the distribution of industries and Workers' Compensation regulations and practices among the states. New York, South Carolina and Washington have the highest percentages among the 15 illustrated states in Table IV(k), while some states such as Illinois, Tennessee, Texas and Ohio have the lowest percentages.

Conclusions Pertaining to Workers' Compensation Benefit Offsets

The following are conclusions from our analysis of Workers' Compensation benefits received by LTD claimants:

- Although only about 4% of LTD claimants receive Workers' Compensation benefits, the average Workers' Compensation benefit is approximately 1/3 higher than the average Primary Social Security benefit relative to the pre-disability earned income.
- The percentage of LTD claimants with Workers' Compensation benefit offsets decreases after age 44 at most durations of disablement.
- Disabilities at the younger ages may be more likely due to injuries affecting the back or muscles. Disabilities due to cancer and circulatory, which are more likely to occur at the older ages, are less likely to be attributable to events at the worksite.
- There are wide variations in the incidence of Workers' Compensation claims by industry. Communications, Public Administration, and Electric, Gas & Sanitary Services exhibit some of the highest incidence of Workers' Compensation claims.
- There are significant differences in the percentages of LTD claimants with Workers' Compensation benefit offsets by state, reflecting differences in the distribution of industries and Workers' Compensation regulations and practices among the states. New York, South Carolina and Washington have some of the highest incidence of Workers' Compensation claims among LTD claimants, while Tennessee, Illinois and Ohio have some of the lowest incidence.
- Certain diagnosis categories such as Other Musculoskeletal, Back and Other Injury have significantly higher percentages of LTD claimants with Workers' Compensation benefit offsets, while others such as Circulatory, Cancer and Genitourinary have very low percentages.

Section V: Pension Benefit Offsets

This section discusses the proportion of LTD claimants with pension benefit offsets. The section also analyzes the ratio of pension benefits to pre-disability income. Pension benefits include both disability and retirement benefits from both private and public plans. When tabulating these results, we excluded all claims from one contributor who was only able to provide Social Security offset information for this study. We also excluded claims with non-integrated benefits.

Pension Disability Benefits

The treatment of disability benefits within retirement plans varies from employer to employer. Some plans are set up so that a disabled employee automatically receives the disability benefit once he or she meets the plan's definition of total disability. Other plans offer the employee the option of deferring his benefits to normal retirement age or taking actuarially reduced benefits as of the date of disability. In this case, the employee may decide to not take the pension benefit, which would result in an offset to the LTD benefit. It is common practice for LTD insurers to not reduce the LTD benefit for any portion of the retirement benefit attributable to employee contributions.

Generally, the definition of retirement plans includes profit-sharing plans, but excludes thrift and savings plans, individual retirement accounts (IRAs), tax-sheltered annuities (TSAs), stock ownership plans or deferred compensation plans. The public Employee Retirement System (PERS) and State Teachers Retirement System (STRS) are retirement programs which often provide disability benefits to persons employed in the education industry. LTD insurers typically offset for PERS and STRS benefits received.

Pension Benefits by Gender, Age and Pre-Disability Income

Table V(a) shows the proportion of claimants with pension benefit offsets by gender and duration of disablement.

Duration of Disablement (Months)	Female	Male	Total
1-6	0.5%	0.3%	0.4%
7-12	1.2%	1.5%	1.3%
13-18	3.0%	3.7%	3.4%
19-24	4.8%	5.7%	5.2%
25-36	7.2%	7.6%	7.4%
37-48	8.1%	9.8%	8.9%
49-60	9.9%	9.8%	9.8%
61-72	8.8%	9.3%	9.0%
73-84	8.7%	8.5%	8.6%
85-96	8.7%	8.2%	8.5%
97-108	8.9%	10.5%	9.6%
109-120	9.7%	9.7%	9.7%
121+	5.8%	6.3%	6.0%
Total	6.2%	6.7%	6.4%
Total # Claimants	43,942	36,970	80,912

The percentage of LTD claimants with pension benefit offsets increases over the first two or three years of disablement. For male and female combined, the percentages for years 4 to 10 fall in the 8-10% range but drop by 40% for years 10+.

Table V(b) shows the variability in the proportion of claimants whose LTD benefits are being offset by pension benefits among eight contributors.

Table V(b) Percentage of Group LTD Claimants With Pension Benefit Offset Variability Among Eight Contributors					
Duration of Disablement (Months)	Average	Median	Minimum	Maximum	Standard Deviation
1-6	0.4%	0.3%	0.0%	1.4%	0.5%
7-12	1.3%	1.5%	0.2%	2.1%	0.5%
13-18	3.4%	3.3%	1.0%	5.0%	1.4%
19-24	5.2%	3.9%	2.0%	10.8%	2.8%
25-36	7.4%	6.3%	1.7%	17.2%	4.6%
37-48	8.9%	8.9%	1.1%	17.7%	5.1%
49-60	9.8%	9.0%	1.7%	21.4%	6.3%
61-72	9.0%	8.7%	1.4%	19.6%	5.7%
73-84	8.6%	8.1%	0.5%	19.5%	6.4%
85-96	8.5%	8.5%	0.5%	16.9%	6.1%
97-108	9.6%	9.1%	1.1%	20.0%	7.1%
109-120	9.7%	9.6%	2.2%	19.2%	6.7%
121+	6.0%	7.3%	2.0%	12.2%	4.2%
Total	6.4%	6.6%	1.4%	13.0%	3.8%

The range of results among the contributing companies reflects differences in the distribution of their LTD claimants by age and industry.

Table V(c) shows the ratio of the pension benefit to the pre-disability earned income by gender and duration of disablement.

Table V(c) Ratio of Pension Benefit to Pre-Disability Earned Income By Gender and Duration of Disablement			
Duration of Disablement (Months)	Female	Male	Total
1-6	0.309	0.369	0.336
7-12	0.294	0.366	0.334
13-18	0.324	0.318	0.320
19-24	0.311	0.303	0.307
25-36	0.322	0.315	0.318
37-48	0.312	0.312	0.312
49-60	0.300	0.306	0.303
61-72	0.284	0.318	0.301
73-84	0.288	0.300	0.295
85-96	0.302	0.313	0.307
97-108	0.285	0.308	0.297
109-120	0.316	0.286	0.302
121+	0.246	0.262	0.254
Total	0.298	0.306	0.302
Total # Claimants	2,705	2,460	5,165

The ratio of pension benefits to the pre-disability earned income by gender and duration of disablement stays quite consistently in the 0.29-0.31 range.

Table V(d) shows the percentage of LTD claimants with pension benefit offsets by age at disablement and duration of disablement.

Table V(d) Percentage of Group LTD Claimants With Pension Benefit Offsets By Age at Disablement and Duration of Disablement										
Duration of Disablement (Months)	0-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+
1-6	0.0%	0.0%	0.0%	0.0%	0.5%	0.4%	0.4%	0.5%	2.4%	3.2%
7-12	0.0%	0.4%	0.3%	0.1%	0.5%	1.2%	2.0%	2.6%	4.1%	3.7%
13-18	0.0%	0.6%	0.4%	1.3%	1.6%	3.5%	5.6%	5.4%	5.3%	7.1%
19-24	0.8%	0.6%	1.4%	2.9%	2.8%	4.8%	7.7%	9.1%	9.7%	1.9%
25-36	0.4%	1.0%	2.5%	3.6%	5.0%	8.6%	10.1%	11.0%	10.4%	
37-48	1.9%	1.6%	2.5%	4.3%	5.9%	9.9%	11.8%	14.2%	19.1%	
49-60	1.4%	1.7%	3.9%	5.2%	7.0%	11.4%	12.7%	18.7%		
61-72	2.5%	2.1%	4.7%	4.8%	7.3%	10.0%	12.5%	25.6%		
73-84	0.3%	1.7%	2.0%	4.9%	6.8%	11.2%	13.8%	35.7%		
85-96	0.6%	2.0%	3.8%	4.0%	7.0%	12.6%	11.9%			
97-108	1.7%	2.7%	6.1%	6.1%	8.3%	13.6%	14.4%			
109-120	1.9%	2.1%	4.3%	5.7%	10.5%	13.9%	13.8%			
121+	1.1%	2.4%	3.4%	5.6%	7.9%	11.6%	21.3%			
Total	0.8%	1.6%	2.7%	4.0%	5.6%	8.6%	9.3%	9.0%	6.3%	4.5%
Total # Claimants	2,701	4,129	7,180	11,155	15,048	17,555	14,768	7,097	979	80,912

Table V(d) shows a considerably different pattern by age at disablement than exists for Workers' Compensation. In particular the proportion of LTD claimants with pension benefit offsets increases with age, reflecting the provisions of pension plans and specified retirement ages.

Table V(e) shows the ratio of pension benefits to pre-disability earned income by age at disablement. The pattern increases with age until 50-54 and then decreases.

Table V(e) Ratio of Pension Benefits To Pre-Disability Earned Income By Age at Disablement	
Age at Disablement	Ratio
0-29	0.268
30-34	0.188
35-39	0.262
40-44	0.285
45-49	0.303
50-54	0.321
55-59	0.312
60-64	0.276
65-69	0.238
70+	0.236
Total	0.302

Pension Benefits by Industry

Table V(f) shows the percentage of LTD claimants with pension benefit offsets by industry.

Table V(f) Percentage of Group LTD Claimants With Pension Benefit Offsets By Industry	
Industry	Percentage
Educational Services	24.3%
Public Administration	10.7%
Electric, Gas & Sanitary Services	8.0%
Communications	6.8%
Entertainment Services	6.1%
Transportation	5.4%
Manufacturing	4.7%
Health Services	4.7%
Real Estate	4.4%
Construction	4.2%
Insurance	4.2%
Social Services	3.0%
Legal Services	2.5%
Membership Organizations	2.5%
Engineering, Accounting, Research & Related Services	2.3%
Wholesale Trade	2.0%
Finance	1.8%
Hospitality Services	1.8%
Retail Trade	1.7%
Business Services	1.3%

Table V(e) illustrates a very wide range of percentages of LTD claimants with pension benefit offsets by industry (1.3% to 24.3%), reflecting the relative prevalence of pension plans among industries. The high incidence of pension benefits among LTD claimants in Educational Services reflects the fact that many states have State Teacher Retirement Systems providing disability coverage to active teachers.

Overlap Between Primary Social Security and Pension Benefit Offsets

Table V(g) shows the distribution of LTD claimants with (1) Primary Social Security benefit offsets but no pension offsets, (2) pension offsets but no Primary Social Security benefit offsets, (3) both Primary Social Security and pension benefit offsets, and (4) neither Primary Social Security or pension benefit offsets, by age at disablement. All durations of disablement have been combined.

Age at Disablement	Primary SS Offsets – No Pension Offsets	Pension Offset – No Primary SS Offsets	Both Primary SS & Pension Offsets	Neither Primary SS or Pension Offsets	Total
0-29 years old	51.4%	0.3%	0.4%	47.8%	100.0%
30-34 years old	58.2%	0.4%	1.2%	40.2%	100.0%
35-39 years old	59.2%	0.6%	2.1%	38.1%	100.0%
40-44 years old	60.0%	0.9%	3.1%	36.0%	100.0%
45-49 years old	59.8%	1.1%	4.5%	34.6%	100.0%
50-54 years old	61.0%	1.8%	6.8%	30.4%	100.0%
55-59 years old	62.5%	1.5%	7.8%	28.2%	100.0%
60-64 years old	58.8%	1.2%	7.7%	32.2%	100.0%
65-69 years old	24.2%	3.5%	2.7%	69.6%	100.0%
70+ years old	13.7%	2.5%	2.0%	81.8%	100.0%
Total	59.5%	1.2%	5.2%	34.1%	100.0%

Table V(g) shows that overall 8% of LTD claimants with Primary Social Security benefit offsets also have pension benefit offsets while over 80% of the claimants with pension benefit offsets also have Primary Social Security benefit offsets.

Conclusions Pertaining to Pension Benefit Offsets

The following are conclusions from our analysis of pension benefits received by LTD claimants:

- The proportion of LTD claimants with pension benefit offsets is higher than the proportion with Workers' Compensation benefit offsets.
- The proportion of LTD claimants with pension benefit offsets increases sharply with the age at disablement.
- The average pension benefit as a percent of the pre-disability earned income is 0.304, which is close to the average Primary Social Security benefit but lower than the average Workers' Compensation benefit.
- There is a very wide range of percentages of LTD claimants with pension benefit offsets by industry, reflecting the relative prevalence of pension plans among industries.

Appendix A

Division	Industry
CONSTRUCTION	
	15 BUILDING CONSTRUCTION-GENERAL CONTRACTORS AND OPERATIVE BUILDERS
	16 HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION-CONTRACTORS
	17 CONSTRUCTION-SPECIAL TRADE CONTRACTORS
MANUFACTURING	
	20 FOOD AND KINDRED PRODUCTS
	21 TOBACCO PRODUCTS
	22 TEXTILE MILL PRODUCTS
	23 APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIAL
	24 LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE
	25 FURNITURE AND FIXTURES
	26 PAPER AND ALLIED PRODUCTS
	27 PRINTING, PUBLISHING, AND ALLIED INDUSTRIES
	28 CHEMICALS AND ALLIED PRODUCTS
	29 PETROLEUM REFINING AND RELATED INDUSTRIES
	30 RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
	31 LEATHER AND LEATHER PRODUCTS
	32 STONE, CLAY, GLASS, AND CONCRETE PRODUCTS
	33 PRIMARY METAL INDUSTRIES
	34 FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND TRANSPORTATION EQUIPMENT
	35 INDUSTRIAL AND COMMERCIAL MACHINERY AND COMPUTER EQUIPMENT
	36 ELECTRONIC AND OTHER ELECTRICAL EQUIPMENT AND COMPONENTS, EXCEPT COMPUTER
	37 TRANSPORTATION EQUIPMENT
	38 MEASURING, ANALYZING AND CONTROLLING INSTRUMENTS; PHOTOGRAPHIC, MEDICAL
	39 MISCELLANEOUS MANUFACTURING INDUSTRIES
TRANSPORTATION	
	40 RAILROAD TRANSPORTATION
	41 LOCAL AND SUBURBAN TRANSIT AND INTERURBAN HIGHWAY PASSENGER TRANSPORTATION
	42 MOTOR FREIGHT TRANSPORTATION AND WAREHOUSING
	43 UNITED STATES POSTAL SERVICE
	44 WATER TRANSPORTATION
	45 TRANSPORTATION BY AIR
	46 PIPELINES, EXCEPT NATURAL GAS
	47 TRANSPORTATION SERVICES

Division	Industry
COMMUNICATIONS	
	481 TELEPHONE COMMUNICATIONS
	482 TELEGRAPH AND OTHER MESSAGE COMMUNICATIONS
	483 RADIO AND TELEVISION BROADCASTING STATIONS
	484 CABLE AND OTHER PAY TELEVISION SERVICES
	489 COMMUNICATIONS SERVICES, NOT ELSEWHERE CLASSIFIED
ELECTRIC, GAS AND SANITARY SERVICES	
	491 ELECTRIC SERVICES
	492 GAS PRODUCTION AND DISTRIBUTION
	493 COMBINATION ELECTRIC AND GAS, AND OTHER UTILITY SERVICES
	494 WATER SUPPLY
	495 SANITARY SERVICES
	496 STEAM AND AIR-CONDITIONING SUPPLY
	497 IRRIGATION SYSTEMS
WHOLESALE TRADE	
	501 MOTOR VEHICLES AND MOTOR VEHICLE PARTS AND SUPPLIES
	502 FURNITURE AND HOME FURNISHINGS
	503 LUMBER AND OTHER CONSTRUCTION MATERIALS
	504 PROFESSIONAL AND COMMERCIAL EQUIPMENT AND SUPPLIES
	505 METALS AND MINERALS, EXCEPT PETROLEUM
	506 ELECTRICAL GOODS
	507 HARDWARE, AND PLUMBING AND HEATING EQUIPMENT AND SUPPLIES
	508 MACHINERY, EQUIPMENT, AND SUPPLIES
	509 MISCELLANEOUS DURABLE GOODS
	511 PAPER AND PAPER PRODUCTS
	512 DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES
	513 APPAREL, PIECE GOODS, AND NOTIONS
	514 GROCERIES AND RELATED PRODUCTS
	515 FARM-PRODUCT RAW MATERIALS
	516 CHEMICALS AND ALLIED PRODUCTS
	517 PETROLEUM AND PETROLEUM PRODUCTS
	518 BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES
	519 MISCELLANEOUS NONDURABLE GOODS

DIVISION	INDUSTRY
RETAIL TRADE	
	52 BUILDING MATERIALS, HARDWARE, GARDEN SUPPLY, AND MOBILE HOME DEALERS
	53 GENERAL MERCHANDISE STORES
	54 FOOD STORES
	55 AUTOMOTIVE DEALERS AND GASOLINE SERVICE STATIONS
	56 APPAREL AND ACCESSORY STORES
	57 HOME FURNITURE, FURNISHINGS, AND EQUIPMENT STORES
	58 EATING AND DRINKING PLACES
	59 MISCELLANEOUS RETAIL
FINANCE	
	601 CENTRAL RESERVE DEPOSITORY INSTITUTIONS
	602 COMMERCIAL BANKS
	603 SAVINGS INSTITUTIONS
	606 CREDIT UNIONS
	608 FOREIGN BANKING AND BRANCHES AND AGENCIES OF FOREIGN BANKS
	609 FUNCTIONS RELATED TO DEPOSITORY BANKING
	611 FEDERAL AND FEDERALLY-SPONSORED CREDIT AGENCIES
	614 PERSONAL CREDIT INSTITUTIONS
	615 BUSINESS CREDIT INSTITUTIONS
	616 MORTGAGE BANKERS AND BROKERS
	621 SECURITY BROKERS, DEALERS, AND FLOTATION COMPANIES
	622 COMMODITY CONTRACTS BROKERS AND DEALERS
	623 SECURITY AND COMMODITY EXCHANGES
	628 SERVICES ALLIED WITH THE EXCHANGE OF SECURITIES OR COMMODITIES
INSURANCE	
	63 INSURANCE CARRIERS
	64 INSURANCE AGENTS, BROKERS, AND SERVICE
REAL ESTATE	
	651 REAL ESTATE OPERATORS (EXCEPT DEVELOPERS) AND LESSORS
	653 REAL ESTATE AGENTS AND MANAGERS
	654 TITLE ABSTRACT OFFICES
	655 LAND SUBDIVIDERS AND DEVELOPERS
HOSPITALITY SERVICES	
	701 HOTELS AND MOTELS
	702 ROOMING AND BOARDING HOUSES
	703 CAMPS AND RECREATIONAL VEHICLE PARKS
	704 ORGANIZATION HOTELS AND LODGING HOUSES, ON MEMBERSHIP BASIS

Division	Industry
BUSINESS SERVICES	
	731 ADVERTISING
	732 CONSUMER CREDIT REPORTING AGENCIES, MERCANTILE REPORTING AGENCIES
	733 MAILING, REPRODUCTION, COMMERCIAL ART AND PHOTOGRAPHY, AND STENOGR
	734 SERVICES TO DWELLINGS AND OTHER BUILDINGS
	735 MISCELLANEOUS EQUIPMENT RENTAL AND LEASING
	736 PERSONNEL SUPPLY SERVICES
	737 COMPUTER PROGRAMMING, DATA PROCESSING, AND OTHER COMPUTER RELATED
	738 MISCELLANEOUS BUSINESS SERVICES
ENTERTAINMENT SERVICES	
	78 MOTION PICTURES
	79 AMUSEMENT AND RECREATION SERVICES
HEALTH SERVICES	
	801 OFFICES AND CLINICS OF DOCTORS OF MEDICINE
	802 OFFICES AND CLINICS OF DENTISTS
	803 OFFICES AND CLINICS OF DOCTORS OF OSTEOPATHY
	804 OFFICES AND CLINICS OF OTHER HEALTH PRACTITIONERS
	805 NURSING AND PERSONAL CARE FACILITIES
	806 HOSPITALS
	807 MEDICAL AND DENTAL LABORATORIES
	808 HOME HEALTH CARE SERVICES
	809 MISCELLANEOUS HEALTH AND ALLIED SERVICES, NOT ELSEWHERE CLASSIFIED
LEGAL SERVICES	
	81 LEGAL SERVICES
EDUCATIONAL SERVICES	
	821 ELEMENTARY AND SECONDARY SCHOOLS
	822 COLLEGES, UNIVERSITIES, PROFESSIONAL SCHOOLS, AND JUNIOR COLLEGES
	823 LIBRARIES
	824 VOCATIONAL SCHOOLS
	829 SCHOOLS AND EDUCATIONAL SERVICES, NOT ELSEWHERE CLASSIFIED
SOCIAL SERVICES	
	832 INDIVIDUAL AND FAMILY SOCIAL SERVICES
	833 JOB TRAINING AND VOCATIONAL REHABILITATION SERVICES
	835 CHILD DAY CARE SERVICES
	836 RESIDENTIAL CARE
	839 SOCIAL SERVICES, NOT ELSEWHERE CLASSIFIED

Division	Industry
MEMBERSHIP ORGANIZATIONS	
	861 BUSINESS ASSOCIATIONS
	862 PROFESSIONAL MEMBERSHIP ORGANIZATIONS
	863 LABOR UNIONS AND SIMILAR LABOR ORGANIZATIONS
	864 CIVIC, SOCIAL, AND FRATERNAL ASSOCIATIONS
	865 POLITICAL ORGANIZATIONS
	866 RELIGIOUS ORGANIZATIONS
	869 MEMBERSHIP ORGANIZATIONS, NOT ELSEWHERE CLASSIFIED
ENGINEERING, ACCOUNTING, RESEARCH AND RELATED SERVICES	
	871 ENGINEERING, ARCHITECTURAL, AND SURVEYING SERVICES
	872 ACCOUNTING, AUDITING, AND BOOKKEEPING SERVICES
	873 RESEARCH, DEVELOPMENT, AND TESTING SERVICES
	874 MANAGEMENT AND PUBLIC RELATIONS SERVICES

Appendix B
Distribution of LTD Claims by Diagnosis and Industry

**Table B-1
Distribution of LTD Claimants by Diagnosis and Industry – Part 1**

Diagnosis	Business Services	Educational Services	Eng, Acctg, Res & Rel Services	Finance	Health Services	Insurance	Manufacturing	Public Administration	Retail Trade	Wholesale Trade
AIDS	1.72%	1.05%	1.33%	1.82%	0.87%	1.13%	0.55%	0.99%	1.18%	0.73%
Alcohol and Drug	0.14%	0.11%	0.10%	0.06%	0.11%	0.22%	0.08%	0.02%	0.15%	0.07%
Back	10.64%	12.95%	11.67%	11.28%	13.19%	9.98%	14.84%	16.53%	14.36%	14.23%
Cancer	11.12%	8.36%	10.62%	9.99%	8.91%	9.43%	8.26%	7.32%	10.00%	9.20%
Chronic Fatigue	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Circulatory	14.25%	12.27%	12.97%	13.44%	12.94%	11.73%	15.45%	13.96%	13.78%	18.25%
Complications of Pregnancy	0.37%	0.32%	0.30%	0.28%	0.26%	0.15%	0.13%	0.19%	0.29%	0.09%
Congenital - Perinatal	0.65%	0.53%	0.70%	0.35%	0.75%	0.64%	0.88%	0.24%	0.68%	0.72%
Digestive	2.87%	2.52%	2.57%	2.66%	2.20%	2.58%	2.26%	2.58%	2.19%	2.46%
Diseases of Blood	0.31%	0.26%	0.23%	0.32%	0.30%	0.13%	0.27%	0.33%	0.35%	0.34%
Diseases of Skin	1.01%	0.66%	0.91%	0.83%	0.78%	1.02%	0.80%	0.54%	0.82%	0.90%
Endocrine, Nutr & Metabolic	1.98%	2.54%	2.33%	2.40%	2.70%	2.53%	2.65%	2.33%	2.01%	2.17%
Genitourinary	1.92%	2.17%	2.95%	2.38%	2.11%	2.28%	2.03%	2.29%	1.96%	2.24%
Mental Disorder	5.19%	9.03%	4.88%	6.58%	4.03%	10.95%	3.74%	6.06%	4.46%	3.46%
Mental Disorder - Dementia	0.23%	0.33%	0.31%	0.35%	0.23%	0.39%	0.32%	0.18%	0.16%	0.12%
Nervous System No Classifiable Diagnosis	16.07%	15.72%	14.78%	19.08%	13.87%	17.40%	12.37%	15.07%	10.87%	11.74%
Normal Pregnancy	0.07%	0.27%	0.12%	0.14%	0.09%	0.01%	0.04%	0.10%	0.11%	0.01%
Other Infect Dis	2.66%	3.10%	2.42%	3.02%	3.27%	4.95%	3.46%	1.34%	6.49%	2.25%
Other Injury	2.83%	2.10%	2.47%	1.78%	1.84%	2.05%	2.29%	2.56%	2.24%	2.62%
Other Musculoskeletal	19.34%	19.80%	21.35%	16.73%	23.97%	16.64%	22.47%	21.86%	21.42%	20.61%
Other Unspec Eff Ext Causes	0.18%	0.17%	0.28%	0.23%	0.41%	0.15%	0.27%	0.08%	0.26%	0.36%
Poisoning	0.00%	0.02%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Respiratory	2.87%	2.85%	2.51%	2.88%	3.44%	2.66%	3.89%	3.60%	3.57%	4.12%
Toxicity	0.00%	0.00%	0.00%	0.04%	0.03%	0.00%	0.01%	0.00%	0.01%	0.01%
Unknown	0.66%	0.17%	0.66%	0.24%	0.59%	0.15%	0.27%	0.27%	0.28%	0.46%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

**Table B-2
Distribution of LTD Claimants by Diagnosis and Industry – Part 2**

Diagnosis	Communi- cations	Construction	Elec,Gas & Sani Services	Entertain- ment Services	Hospitality Services	Legal Services	Membership Organizations	Real Estate	Social Services	Transport- ation
AIDS	2.14%	0.52%	0.80%	2.32%	2.27%	2.66%	2.12%	1.98%	2.23%	1.28%
Alcohol and Drug	0.63%	0.17%	0.13%	0.33%	0.00%	0.58%	0.07%	0.22%	0.28%	0.24%
Back	12.32%	13.63%	15.00%	12.72%	11.80%	11.08%	10.88%	12.53%	11.16%	13.24%
Cancer	7.68%	10.33%	6.97%	9.18%	9.31%	10.05%	9.92%	10.33%	8.02%	8.93%
Chronic Fatigue	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Circulatory	9.73%	13.54%	10.35%	12.06%	12.45%	10.69%	13.06%	12.53%	12.34%	11.66%
Complications of Pregnancy	0.54%	0.00%	0.07%	0.11%	0.54%	0.58%	0.48%	0.33%	0.56%	0.24%
Congenital - Perinatal	1.07%	0.78%	1.46%	0.66%	1.08%	0.58%	0.55%	0.99%	0.91%	1.28%
Digestive	3.75%	4.60%	3.78%	2.99%	3.25%	4.86%	3.90%	4.62%	4.88%	4.31%
Diseases of Blood	0.89%	0.35%	0.40%	0.44%	0.32%	0.45%	0.75%	0.22%	0.77%	0.61%
Diseases of Skin	1.25%	1.65%	1.39%	1.11%	1.62%	0.65%	0.89%	0.99%	1.53%	1.15%
Endocrine, Nutr & Metabolic	3.13%	2.60%	4.05%	3.10%	4.11%	3.69%	4.17%	3.19%	4.04%	4.37%
Genitourinary	3.75%	2.60%	3.12%	2.99%	4.11%	3.56%	3.69%	3.63%	3.70%	3.16%
Mental Disorder	7.41%	2.95%	5.84%	5.53%	4.33%	8.62%	5.61%	4.29%	6.56%	4.56%
Mental Disorder - Dementia	0.36%	0.35%	0.27%	0.11%	0.43%	0.45%	0.27%	0.33%	0.28%	0.30%
Nervous System	13.30%	11.28%	11.35%	12.72%	11.04%	13.80%	12.31%	11.98%	10.39%	11.48%
No Classifiable Diagnosis	4.38%	4.51%	4.98%	3.76%	4.76%	4.41%	4.79%	4.40%	4.46%	5.29%
Normal										
Pregnancy	0.18%	0.09%	0.07%	0.11%	0.32%	0.06%	0.07%	0.11%	0.35%	0.12%
Other Infect Dis	3.66%	2.08%	3.72%	2.54%	3.14%	2.85%	3.15%	2.42%	3.21%	2.92%
Other Injury	3.66%	5.21%	4.64%	5.09%	3.46%	3.76%	3.01%	3.41%	3.97%	4.13%
Other										
Musculoskeletal	15.36%	17.19%	16.19%	16.70%	15.15%	11.99%	14.43%	16.37%	14.02%	14.82%
Other Unspec Eff Ext Causes	0.36%	0.52%	0.80%	0.33%	0.65%	0.78%	0.75%	0.33%	0.56%	0.36%
Poisoning	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.07%	0.00%
Respiratory	4.29%	4.77%	4.38%	5.09%	5.30%	3.82%	4.79%	4.62%	5.09%	5.35%
Toxicity	0.00%	0.00%	0.07%	0.00%	0.11%	0.00%	0.07%	0.00%	0.07%	0.06%
Unknown	0.18%	0.26%	0.20%	0.00%	0.43%	0.00%	0.27%	0.22%	0.56%	0.12%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%