Disability Insurance: The Private Sector

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Overview
Market Overview

**Private Disability Market**

1. Individual Disability Market (IDI)
   - Mostly professional occupations: physicians, attorneys, etc.
   - Individually underwritten
   - Issue-age rates with long term rate guarantees (non-can, GR)
   - $5 bn annual premium
   - Roughly 15 insurance carriers

2. Group Disability Market (STD/LTD)
   - Wide range of covered industries & occupations
   - Guaranteed Issue
   - Attained-age rates with 1-3 year rate guarantees
   - $17 bn annual premium ($5 bn STD, $12 bn LTD)
   - Roughly 30 insurance carriers
Group LTD

- Average annual premium ~ $250 per employee
- Covered employees ~ 50 million lives
- Penetration ~ 35% of employees have LTD
- Penetration varies greatly by group size
- Penetration varies with employer funding
- Demographics of Group LTD insured lives – see next slides
**Market Overview**

**LTD Coverage is between 30% and 35% of the SSDI Coverage**

<table>
<thead>
<tr>
<th>LTD</th>
<th>Total</th>
<th>LT 20</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-39</th>
<th>40-44</th>
<th>45-49</th>
<th>50-54</th>
<th>55-59</th>
<th>60-64</th>
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<tr>
<td>50M</td>
<td>0.5M</td>
<td>2M</td>
<td>3M</td>
<td>4M</td>
<td>5M</td>
<td>6M</td>
<td>7M</td>
<td>7M</td>
<td>6M</td>
<td>5M</td>
<td></td>
</tr>
<tr>
<td>155M</td>
<td>2M</td>
<td>14M</td>
<td>19M</td>
<td>18M</td>
<td>17M</td>
<td>16M</td>
<td>17M</td>
<td>17M</td>
<td>18M</td>
<td>16M</td>
<td></td>
</tr>
<tr>
<td>32%</td>
<td>21%</td>
<td>13%</td>
<td>17%</td>
<td>24%</td>
<td>30%</td>
<td>38%</td>
<td>40%</td>
<td>40%</td>
<td>36%</td>
<td>35%</td>
<td></td>
</tr>
</tbody>
</table>

**Ratio of LTD to SDI coverage by Age Band**

![Graph showing the ratio of LTD to SDI coverage by age band](image-url)
Private Coverage tends to be for higher wage earners

<table>
<thead>
<tr>
<th>All Earners</th>
<th>With LTD</th>
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<tbody>
<tr>
<td>BLS 2017 - National</td>
<td>$20K</td>
</tr>
<tr>
<td>2017 LTD Prospects</td>
<td>$26K</td>
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</table>

Average Salary by Percentile

- 10%
- 25%
- Median
- 75%
- 90%
Product Overview

**Short Term Disability (STD)**
- Elimination period: 1-2 weeks
- Benefit period: 3 or 6 months
- Replacement ratio: 70-100% of Salary
- Definition of disability: unable to perform “own job”
- Offset: typically does not integrate with SSDI or other income
- Incidence rate: 60 / 1,000 lives insured (per annum)

**Long Term Disability (LTD)**
- Elimination period: 3 or 6 months
- Benefit period: to age 65 or SSNRA
- Replacement ratio: 60-70% of Salary
- Definition of disability: “own occ” (first 24 mos.) / “any occ” (> 24 mos.)
- Offset: typically integrates with SSDI or other income
- Incidence rate: 3-4 / 1,000 lives insured (per annum)
**Long Term Disability (LTD)**

**Benefit Example**

$5,000/month  
\* 60%  
$3,000/month

Salary  
LTD Replacement Ratio  
LTD Gross Monthly Benefit

If claimant awarded $1,000/month SSDI, it is offset from gross benefit:

$3,000/month  
-$1,000/month  
$2,000/month

LTD Gross Monthly Benefit  
SSDI Benefit  
LTD Net Monthly Benefit
Product Overview

<table>
<thead>
<tr>
<th>DurYr</th>
<th>Pct w/SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20%</td>
</tr>
<tr>
<td>2</td>
<td>47%</td>
</tr>
<tr>
<td>3</td>
<td>65%</td>
</tr>
<tr>
<td>4</td>
<td>78%</td>
</tr>
<tr>
<td>5</td>
<td>83%</td>
</tr>
<tr>
<td>6</td>
<td>85%</td>
</tr>
<tr>
<td>7</td>
<td>86%</td>
</tr>
<tr>
<td>8</td>
<td>86%</td>
</tr>
<tr>
<td>9</td>
<td>87%</td>
</tr>
</tbody>
</table>

Probability of open LTD Claim having SS (as of year-end 2015)

Years since date of loss

0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
LTD Claims Management

Claim approvals
- Validate inability to work (APS, IME, FCE)

Return to work
- Primary focus is to help claimant return to gainful employment
- Work directly with employee and employer
- Vocational Rehabilitation, worksite modification, financial incentives, etc. all used as tools to assist with RTW

SSDI Advocacy
- Help claimants with SSDI application process (often 3rd party)
- Reduces insurance benefit, but claimant eligible for Medicare and typically receives the annual COLA increase
Actuarial considerations for Group LTD

- Incidence rates
- Claim termination rates
  - Death
  - Recovery
- Offsets
  - Amount
  - Duration
- Interest Rates

Note: considerable work recently by SOA on claim termination rate studies, yet more than 30 years since industry-wide Group LTD incidence study.
Trends
LTD Cross Industries Studies

GLTD2008: Society of Actuaries Termination Study
Years: 1997-2006  Participation: 21 carriers, 12 of top 15

GLTD2016: Society of Actuaries Termination Study
Years: 2004-2012  Participation: 26 carriers, All of top 15

2018 Private Incidence Study
Years: 2008-2017  Participation: 19 carriers, All of top 15

2011 Private Incidence Study
Years: 2006-2010  Participation: 19 carriers, All of top 15

2016 Private SS Approval Study
Years: 2005-2016  Participation: 19 carriers, All of top 15
Incidence Trends

Decline Since Peak in 2010:

- EP 90: -16.1%
- EP 180: -13.8%
- Total: -14.5%
Claim Termination Trends

Expectation: E = GLTD2008 Reserve Table (based on 1997-2006)
Common Industry Speculations on declining incidence

1. Improving economy and low unemployment reduces incentive to file: will revert if economy worsens
2. Older age workers (55-65) do not have sufficient savings… reluctant to leave workforce for disability due to fear of losing their jobs
3. Increasing automation reduces physical nature of many jobs.
4. Increased workplace accommodation (remote employment options) makes it easier to work with a disabling condition
5. Improved health outcomes reduces prevalence of long-term disabilities.
Speculation: More physical jobs lost in 1998-2010, with recent job growth being in occupations involving less physical tasks.
Increasing Remote Employment

The Time Employees Spend Working Remotely
Americans who work remotely are doing so for longer periods of time.

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>2012</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20%</td>
<td>34%</td>
<td>25%</td>
</tr>
<tr>
<td>20% to 40%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>40% to 60%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>60% to 80%</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>80% to 100%</td>
<td>24%</td>
<td>31%</td>
</tr>
</tbody>
</table>

Source: Gallup

Disability incidence vs. Economy

- Studied in several international markets
- Strong evidence of correlation between disability and economy
- Attempts at quantifying this relationship using multi-variate models
  - Unemployment Rate
  - Consumer Confidence Index
  - Business Confidence Index
  - Gross Domestic Product
  - Interest Rate Spreads
  - Bankruptcies
- Yet, problems remain with using these models for projections due to uniqueness of each recession and over-fit issues
Disability incidence vs. Economy – *a contrarian view*

- Some international studies have not corroborated correlation
- Some U.S. Group LTD carriers indicated there were not seeing elevated incidence during 2008-2009, positing:
  - Concentrations in recession-resistant industries
  - Improved claims management (submitted vs. approved incidence)
- Some markets see “pro-cyclical” correlation (e.g. workers’ comp)
  - Claims decrease during recessions
    - Inexperienced workers first to released
    - Older (less safe) equipment first to be mothballed
    - Less overtime means less fatigue
    - Job Preservation
    - Hazardous occ cycle (e.g. construction)
Recessions Are Not Equal Opportunity Events

Nonfarm Payroll

Government
Education and health services
Other services
Mining and logging
Information
Financial activities
Leisure and hospitality
Construction
Professional and business
Trade
Manufacturing

Monthly Change (thousands)

Unemployment Rate by Educational Attainment Relative to Overall Unemployment Rate

- Less than High School
- High School
- Some College
- Bachelor’s Degree or Higher
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