OCTOBER 26–29, 2020

SOA

2020 VIRTUAL ANNUAL MEETING & EXHIBIT

OCTOBER 26–29, 2020
Session 3B

Moving Forward with GAAP Targeted Improvements: Considerations for Improving Clarity in Communicating Company Performance

October 27, 2020
Active participation in the Society of Actuaries is an important aspect of membership. While the positive contributions of professional societies and associations are well-recognized and encouraged, association activities are vulnerable to close antitrust scrutiny. By their very nature, associations bring together industry competitors and other market participants.

The United States antitrust laws aim to protect consumers by preserving the free economy and prohibiting anti-competitive business practices; they promote competition. There are both state and federal antitrust laws, although state antitrust laws closely follow federal law. The Sherman Act, is the primary U.S. antitrust law pertaining to association activities. The Sherman Act prohibits every contract, combination or conspiracy that places an unreasonable restraint on trade. There are, however, some activities that are illegal under all circumstances, such as price fixing, market allocation and collusive bidding.

There is no safe harbor under the antitrust law for professional association activities. Therefore, association meeting participants should refrain from discussing any activity that could potentially be construed as having an anti-competitive effect. Discussions relating to product or service pricing, market allocations, membership restrictions, product standardization or other conditions on trade could arguably be perceived as a restraint on trade and may expose the SOA and its members to antitrust enforcement procedures.

While participating in all SOA in person meetings, webinars, teleconferences or side discussions, you should avoid discussing competitively sensitive information with competitors and follow these guidelines:

- **Do not** discuss prices for services or products or anything else that might affect prices.
- **Do not** discuss what you or other entities plan to do in a particular geographic or product markets or with particular customers.
- **Do not** speak on behalf of the SOA or any of its committees unless specifically authorized to do so.
- **Do** leave a meeting where any anticompetitive pricing or market allocation discussion occurs.
- **Do** alert SOA staff and/or legal counsel to any concerning discussions.
- **Do** consult with legal counsel before raising any matter or making a statement that may involve competitively sensitive information.

Adherence to these guidelines involves not only avoidance of antitrust violations, but avoidance of behavior which might be so construed. These guidelines only provide an overview of prohibited activities. SOA legal counsel reviews meeting agenda and materials as deemed appropriate and any discussion that departs from the formal agenda should be scrutinized carefully. Antitrust compliance is everyone’s responsibility; however, please seek legal counsel if you have any questions or concerns.
Presentation Disclaimer

Presentations are intended for educational purposes only and do not replace independent professional judgment. Statements of fact and opinions expressed are those of the participants individually and, unless expressly stated to the contrary, are not the opinion or position of the Society of Actuaries, its cosponsors or its committees. The Society of Actuaries does not endorse or approve, and assumes no responsibility for, the content, accuracy or completeness of the information presented. Attendees should note that the sessions are audio-recorded and may be published in various media, including print, audio and video formats without further notice.
Management Reporting under Targeted Improvements

Using implementation to bring organizational insights

October 27, 2020
Agenda

1. LDTI Reporting Challenges
2. Introduction to Source of Earnings
3. Implementing Source of Earnings Analysis
LDTI Reporting Challenges
LDTI will drive meaningful changes in insurers’ operations

In response to these changes, insurers will be faced with core questions and be required to implement meaningful changes to the processes and technologies.

As companies move to new reporting bases, they are also faced with these questions:

• How can we better explain and articulate financial results to internal and external stakeholders?
• What other insights can be extracted from LDTI solutions to inform business decisions?
• How can we best harness insights from financial reporting bases as they are more reflective of a “current value” view than ever?

Complexities introduced by LDTI

- **New Internal KPIs**
  - Internal KPIs will need to be adapted to new external measurements
  - Income Statement changes may necessitate different performance measurement metrics

- **High Demand on Talent**
  - Internal education on LDTI may be necessary throughout an organization given today’s limited knowledge base
  - Many competing priorities (i.e. IFRS 17 and remote close)

- **Planning/Forecasting**
  - Forecasts must be recalibrated for current value framework
  - More active ALM needed to manage accounting mismatches

- **Policyholder Data**
  - Increased data capture requirements
  - Policyholder behavior, mortality/longevity/morbidity, discount rates and liability durations must be tracked

- **Siloed reporting**
- **Lack of cohesive financial stories**
- **Difficulty in bridging financial reporting with mgmt reporting**

*It is important for companies to understand the new reporting bases, be able to explain the results, and, furthermore, build the ability to translate financial results to business insights consistently across BUs.*
An opportunity exists to leverage these changes to transform financial reporting and deliver management insights

**Explainable and reconcilable stories for LDTI financials**
- Articulate source of earnings (SOE)
- Establish a standardized SOE package across BUs
- Reconcile and form a cohesive and explainable story
- Enhance clarity for internal/external stakeholders

**One Single Source of Truth**
- Leverage the significant amount of granular data produced for LDTI disclosures
- House the data supporting SOE creation in central data warehouse
- Analyze SOE via collaboration between actuarial, finance and investment teams

**Enhancement to management reporting**
- Integrate multiple bases, harmonize financial metrics,
- Reassess KPIs, focusing on economics and value creation at desired level
- Leverage enhancements further for inforce management, planning, and forecasting.

**Real-Time SOE analysis and KPI tool**
- Standardized process will allow SOE and KPIs to be created in a matter of hours
- Integration of the central data warehouse with LDTI subledger or data repository will be key to bridge external compliance with internal management

The ability to think beyond compliance and be ready to harness the power of financial data for decision making will become a true distinguishing factor!
Introduction to Source of Earnings
Insurance Management Reporting at a Glance

Management reporting seeks to provide internal leadership with insights to evaluate performance and inform strategy business decisions.

Controllers often produce a bevy of internal reports. These may include, but are not limited to:

- Internal quarterly earnings reports
- Summary of subsidiaries’ results
- SOX control reports
- Run rate forecasts and budgets

The primary audience of these reports is senior leadership (i.e. C-Suite executives), who must ultimately make business decisions and communicate results to investor. Other key users include:

- Investor relations
- Financial planning and analysis

How did the business perform over the most recent period? How did this performance compare to the previous period? The same period last year?

What trends and patterns are emerging across the business?
Source of Earnings: Fundamental Principles

Insurers can leverage the implementation of emerging standards and the increased demand for data to create the SOE analysis which will in turn help explain the financial results.

<table>
<thead>
<tr>
<th>What is a Source of Earnings?</th>
<th>Why use a Source of Earnings?</th>
<th>How can a company derive meaning from its Source of Earnings?</th>
</tr>
</thead>
<tbody>
<tr>
<td>An SOE analysis is a comprehensive allocation of a firm’s periodic financial results that reflects the main drivers of their business. For insurers, SOEs largely aim to present earnings related to Premiums, Interest, Mortality, Surrenders, Persistency, and Expenses.</td>
<td>In contrast with earnings presentations required for external disclosure by GAAP, an SOE framework allows a firm to analyze their periodic performance in a manner that more appropriately aligns to the key drivers of their business.</td>
<td>Beyond explaining the financial results, the SOE analysis can be easily altered to provide insights on financial performance against pricing, internal KPI goals and inform FP&amp;A and inform management strategies.</td>
</tr>
</tbody>
</table>
Implementing a Source of Earnings Analysis
Source of Earnings Deployment Overview

These steps can help a company effectively define and implement a valuable SOE

1. **DEFINE THE BASELINE**
   Agree to high-level definitions to best capture enterprise earnings under the LDTI framework

2. **IDENTIFY KEY STRATEGIC DECISIONS**
   Analyze which questions must be answered to proceed

3. **CUSTOMIZE DEFINITIONS**
   Tailor SOE margins to meet all stakeholders’ needs

4. **DEVELOP REQUIREMENTS**
   Strategize future-state data sourcing for tailored definitions

5. **IMPLEMENT SOE**
   Perform User Acceptance Testing and deploy SOE

These steps can help a company effectively define and implement a valuable SOE.
Defining the Baseline
Companies with an existing Source of Earnings analysis will need to consider the impacts that LDTI will create on business performance

<table>
<thead>
<tr>
<th><strong>Illustrative SOE Construct</strong></th>
<th>Mortality Margin</th>
<th>morbidity Margin</th>
<th>surrender Margin</th>
<th>premium Margin</th>
<th>other Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Underwriting Margin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Investment Spread</strong></td>
<td>Spread Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expense Margin</strong></td>
<td>Amortization</td>
<td>expense Margin</td>
<td>Other Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assumption Unlocks</strong></td>
<td>Mortality Unlock</td>
<td>morbidity Unlock</td>
<td>Lapse Unlock</td>
<td>Other Unlock</td>
<td></td>
</tr>
<tr>
<td><strong>Corrections, Adjustments and other Refinements</strong></td>
<td>BOP Adjustments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Example LDTI Baseline Design Considerations
1. How are experience true-ups considered in underwriting margin?
2. How are assumption un-locks considered?
3. How do we interpret premium margin given the removal of deferrable expense net premium under LDTI?
4. How is DAC amortization considered?
5. How do we interpret premium margin for limited pay products?
6. How do market risk benefits fit into the construct?
7. How should interest rate movements captured in AOCI be considered?
Identifying Key Strategic Decisions

1. To what extent must we focus on **consistency** across business segments?
   - An effective SOE can leave room for **each business segment’s nuances** while simultaneously allowing for a total company view.

2. Are the drivers of our business better explained on an **actuals or expected basis**?
   - Given the annual FAS 60/97LP reserve unlocking prescribed by LDTI, **A vs. E true-ups** will drive material volatility in periodic earnings. Insurers may or may not choose to reflect these true-ups to actual experience in their SOE.

3. Should our SOE reflect **GAAP or non-GAAP earnings**?
   - Management must decide whether GAAP or non-GAAP financial measures are **more beneficial for internal analysis**.
Customizing SOE Definitions

Stakeholders across an insurance organization present unique requirements and use cases for an SOE. Tailoring the specifications of the analysis will allow the SOE to meet all needs.

**Adaptability to Various Purposes**
- Potential use cases for an effective SOE:
  - External reporting
  - Management reporting
  - Product development
  - Inforce management
  - Capital deployment
  - Product profitability

**Customization of Build Strategies**
- Multiple SOE build strategies:
  - Generate additional attribution runs from existing models
  - Enhance build for required rollforwards
  - Use vendor system built-in reporting functionality
  - Source data from general ledger or data warehouse

**Extension to Related Analyses**
- Related analyses to which SOE can be tailored and extended:
  - Economic view
  - Actual vs. Expected
  - Actual vs. Pricing
  - Extension to other accounting bases
  - Drill down analysis (business unit, project, channel)
Developing Requirements and Implementing SOE

While many of the data elements required for LDTI can be leveraged, the SOE may analyze the results in a different granularity, require data and collaboration beyond that are involved in financial reporting.

Clearly and appropriately assigned ownership and accountability.

A “single source of truth”, as well as the granularity and availability of data, is key to create an impactful SOE framework.

Beyond leveraging the existing information produced for LDTI disclosures, there’s added value of further attribution runs out of the actuarial systems for the SOE analysis.

Build in additional data requirements to facilitate a more effective SOE.
Key Success Factors
Aligning to a set of guiding principles will help ensure timely progress toward enhanced management reporting

**Transparency**
Make sure all parties are effectively communicating and keeping everyone aligned

**Understanding**
In order to successfully implement an effective SOE, it is imperative to have resources that are willing to learn and completely understand all aspects of the reporting basis

**Driving Consistency**
All business units will need to align on SOE definitions, so it is important to drive consistency and make sure all parties know alignment is important

**Don’t Wait**
Although SOE might not be applicable right now, it is a key day 2 item for which groundwork needs to be started today
Non-GAAP changes for LDTI

Robert Winawer, FSA, MBA, MAAA
GAAP Long Duration Targeted Improvements objectives

Revisions to simplify and enhance financial reporting

- Simplify amortization of deferred acquisition costs
- Improve timeliness by recognizing changes in expected traditional and limited pay future liability payments
- Simplify reporting of market-based guarantees through consistent fair value accounting
- Enhance effectiveness of required disclosures
Cost of equity capital compared to published GAAP profitability

No strong pattern among industries is evident

1. Data compiled from A. Damodaran NYU Stern database.
Comparison of sample key financial metric disclosures

Disclosures in other industries have fewer operating earnings adjustments (“AOE”) and higher unadjusted ROE

Goldman Sachs (NYSE: GS)
Beta 139%, ROE 10.0%, P/B 0.87

Prudential Financial, Inc. (NYSE: PRU)
Beta 169%, ROE 7.1%, P/B 0.56

Microsoft Corporation (NYSE: MSFT)
Beta 92%, ROE 42.9%, P/B 10.81

Microsoft Corporation (2019)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$125,862</td>
<td>$115,340</td>
<td>$98,271</td>
<td>$91,154</td>
</tr>
<tr>
<td>Gross profit</td>
<td>82,863</td>
<td>72,357</td>
<td>63,559</td>
<td>56,574</td>
</tr>
<tr>
<td>Operating income</td>
<td>42,995</td>
<td>30,859</td>
<td>24,505</td>
<td>19,573</td>
</tr>
<tr>
<td>Diluted earnings per share</td>
<td>0.90</td>
<td>0.78</td>
<td>0.61</td>
<td>0.52</td>
</tr>
<tr>
<td>Cash dividends declared per share</td>
<td>0.84</td>
<td>0.78</td>
<td>0.75</td>
<td>0.74</td>
</tr>
<tr>
<td>Cash, cash equivalents, and short-term investments</td>
<td>173,079</td>
<td>133,706</td>
<td>132,981</td>
<td>113,241</td>
</tr>
<tr>
<td>Total assets</td>
<td>286,555</td>
<td>258,846</td>
<td>250,512</td>
<td>222,897</td>
</tr>
<tr>
<td>Long-term obligations</td>
<td>114,688</td>
<td>117,642</td>
<td>106,056</td>
<td>86,703</td>
</tr>
<tr>
<td>Stockholders equity</td>
<td>172,239</td>
<td>142,173</td>
<td>143,557</td>
<td>135,822</td>
</tr>
</tbody>
</table>

The Procter & Gamble Company (NYSE: PG)
Beta 41%, ROE 9.29%, P/B 6.59

Lincoln Financial Group (NYSE: LNC)
Beta 219%, ROE 10.8%, P/B 0.57

Prudential Financial, Inc. (2019)

<table>
<thead>
<tr>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$86.407</td>
<td>$62.992</td>
</tr>
<tr>
<td>Benefits and expenses</td>
<td>$59.722</td>
<td>$58.158</td>
</tr>
<tr>
<td>Income (loss) before income taxes and equity in earnings of operating joint ventures</td>
<td>$5.085</td>
<td>$4.834</td>
</tr>
<tr>
<td>Return on average equity (ROE)</td>
<td>7.1</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Earnings per share of common stock – diluted
- Adjusted operating income after income taxes
- Recommitting items:
  - Realized investment gains (losses), net, and related charges and adjustments
  - Other restructuring
- Total reconceitting items, before income taxes
- Total reconceitting items, after income taxes
- Total reconceitting items attributable to common shareholders (after tax)

Net income attributable to common shareholders

The Procter & Gamble Company (2019)

<table>
<thead>
<tr>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>$59.7</td>
<td>$60.6</td>
</tr>
<tr>
<td>Operating income</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>$9.8</td>
<td>$9.8</td>
</tr>
</tbody>
</table>

Adjusted operating cash flow

Notable items

Adjusted operating EPS

Book value per share, ex. AOCI

3% performance (2017-2019)
- Adjusted operating revenue
- Adjusted operating EPS
- Expanded to 2.5x

1. Beta 5Y monthly Yahoo Finance, other headline data as of FY2019 Macrotrends.
Share prices compared to market and published ROE

Published GAAP ROE has not influenced stock price

**Prudential Financial, Inc.**  
(NYSE: PRU)

**Lincoln Financial Group**  
(NYSE: LNC)

### Correlations

**Prudential Financial, Inc.**

- ROE: 49.7%
- S&P 500: 80.2%
- S&P L&H: 83.5%

**Lincoln Financial Group**

- ROE: 24.8%
- S&P 500: 79.6%
- S&P L&H: 88.0%

**Share prices compared to market and published ROE**

Published GAAP ROE has not influenced stock price
AOE Dispersion

Net downward AOI adjustments are fairly uncommon

Non-GAAP adjustment to earnings

(Earnings adjustment) / (Average of earnings & adjusted earnings)

1. Six companies studied (AIG, AXA, Brighthouse, Lincoln, MetLife and Prudential)
Operating earnings comparison (1 of 2)

American International Group, Inc.
(NYSE: AIG)
(All values relative to average three year GAAP income)

Equitable Holdings, Inc.
(NYSE: EQH)

Brighthouse Financial, Inc.
(NYSE: BHF)
Operating earnings comparison (2 of 2)

Prudential Financial Inc. (NYSE: PRU)
Lincoln National Corporation (NYSE: LNC)
MetLife, Inc. (NYSE: MET)

(All values relative to average three year GAAP income)
OE is prominent in most SEC filings.
- CEO’s use it almost exclusively in letters to shareholders.
- LOB analysis always includes it.
- Most companies report either per share or ROE metrics.
- Different practices for alternatives may reflect management’s view of why they invest in them.
- All companies remove realized gains but none consider associated reduction to ongoing yields.
- Product market based guarantees and associated hedges are commonly removed, although methods vary.
- Exposure to fair value volatility on reinsurance (such as on funds withheld reinsurance) is addressed less often.
None of the companies in this analysis group recognized that realized capital gains sometimes influences contract-holder benefits. DAC and similar offsets are incorporated, but methods used and transparent of the offsets varies.

All companies removed the 2017 headline TCJA implications.

Methods to allocate taxes to both operating earnings and LOB vary.

Only one company said they adjust for uncertain tax matters and DTA.

All companies in the analysis group have significant exposure to each of the non-recurring event categories.

However, treatment in operating earnings varies.
<table>
<thead>
<tr>
<th>Accounting change</th>
<th>Operating earnings adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplify amortization of deferred acquisition costs</td>
<td>No longer included as offsets, increasing level of adjustments and homogeneity among companies</td>
</tr>
<tr>
<td>Improve timeliness by recognizing changes in expected traditional and limited pay future liability payments</td>
<td>No changes for prem deficiency</td>
</tr>
<tr>
<td>Simplify reporting of market-based guarantees through consistent fair value accounting</td>
<td>Assumption revisions may produce more discontinued ops</td>
</tr>
<tr>
<td>Enhance effectiveness of required disclosures</td>
<td>Discount rate adjustments likely</td>
</tr>
<tr>
<td></td>
<td>Increase volume of guarantee adjustments</td>
</tr>
<tr>
<td></td>
<td>Result in more homogeneity among companies</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>
Operating earnings effectiveness

- Management’s perspective
- Common practice
- Additional info
- Less noise
- More stable

- The “agency” problem
- Inconsistent
- Incomplete
- No restatements
- Opaque
A Key Performance Indicator for Mortality and Morbidity

Steve Malerich
A Key Performance Indicator for Mortality and Morbidity

Agenda

• The Setting
• Define the Problem
• Understand the Past
• Anticipate the Future
The Setting
Targeted Improvements – 2016 Exposure Draft

Liability for future policy benefits
Targeted Improvements – 2016 Exposure Draft

Liability for future policy benefits

• Current assumptions
Targeted Improvements – 2016 Exposure Draft

Liability for future policy benefits

• Current assumptions

• Retrospective updates
Targeted Improvements – 2016 Comment Letters

39 comment letters
• 31 commented on LFPB
Targeted Improvements – 2016 Comment Letters

31 commented on LFPB

• Current assumptions – good
Targeted Improvements – 2016 Comment Letters

31 commented on LFPB

• Current assumptions – good

• Retrospective updates
  • 1 – good idea
Targeted Improvements – 2016 Comment Letters

31 commented on LFPB
• Current assumptions – good
• Retrospective updates
  • 1 – good idea
• 4 – ok idea, but ...
Targeted Improvements – 2016 Comment Letters

31 commented on LFPB
• Current assumptions – good
• Retrospective updates
  • 1 – good idea
  • 4 – ok idea, but ...
• 26 – bad idea!
Accounting Standards Update No. 2018-12

Nonparticipating LFPB

• Current assumptions
• Retrospective updates
Define the Problem
Protective Life, 2016 comments on LDTI

*Retrospective unlocking ‘encumbers’ future earnings by deferring the recognition of part of the impact of an experience adjustment.*
Protective Life, 2016 comments on LDTI

Retrospective unlocking ‘encumbers’ future earnings by deferring the recognition of part of the impact of an experience adjustment.

It is then necessary to attribute the impact of a future assumption change to the current period in order to reverse prior amounts that arguably should never have been deferred.
When mortality experience is higher than anticipated in early years, the net premium ratio is unlocked, leading to a lower reserve.
4 Life Insurers, 2016 comments on LDTI

When mortality experience is higher than anticipated in early years, the net premium ratio is unlocked, leading to a lower reserve.

However, upon assumption unlocking ... the excess income realized in prior years needs to be reversed.
The problem in three parts

• Recurring claim variances
The problem in three parts

• Recurring claim variances

• Assumption change
The problem in three parts

• Recurring claim variances
• Assumption change
• Random variations
Persistency is not the problem
Understand the Past
How do claims affect the reserve?

• Net premium ratio
How do claims affect the reserve?

• Net premium ratio

• Persistency
How do claims affect the reserve?

• Net premium ratio

• *Reserve adjustment*

\[ = \Delta NPR \times PV(Premium) \]
How do claims affect the reserve?

• Net premium ratio
• Reserve adjustment = ΔNPR × PV(Premium)

• Cumulative adjustment
  = \((NPR - NPR_0) × PV(Premium)\)
Cumulative reserve adjustment

\[(NPR - NPR_0) \times PV(Premium)\]
Anticipate the Future
Baseline assumption change estimate

Assume

• Constant percent of revenue
Baseline assumption change estimate

Assume

• Constant percent of revenue

• Permanent trend
Baseline assumption change estimate

Assume

- Constant percent of revenue
- Permanent trend

**Unlocking adjustment**

\[
\approx (NPR - NPR_0) \times PV(Premium)
\]
Persistency is a different problem
Adjusting the estimate

• New cohorts ➢ Decrease
Adjusting the estimate

• New cohort

• Decreasing revenue

➤ Decrease

➤ Increase
Adjusting the estimate

• New cohort

• Decreasing revenue

• Increasing revenue

Decrease

Increase

Decrease
Adjusting the estimate

• New cohort ➢ Decrease
• Decreasing revenue ➢ Increase
• Increasing revenue ➢ Decrease

• Late emerging trend ➢ Increase
Summary

Limits

• Declining sensitivity
Summary

Limits

• Declining sensitivity

• Diagnostic only
Summary

Limits
• Declining sensitivity
• Diagnostic only

Benefits
• Simple, easy to use
Summary

Limits
• Declining sensitivity
• Diagnostic only

Benefits
• Simple, easy to use
• Significance is obvious
Summary

Limits
• Declining sensitivity
• Diagnostic only

Benefits
• Simple, easy to use
• Significance is obvious
• Faster insight
Summary

Limits
• Declining sensitivity
• Diagnostic only

Benefits
• Simple, easy to use
• Significance is obvious
• Faster insight
• More insight