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A Letter from the Chairperson...

## GAAP ROE: Exactly How Meaningful Is It?

by John Bevacqua

*Editor's Note: The section's GAAP list serve would be an appropriate forum for discussing concepts in this article.*

**R**eturn on equity (ROE) is the ratio of annual earnings to the equity position of the company at the beginning of the year. Fidelity's Web site states that ROE "shows how effectively a company is using its investors' money." The underlying view, it appears, is that management invests its equity into its business each year and, *presto*, the original equity plus its return appears at the end of the year. In the ensuing year, the process is repeated. This is how analysts and the investment community interpret GAAP ROE, as they believe GAAP has been standardized across industries; therefore, a GAAP ROE of a life insurance company should be comparable to a GAAP ROE of an automobile manufacturer.

Upon inspecting the mechanics of GAAP for a life insurance enterprise, it becomes apparent that GAAP ROE says very little, if anything, about the value that management has created during the reported period. This may be seen by separately examining the numerator, the denominator and the relationship between the two.

### THE NUMERATOR

With a traditional manufacturer, a "widget" is created and sold to a customer (usually without recourse) within a relatively short period of time. The recorded gain to the manufacturer is the excess of the price received for the widget less the cost of goods sold. Generally speaking,

management creates value by identifying strategies that allow them to sell as many widgets as possible at a price that exceeds the cost of goods sold as much as possible. Therefore, the earnings for a traditional manufacturer are closely ascribed to the strategies adopted by management to

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market, build, and distribute their products within the recent period.

Life insurance policies, however, have unique characteristics that create a number of challenges when measuring the financial performance of a life insurance enterprise. First, the obligation of the life insurance company to its customers does not stop when the product is sold. Current accounting models dictate that the earnings associated with the sale of a life insurance contract should be recognized ratably during the period of



time over which the life insurance company fulfills its obligation to the policyholder. Given the long duration of many life insurance contracts, a substantial portion of the earnings reported by life insurance companies in a given reported period is associated with policies sold many years ago and are, therefore, more of a byproduct of historical pricing, marketing, underwriting and marketing strategies defined under prior management regimes than by strategies implemented by current management.

### THE DENOMINATOR

The GAAP equity of a life insurance enterprise may be conceptually viewed as consisting of four primary components: (1) unamortized deferred acquisition costs, (2) goodwill and other intangible assets, (3) target surplus, and (4) free surplus. The first three items represent amounts that management effectively cannot deploy to the benefit of stakeholders. A company may monetize its DAC through debt, but its ability to do this is generally

limited. As a life insurance company grows and its DAC balance grows, the ability of the company to sustain its profitable growth becomes hampered as an increasing portion of its equity becomes non-deployable.

### THE RATIO

Going back to the point made at the beginning of this article, GAAP ROE is premised upon the fact that a relationship exists between earnings and equity—more specifically, that the equity was, in fact, used by management to create the earnings. This relationship does not generally hold true for a life insurance business, as:

- Not all of the equity is deployable
- Much of the reported earnings have nothing to do with actions taken by management during the reported period

Therefore, much of the reported earnings are completely unrelated to the GAAP equity that existed at the beginning of the reported period.

### POSSIBLE SOLUTIONS

Do the problems associated with GAAP ROE mean that management can do very little to influence the value of their enterprise? Absolutely not! Life insurance companies can improve the productivity of their distribution channels, the quality of their underwriting and marketing departments and provide exceptional customer service as a means of increasing stakeholder value. This shortcoming of GAAP is its departure from basic economic capital budgeting theory, which is a glaring deficiency as investors and potential investors use this information to decide how to invest their own capital (i.e. should I buy/sell an interest in this corporation?). So, what can management do to provide more useful financial information to the investing public?

This predicament appears to call for the use of non-GAAP measures. Certainly, many of the value-based measurement systems can provide the information that investors are truly seeking. These systems generally recognize the present value of future profits of the business, and the changes in the present value of future profits over a reported period. These measurement systems, in

effect, value the asset of the shareholders and the changes in this value over time.

The AICPA Insurance Liaison Task Force convened on January 8, 2003 and discussed a number of issues, including the disclosure of non-GAAP measures in documents filed with the SEC. Among other requirements, the SEC indicated that non-GAAP measures should be reconciled with GAAP measures with adequate explanation of the appropriateness of the non-GAAP measures. Further, whenever non-GAAP measures are presented, the related GAAP measure should be presented. The question that naturally arises within the context of value-based measurement systems is how, if at all, can we convey value-based concepts within a GAAP context?

One possibility would be to attempt to apply certain value-based concepts to the mechanics used to derive DAC. A couple of ways in which this may be done are as follows:

- Solve for and disclose the discount rate that results in a K-factor of 100%. For SFAS 60 business, the K-factor would be established such that 100% of the gross premium in excess of the net premium would be used to amortize DAC. This should roughly correspond to the internal rate of return on the business sold—to the extent this exceeds the company's cost of capital, management would appear to be adding value to the enterprise. This approach would:

- o Result in no gain or loss upon selling a given contract, which is similar to current GAAP results but different than an Embedded Value approach
- o Create a yield on DAC equal to the IRR, rather than the earned or credit rate of the company.
- Set DAC equal to the present value of future EGPs (Expected Gross Profits under SFAS 97), EGMs (SFAS 120), or excess of gross premiums over net premiums (SFAS 60) using a cost of capital or hurdle rate. To the extent you have worked with purchase accounting, you will recognize this as the method used to calculate VOBA. This approach would:
  - o Create a gain or loss upon the sale of a given contract, depending upon the relationship of the adjusted DAC as defined within this method to the actual acquisition costs.
  - o Create a yield on DAC equal to the cost of capital or hurdle rate.

I am certain that other approaches may exist, and that further refinements to this methodology may be necessary, but, rest assured, that the investment community stands to benefit significantly by providing an alternative to GAAP ROE for determining management effectiveness for a life insurance enterprise. ☒



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## Group Experience Studies

The Group Life Experience Committee is now requesting data for two studies: a group term life experience study and a premium waiver study. The data will serve in updating the 1985-89 Group Life Experience Study (<http://www.soa.org/research/rarchive/glifetab.htm>) and the Krieger Table, also known as the 1970 Intercompany Group Life Disability Study (<http://www.soa.org/library/tsa/1970-79/TSA71V23PT1N6722.pdf>), respectively, and are critical to pricing and reserving for group life insurance. The specifications for this study can be found on the SOA Web site ([www.soa.org](http://www.soa.org)) under Research. For more information on these studies, please contact either of the experience study chairs, Sue Sames, at [samess@towers.com](mailto:samess@towers.com), or Karen Edgerton, at [karen\\_edgerton@swissre.com](mailto:karen_edgerton@swissre.com). ☒