

## Economic Measurement of Insurance Liabilities Abstract

Insurance company financial reporting and performance measurement are going through a significant transformation. Insurers are beginning to look at their business based on what many refer to as the "economic value framework." Under this framework, insurance companies determine the economic value of the capital invested in their business and the economic value of earnings to derive a risk-adjusted return on capital. Standard setters, primarily European insurance regulators through Solvency II and the International Accounting Standards Board through IFRS Phase II and subsequent developments, propose adopting many of these concepts for solvency and performance reporting.

Management creates economic value if return on capital equals or exceeds the cost of capital. Since the cash flows associated with insurance contracts may not confirm or demonstrate the value of these activities until, perhaps, decades after the policies are sold, companies and investors are looking to answer some basic questions: How much value is created? How was the value created and when was it created (either in sales, servicing or risk management of the contracts)? How and in what manner can investors be convinced that reported "values" are really money and not just a magic game of numbers?

This paper examines some of the recent changes in financial reporting for insurance contracts. These changes involve a migration away from valuing liabilities and capital based on management judgment or regulatory rules to a system that incorporates market-based assumptions and risk modeling of the business.

We then explore whether sufficient evidence exists to conclude whether a company has created value simply by the sale of an insurance contract (gain at issue), and also review the necessary disclosures needed to build market trust of "next-generation" financial reporting.

Specific issues related to the economic view of capital also are examined as well as some of the problems existing economic capital approaches present to the industry. Key findings include:

- 1) Economic capital — and cost of capital as contemplated and implemented today — is not sufficiently market-based in order to measure whether the company will expect to earn more than its cost of capital.
- 2) When the unobserved occurs, a solvency system that is solely based on statistical tails and stress tests of past observations will result in inadequate levels of capital and a resultant financial crisis in the insurance industry.
- 3) There is market evidence of unobserved risks that are not captured in economic capital modeling, and the market would demand to be compensated for the unaddressed risks.
- 4) An insurance company can disclose to the market that it expects to earn more than its cost of capital without reporting a gain at issue.

This article proposes a performance measurement approach that incorporates the market's view of risk and the level of compensation the market demands to accept that risk. The correct level of economic capital is equal to an amount needed so that a company can raise funds to cover unexpected risks at a cost that is lower than the cost of equity capital. This amount should not vary based by company. The return on capital should equal the market price for equity, and it also should not vary based on company. To the extent that the risk margin is the product of cost of capital and economic capital, then the risk margin should be a market-based number and not vary based on company.