

Solvency II versus IFRS: Cost of Capital Implications for Insurance Firms*

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Abstract

Solvency II is being developed by the European Union in response to a desire harmonise insurance supervision and to effect greater consistency across the measurement of assets and liabilities of insurance companies across the European Union. Also it will improve the link between minimum solvency and the risks borne by EU insurance firms. Solvency II will require all insurers to formally assess their risks to assess what capital they need, which will be subject to regular monitoring and reporting to regulators. The resulting increased public disclosures are still in development, and may conflict with existing and proposed international financial reporting IFRS requirements for insurance firms, although the current QIS4 exercise is heavily reliant on IFRS, as far as that has developed for insurers.

This paper identifies the key differences in measurement, risk margin, entity and reporting for insurance firms and considers their implications for incorporating these risks into cost of capital estimates. This paper discusses international diversity in accounting for insurance contracts as reported under various Generally Accepted Accounting Principles in the UK. Relative to statutory-based accounting principles, UK GAAPs currently allow insurance firms to match income to expenses over the term of an insurance contract in order to provide a more 'realistic' basis for reporting to shareholders. However UK GAAP does not employ a coherent and consistent view of how to measure the fair value of a insurance firm's business. The International Accounting Standards Board (IASB) has tentatively concluded that fair value should be used in accounting for insurance contracts. This paper discusses how existing UK GAAPs differ from statutory accounting principles (SAP), IFRS (proposed fair value) and Solvency II. We use the analysis from this discussion to present new evidence on the cost of equity capital by line of business for for a sample of UK general insurance firms. To do so we obtain beta estimates and then use the full-information industry beta (FIB) methodology to decompose the cost of capital by line. We obtain full information beta estimates using the standard one-factor CAPM model, accounting-based estimates and extend the FIB methodology to incorporate the Fama-French three factor cost of capital model. Contrary to the results of prior research, the analysis suggests that the cost of capital for firms using the Fama-French model are significantly higher than estimates based on the CAPM. In addition, we find evidence of significant differences in the cost of capital across business lines, indicating that the use of a single company-wide cost of capital is generally not appropriate. Finally, we find that cost of capital estimates are significantly understated when applied using GAAP or SAP relative to either IFRS or Solvency II definitions of profit and book value.

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