



SOCIETY OF ACTUARIES

Article from:

# The Financial Reporter

June 2008 – Issue No. 73

# Highlights of Section's IFRS Research Project

by Tom Herget

The International Accounting Standards Board (IASB) has been studying insurance accounting for 10 years. In May 2008 it issued a Discussion Paper (DP), *Preliminary Views on Insurance Contracts*, discussing the many issues surrounding accounting for insurance contracts and presenting current views in a number of areas. This DP can be found on the IASB's Web site, [www.iasb.org](http://www.iasb.org), under the current IASB project section. In February 2008, the SOA published an 85-page research report on the impact of these Preliminary Views on popular U.S. life, health and annuity products. This report is now being widely read and discussed around the world.

The SOA's report was conveyed to the IASB, the FASB, the SEC, the International Actuarial Association (IAA), the International Association of Insurance Supervisors (IAIS), the CFO Forum (European companies) and GNAIE (North American companies). It has been presented to actuarial organizations on three continents. The study's creators are very hopeful that it sheds light on the positives and negatives of the IASB's DP.

The March issue of *The Financial Reporter* contained an article that described how this research project was conducted. This article presents the highlights of the results of the project.

Chapter 1 contains a brief primer on the DP's three building blocks for calculating liabilities: current estimates of future cash flows, margins (risk margins and service margins) and discount rates. It also contains a summary of other features of the DP along with a delineation of certain limitations of the research project.

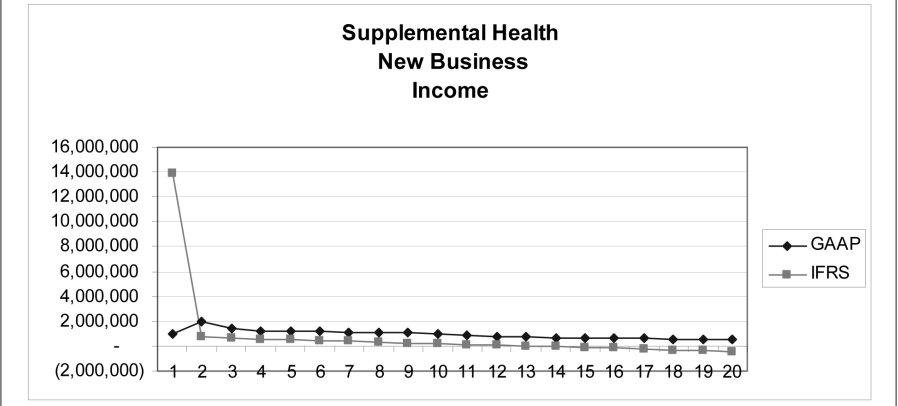
Chapter 2 contains an overview of the approach and assumptions for the blocks of business studied.

The muscle of the report is in Chapter 3. Here the report graphically displays and compares the incidence of earnings between US GAAP (GAAP) and the (tentative) IFRS basis. After the reader establishes comfort with the patterns shown by GAAP, he or she can then see how IFRS would perform.

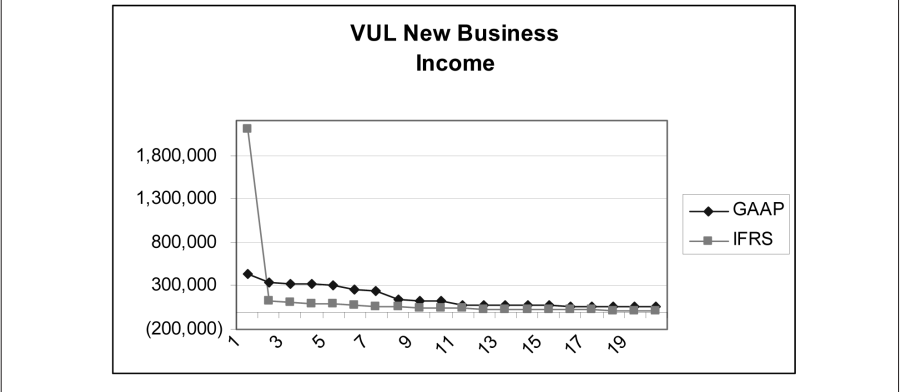
The GAAP income graphs generally show relatively level, gradually decreasing profits over the contract

period. In the models used, some blocks of new business had significant nondeferrable acquisition costs, so these (term, long-term care and participating life) have GAAP losses in year one, followed by gains in later years.

**Figure 3.7-1 Supplemental Health New Business, IFRS Baseline and U.S. GAAP**  
[first year premium of \$3.2 million]

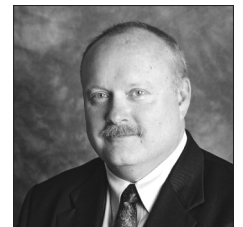


**Figure 3.5-1 Variable Universal Life New Business, IFRS Baseline and U.S. GAAP**  
[first year premium of \$3.2 million]



The baseline IFRS results shown use what the DP calls current exit value (Implementation B). Current exit value allows for the emergence of profit or loss at the point of issue, since there is no calibration of margins to the premiums charged.

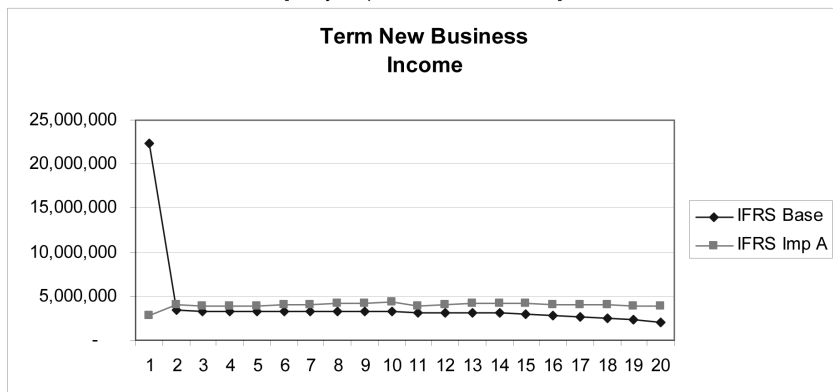
In contrast with GAAP income, the baseline IFRS results for the first year show large first year profits (UL, supplemental health, term and VUL). Products that rely on investment spreads for a significant source of profit (SPDA, SPIA, long-term care and



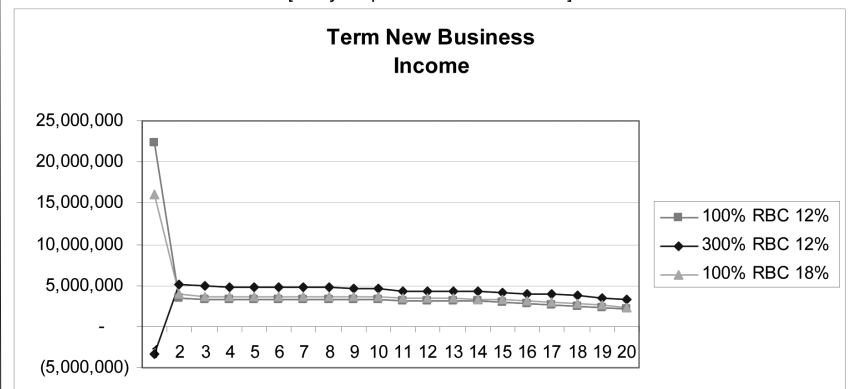
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**Figure 3.2-4 Term Life New Business, Implementation A and Baseline IFRS**  
[first year premium of \$28 million]



**Figure 3.2-10 Term Life New Business, Risk Based Capital Factor Sensitivities**  
[first year premium of \$5.8 million]



participating life) generally show significant day one losses since cash flows were projected using what companies expect to earn or intend to credit to the policies based on an expected earned rate, while the cash flows are then discounted back at a risk-free rate. Products that don't have a significant source of interest earnings, such as term life or supplemental health, show significant IFRS gains at issue.

Some graphs display entry value results (Implementation A), for which the margins have been calibrated to the premium so that there are no day one profits. Since this alternative approach uses different margins than the baseline IFRS calculations, the two approaches show different earnings patterns. Look at figure 3.2-1.

The method and assumptions used to generate the risk margin component of the IFRS liability are also important contributors to the gain or loss at issue. The DP lists eight methods the actuary might consider. Although the stated objective of the risk margin is to capture the amount that market participants would require as a compensation for risk, there

is no further guidance provided as to its calibration. There is no widely traded and deep market to determine this, and for those transactions that do occur, individual circumstances would likely bias its basis.

For most products analyzed, the study's authors used an expected 12 percent cost of capital (that is, on a pre-tax basis including a risk-free component) applied to 100 percent of RBC. This is the company action level under U.S. Statutory rules and serves as a proxy for economic capital as the basis for risk margins. The authors used this approach in part since it would be familiar to most U.S. actuaries. The resulting present value of risk margins may appear at first glance to be on the low side, but the current thinking at the International Actuarial Association is that the margins used in such an approach should not include any provision for C1 (asset default) or C3 (asset-liability mismatch) risks, as they are provided for by the use of the risk-free rates and by capital, respectively. Excluding this from the RBC calculation significantly reduces the calculated figures and makes the 100 percent RBC a more reasonable capital surrogate. In order to illustrate the importance of this choice, the paper presents results for every product using two alternative cost of capital assumptions: a significantly higher level of capital, 300 percent of RBC, and a higher level of total cost, 18 percent. Look at figure 3.2-10.

Below is one of the tables in the report that shows the emergence of year one IFRS profits for new business (using 100 percent RBC). The first column shows day one; the second shows days 2-365 (values are in \$000):

	Day 1 gain/loss	Days 2-365 gain/loss	Year one premium
Universal Life	546	131	5,800
Term Life	20,575	1,797	28,000
Immediate Annuity	-7,417	3,286	117,000
Long Term Care	-29,267	316	27,000
Supplemental Health	13,480	379	3,200
Fixed Deferred Annuity	-12,030	8,418	200,000
Par Whole Life	-102	-4	133

There were over 150 comment papers submitted to the IASB on the DP. Many expressed dissatisfaction over one item that this research paper quantifies: the existence of large earnings in year one for some products, primarily fueled by the selection of risk margins that are not calibrated to the actual premium charged.

One of the more interesting graphs shows the IFRS profit emergence if policyholder dividends are not deemed a component of cash flows (since they do not represent a legal obligation). In such a case par life insurance business displays a windfall year-one profit (the entire expected premiums are in the cash flows but not the related dividends), modest gains for 10 years, then notable and growing losses thereafter, as policyholder dividends must be funded from previously taken gains, now existing in surplus. Look at figure 3.9-4.

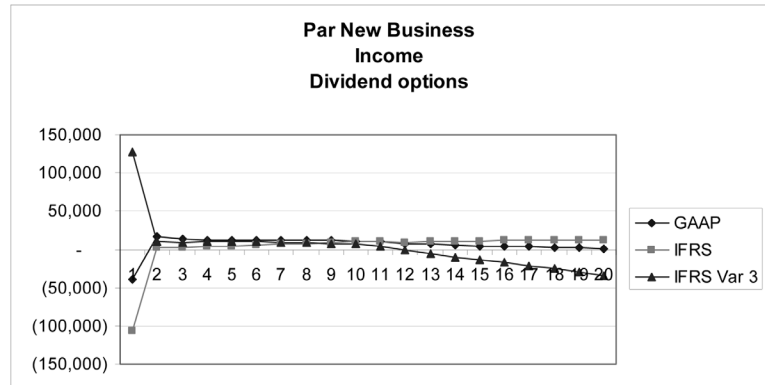
One thing the savvy reader can observe is that without proper calibration of margins, IFRS profits after year one for several products will be very low since they would have been reported as year one gains. The opposite occurs for products with significant losses at issue.

Chapter 4 of the paper shows resulting balance sheet values. The reader can see the relationship between IFRS and net (of outstanding DAC asset balance) GAAP liabilities. The reader can also gauge the relative level of IFRS liabilities between its cash flow and risk margin components. The figures included in this chapter illustrate that the relative difference between GAAP and IFRS liabilities do not appear as stark as the income figures in Chapter 3, as income reflects the change in these values.

Chapter 5 includes comments on the results of several sensitivity tests applied to IFRS income for each product shown in figures included in Chapter 3. The authors comment on the significance of the impact that the choice of risk margin methods and assumptions can have. For the cost of capital method as applied, the sensitivity of the assumptions used had less of an impact than one might have anticipated.

Chapter 6 discusses practical issues in calculating the IFRS liabilities that were identified in the course of the project. A significant amount of measurement guidance and education will be needed by the financial reporting actuary applying the preliminary views of the IASB as described in its DP. Stochastic models may be needed in many cases in determining the risk margins and certain assumptions. Economic capital modeling will be a valuable precursor to IFRS calculations. Based on conversations with the ATFs, work flow and run time will be a significant issue as these values will be needed to produce financial reporting values, rather than simply after-the-fact testing that many of the current calculations from which these values are derived have been used historically. Finally,

**Figure 3.9-4 Par Life New Business, Baseline IFRS, U.S. GAAP and Variation 3**  
[first year premium of \$133,000]



the process needs to be transparent enough to enable adequate auditing of the work product.

Chapter 7 addresses areas where further research will be needed. Discounting, premium recognition, policyholder dividend recognition and measurement, risk margins, credit characteristics of liability, market-based assumptions and product development impacts will all need attention in the near future prior to adoption and implementation.

All insurers need to follow this rapidly evolving topic, as IFRS currently has a good chance of replacing US GAAP within the next five years. The IASB has focused on the balance sheet concepts; this paper reveals the impact of some of its features on the income statement. All readers should prepare to get involved, as this new accounting development could well be the report card of the future. Brace yourself to react to the upcoming Exposure Draft (expected in 2009) and contribute to the Final Standard (2010?).

I would like to thank Henry Siegel, chair of the Academy's Financial Reporting Committee, for being the project's creator and to Sam Gutterman of PricewaterhouseCoopers and his troops for their direction, analysis and report writing. Also, thanks go to the Actuarial Task Forces for their calculations, to the Project Oversight Group for riding herd on the many drafts and to the SOA research staff for their oversight. Finally, I want to recognize the sponsors of the project, the SOA's Financial Reporting Section, the Product Development Section and the Committee on Life Insurance Research.

The reader can find the paper on the SOA Web site at <http://www.soa.org/research/life/research-financial-standards.aspx>. 