



SOCIETY OF ACTUARIES

Article from:

International News

April 2032 – Issue No.72



Yihong (Sherry) Du, FSA, is VIPitech manager & consulting actuary at Towers Watson in Hong Kong. She can be reached at Sherry.Du@TowersWatson.com.

Impact of Moving to International Accounting Standards in Taiwan

By Yihong (Sherry) Du

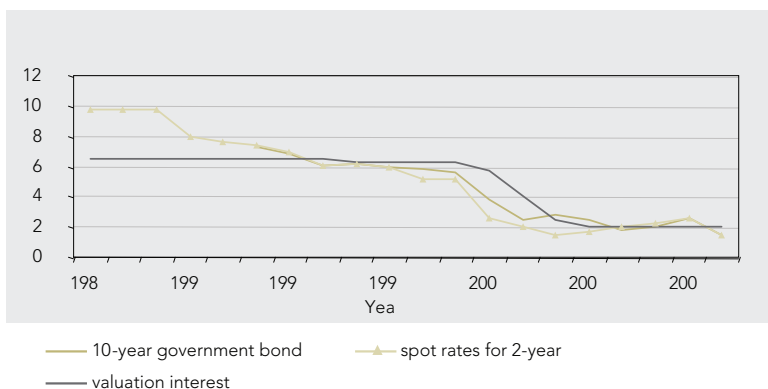
APPLICATION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) IN TAIWAN

The International Accounting Standards Board (IASB) has been developing a framework of accounting rules, known as the International Financial Reporting Standards (IFRS), which aim to more accurately reflect the economic nature of the business, and improve transparency and comparability across sectors and companies.

Considered to follow the Securities and Exchange Commission in the United States, the Financial Supervisory Commission of Taiwan announced that Taiwan is likely to adopt the International Accounting Standards in 2014.

This has drawn discussion and concerns among many insurers in the market, especially regarding the proposed Phase II changes, including the fair valuation rule on liabilities, the replacement for current locked-in valuation interest rates by risk free discount rates, the mismatch of assets and liabilities, and other practical implementation issues.

Taiwan Yields/Interest



This paper will discuss, in a high-level nature, the potential impact of moving to International Accounting Standards on life insurers in Taiwan.

THE REPORTING PRACTICE PRIOR TO INTRODUCTION OF IFRS

Current Taiwan statutory valuation rules require that mathematical reserves for traditional insurance contracts are calculated using a net premium method, with assumptions based on conditions at policy inception. This means that the valuation basis is locked in at policy inception and will remain unchanged over the lifetime of the contract. Should the market conditions change, the adjustments on valuation basis are only applied to new business.

While a conservative basis for insurance risks is usually used in the statutory valuation basis, the assumptions for investment return rates are believed to be optimistic under the current investment environment. The following chart shows the 10 year government bond yields, the 2 year deposit rates and the statutory valuation interest rates in Taiwan in the past 20 years:

As both the 10 year government bond yields and the 2 year deposit rates were historically high, the statutory valuation interest rates were set at a level of 6.5 percent prior to the Asian financial crisis in 1997–98, and then reduced gradually to less than 2 percent today. This has caused negative interest rate spreads of 250 to 500 basis points common for large blocks of the in force life insurance portfolios issued before 2003.

ELEMENTS UNDER PROPOSED IFRS PHASE II

The IASB discussion paper proposed that liabilities be measured using the following three building blocks:

- Current estimates—explicit, unbiased, market-consistent, probability weighted and current estimates of the contractual cash flows.
- Discounting—current market discount rates that adjust the estimated future cash flows for the time value of money.
- Margins—an explicit and unbiased estimate of the margin that market participants require for bearing risk (risk margin) and for providing other services if any (service margin).

POTENTIAL IMPACT OF IFRS PHASE II ON DIFFERENT PRODUCT LINES

Old generation traditional products (contracts issued before 2003)

Old traditional policies that have substantial negative spreads such as whole of life and endowment products are likely to be significantly adversely affected by the proposed IFRS Phase II. As discount rates for those policies would be reduced to the level of risk-free rate, hidden negative spreads that would be realised in the future years under the current accounting standards would be fully crystallised and the losses would be recognised in the profit and loss account.

As the in force business sold before 2003 still constitutes the major part of Taiwan's insurance portfolio (in terms of reserves) as at the end of 2008, this impact is likely to be material on the financial statements of life insurers in Taiwan.

IFRS Phase II proposes to use current estimates instead of the conservative basis, which is currently used in statutory valuations in Taiwan. This would reduce the liabilities of old generation traditional products, and partly offset the impact by using risk free discount rate. However, the net impact is still likely to be significant.

A quantitative study is included in the end of this paper.

New traditional products (contracts issued after 2003)

New traditional policies recently incepted have no or little negative spreads as the pricing and valuation interest rates have fallen down in recent years. The impact of using risk free discount rates is likely to be relatively small, which could be largely or fully offset by the release of risk margin from the current statutory valuation basis.

New participating products

It is not clear how the future policyholder bonuses should be treated under IFRS Phase II. However, because the market share of this type of products is minor, the potential impact is not expected to be material.

Investment-linked/variable annuity products

The reserves for investment-type products, including investment-linked and interest-sensitive life and annuity products, are in principle measured at market values of underlying assets, so the reserve values may not be materially affected by the introduction of IFRS Phase II.

CONTINUED ON PAGE 22

Impact of moving to International ... | from Page 21

The explicit fair value of options and allowance for the guarantees is not compulsory under current statutory valuation. The introduction of IFRS Phase II would require such guarantees to be fair valued. Therefore, policies that have such options or guarantees may be adversely affected by IFRS Phase II, although the impact may not be material at an industry level.

Traditional annuity

Longevity risk, particularly in annuity products, is not allowed for under the existing accounting standards because of the locked-in principles of assumptions for statutory reserving. However, if IFRS Phase II is adopted, any assumptions will be restated at each valuation date if relevant. Moreover, if there is any improvement in mortality, such improvement will be taken into account in the future cash flow projections for reserving. Therefore, traditional annuity products are likely to be adversely affected by incorporation of longevity risk under IFRS Phase II.

Business volumes of this kind of product in Taiwan are relatively small, and so the impact of introduction of IFRS Phase II is unlikely to be material.

Accident and Health

Accident and health contracts may be affected by both the application of risk free discount rates and the release of the risk margins from the current statutory valuation approach. These two factors offset each other and the net impact may not be material.

Policyholders' dynamic behaviour

Financial anti-selection may occur to life and annuity products when market interest rates rise compared to the level of guaranteed interest rates within the products. Such policyholders' dynamic

behaviour is incorporated in the future cash flow projections for reserving under the proposed IFRS Phase II.

However, there is very little experience in the Taiwan market for policyholders' dynamic behaviour on discontinuance as a result of changes in the investment environment. Implementing the proposed changes for policyholders' dynamic behaviour under IFRS Phase II is likely to be difficult in Taiwan.

A QUANTITATIVE STUDY OF IMPACT OF USING RISK FREE DISCOUNT RATES FOR OLD GENERATION TRADITIONAL LIFE PRODUCTS

As the old traditional are expected to be significantly adversely affected by the proposed IFRS Phase II, a quantitative study of such impact has been carried out to show a high level indicative comparison at an industry level in Taiwan for traditional business issued before 2003 between current statutory reserves and policyholder liabilities determined on a gross premium valuation basis using risk free rates to discount cash flows.

The Taiwan government zero coupon bond yields for the coming 30 years from December 31, 2008 were chosen as the risk free rates. The forward risk free rates were then derived and used in this quantitative analysis.

The model points were chosen to represent the major features of traditional products issued before 2003 in Taiwan with various issue years, valuation interest rates, policy terms, premium terms and benefit features. Neither traditional contracts issued after 2003, nor other types of products such as investment-linked products, universal life products, and interest-sensitive annuities, were included due to their less significant impact.

The current estimates of experiences, including assumptions such as mortality, morbidity, expense and lapse, were set based on the market condition and the features of life insurance business in Taiwan. Sensitivity tests were also carried out to show the effect of different margins on current estimates of experiences and the effect of allowing for liquidity premia.

RESULTS

The output from this study shows that due to the severe negative interest rate spreads in old generation traditional products and the long-term characteristic of these contracts, the impact of using risk free discount rates in calculating policy liabilities is significant, with policy liabilities in the range of 73 percent to 105 percent higher than the current statutory reserves.

Individual Taiwan life insurers which have large existing portfolio of old traditional products or have more embedded options in their portfolios, are likely to see more significant impact than those which issued less old generation traditional products and less embedded options.

On the other hand, the valuation of assets would also be impacted by moving to IFRS Phase II. A shift from amortised cost to fair value for categories of trading and available-to-sale could lead to a significant change in the value of these assets (depending on the company's asset types and features), and this could partly offset the impact on liabilities. The fair valuation approach and the use of risk free discount rate are likely to lead to a more volatile value of balance sheet assets and liabilities if they are badly mismatched (this is the common case in Taiwan).

The outstanding liability durations of in force contracts affects the results significantly, whereas the effect of risk margins is much less significant.

An allowance for liquidity premia within the discount rates can offset the rise in policy liabilities. However, this is a contentious issue and caution should be taken in place in determining whether it is appropriate to allow for such liquidity premia based on each insurer's particular situation.

Attentions would be drawn to the fact that the precise details of Phase II of the IASB Project are still under discussion. This paper is purely for indicative purposes and in no way should be taken to represent the actual impact of moving from Taiwan's current accounting standards to Phase II of the IASB Project. □



2010 Life Insurance Conference
New Opportunities—Anchored in Tradition

April 13-15, 2010
The Renaissance Hotel
Washington, DC
www.loma.org/lifeconference.asp

LIMRA LOMA SOCIETY OF AMERICA ACLI