

RECORD, Volume 27, No. 3*

New Orleans Annual Meeting
October 21- 24, 2001

Session 76PD GAAPs Around The World

Track: International/Financial Reporting

Moderator: GREGORY MARK SMITH

Panelists: GREGORY MARK SMITH
STEVE MAHAN
JACK L. GIBSON
ROBERT DALY

Summary: As financial institutions become increasingly global, actuaries are interacting with financial professionals from different countries. The different regulatory, market, and educational situations make finding a common understanding difficult. Adding to the confusion is the presence of different GAAPs around the world.

For firms currently or desiring to operate internationally, it is important to be able to speak the financial language of the countries they are investigating.

MR. GREGORY MARK SMITH: My practice areas include statutory and U.S. GAAP financial reporting, financial projections, software development, and support. I've assisted companies in the UK, Germany, Switzerland, Japan, and Australia with conversions of their financial statements using GAAP. Let's get started.

Today we're going to review UK GAAP, and after that we're going to discuss supplementary information that public companies in the UK report under the achieved profits method.

If you were to get on a plane tonight to fly, one of the first things you'd encounter would be new products, and the bullets below give you an idea of some U.S. GAAP considerations made through proper classifications because, those are going to drive the profits, emergence, and many other decisions. So let's talk a little bit

*Copyright © 2002, Society of Actuaries

Note: The chart(s) referred to in the text can be found at the end of the manuscript.

about the products themselves.

Insurer's P&L accounts (income statement reporting) must be split into three sections:

- Long-term technical account
- General insurance technical account
- Non-technical account
- "Fund for Future Appropriations" is also used

The ownership rights of with-profits policyholders versus shareholders are a key focus.

Historically, both stock and mutual companies have sold with-profit business. These are participating policies sold as traditional products—for example, whole life and endowment—and these policies typically provide reversionary bonuses (we would call them dividends) that are used to purchase additional coverage and also provide maturable bonuses that are paid at the maturity or claim and sometimes also at surrender. In addition to with-profits business, the market also provides unitized with-profits products. This business is similar to the business in the U.S., except that in addition to the fund choices that transfer investment risk to the policyholder, unitized with-profits business also provides an option to invest some or all of the funds in the so-called with-profits fund, a fixed account choice with a guaranteed interest rate and anticipated future bonuses.

Unit-linked products lack the bonus found in unitized with-profits business, but they provide a UK equivalent of variable products. While these products are directly linked to the performance of an underlying block of assets, the assets themselves are not required to be held in a legal trust, as is the case with U.S. separate account products. In respect to both with-profits and unit-linked products, the trend in recent years has been to move away from heavily funded front-end loaded products toward products with level charges.

The deferred annuity market is very active in the UK, with offerings of both tax-qualified products for private pensions and non-qualified products. These products may also provide the policyholder with the right to switch between a with-profits fund and a unit-linked basis. Other nonparticipating products offered in the market include term life insurance, group life, and endowment insurance (for example, to cover the balloon payment due on a mortgage). In addition, insurers provide immediate annuities and disability income coverage, called PHI coverage, permanent health insurance, and some other kinds of health coverage. To cover the market valuation of assets in the UK, the guarantees are typically small in life and annuity products, although in recent years additional guarantees have started to appear in the market due to the consumer movement. Finally, the term general insurance is used to describe nonlife business, including what we would normally call profit and loss insurance.

The insurance company in the UK is a group structure, in which a single company will offer life, business, property and casualty business together for general

insurance along with life business. For this reason, the profit and loss account is split into three sections:

1. The long-term technical account that reports results for life insurance.
2. The general insurance account, which reports results for nonlife insurance
3. The nontechnical account, which reports results for noninsurance operations.

Among other things, the nontechnical account also provides a place to report investment return on any shareholder assets that are not backing the insurance business.

In addition to the standard income statement accounting provisions, the accounting regulations permit the use of a fund for future appropriations. This facility is intended to report the movement of funds for allocation to either policyholders or shareholders that has not been determined at the valuation date. Using GAAP accounting guidance, it states that it is inappropriate to use the fund for future appropriations in any situation in which there is reasonable certainty that the funds in question can be attributed to shareholders. This fund is universally used by companies reporting the results of with-profits business as a proviso-ready mechanism to support the payment of bonuses. While we don't have time to cover every nuance of the profit and loss (P&L) account, it's clear that there's a real strong emphasis on drawing a line between policyholder assets and shareholder assets from the UK.

Before we go on, I need to put the fund for future appropriations in perspective. There's more than one use of the word "fund" in the UK, of course. There is the long-term fund, which is a pool of assets that is legally dedicated to long-term business. Please note that the long-term fund includes both the with-profits fund for participating business and also the nonparticipating business. When it comes to with-profits business, the fund for future appropriations holds most of the accounting and asset valuation differences between the supervisory returns—that is, the statutory returns and the statutory accounts—which is the UK term for the GAAP accounts. As a result, reported profits in participating business equal the statutory transfer from the long-term fund to the shareholder's account. One exception to this statement will arise if shareholder capital has, with the agreement of the supervisory authority, been identified within the long-term fund. When this is the case, the assets in the long-term fund representing this capital will be recognized on the shareholder balance sheet and in the investment return section of the nontechnical account. For nonparticipating business, the fund for future appropriations isn't used, so differences in accounting conventions will mean that after-tax reported profits will not include the transfer to long-term fund.

My comments will focus on UK convention. Generally both countries are similar in valuing equities. In the UK noncallable fixed-interest securities, and callable fixed-interest assets link to unit weight. Backing unit weight liabilities are also valued at market value. In the case of other callable assets not used to back linked liabilities,

the pronouncement permits the use of an amortized cost basis in cases in which the securities are expected to be held to maturity. That's noted in the footnote at the bottom. I think the rest of what's going on is pretty clear. I would point out that the impact of realized and unrealized capital gains is carried in the P&L account in the long-term technical account.

UK companies under GAAP have an option to report capital appreciation or depreciation on shareholder-attributed assets in two pieces. First, the portion of the term that equals the long-term investment rate of return is reported in the long-term technical account. Second, the balance of the total return—that is, the excess above or below the long-term investment return—is shown in the nontechnical account. The result is that the companies are able to report smooth operating profits on their long-term business if a volatile element being carried is a below the line, nontechnical account adjustment result. Operating profits for insurance companies are generally disclosed separately. As I mentioned previously, the long-term technical account reports on investment returns including realized and unrealized capital gains for those assets backing the long-term business.

As you can imagine, the P&L volatility that this introduces is mitigated by:

1. The movement in unit-linked liabilities, which will match the movement in the assets and will move as a market value.
2. The equivalent changes in the long-term provision, and that's the liability that's set for nonunit-linked business.
3. The flow of capital gains and losses into the fund for future appropriations.

Table 1 provides a summary of key differences between UK GAAP and U.S. GAAP for deferred acquisition costs, and again my comments will focus on the UK conventions. The accounting regulations require that acquisition costs to be recovered from future margins must be deferred. This includes both direct and indirect expenses. The amortization of these costs through the technical account is largely left to the company with a few general rules: first, that costs should be deferred to the rate commensurate with the emergence of policy margins; second, that only the net costs should be deferred; and third, that if your deferred acquisition cost (DAC) asset is uncertain, then the asset itself should be written down. As we generally have in the U.S., recoverability testing of GAAP assets is required at each balance sheet date and should be reviewed in the aggregate at category of business level. Companies in the UK use a variety of practices when amortizing acquisition costs; however, the pace of amortization impacts only the profits for business written outside the with-profits fund. For participating business, the impact of amortization is absorbed in the fund for future appropriations and released through the bonus process.

Table 1

Asset Valuation — Deferred Acquisition Costs

Key Differences	UK GAAP	US GAAP
What to defer?	Direct and indirect recoverable expenses	Direct, recoverable expenses
How to amortize?	Latitude with a few rules: <ul style="list-style-type: none"> ■ Don't defer if expense is covered by loadings ■ Amortize against emergence of margins 	More prescriptive <ul style="list-style-type: none"> ■ Not permitted to net out loads ■ Revenue streams for amortization set by SFAS 60, 91, 97 and 120
Recoverability / loss recognition	General guidance - <ul style="list-style-type: none"> ■ write off when recovery is uncertain 	More prescriptive <ul style="list-style-type: none"> ■ No loss recognition under SFAS 91

Pace of amortization affects profits for business written outside with-profits fund.

7

Let's move on to valuation of policyholder liabilities. Actuarial liabilities in the statutory accounts are split between a technical provision for unit-linked liabilities and a long-term business provision. The provision for unit-linked liabilities is equal to the liability carried in the statutory supervisory returns and must be matched by an asset of equal value. While the directors of the company are ultimately responsible for the long-term provision, the accounting regulations require that the provision is calculated by an actuary. Now I will summarize the rules pertaining to the long-term provision. In setting a long-term provision, UK actuaries also consider the impact of a policyholder's reasonable expectations regarding future reversionary bonuses. It's interesting to note that the long-term provision doesn't include terminal bonuses, which are not guaranteed before the date of claim or maturity. Reserves are calculated using net premium methods, and the assumptions include prudent margins for adverse deviations as appropriate for the territory in which the business is written. Prudent allowances also permit improvements in mortality. The accounting regulations do require that the key assumptions used to calculate the long-term business provision be disclosed in the statutory accounts.

The second main item I want to talk about is the achieved profits method. The Association of British Insurers (ABI) allows authorized proprietary groups to present supplementary information on the achieved profits method, and, in fact, many British actuaries believe that this method provides the best information on the current trading position of the insurer. The data varies widely in terms of what's published for public consumption. The method is consistently applied thanks to guidance from the ABI. The objective is to recognize profit as it is earned from

contracts of long-term business. The achieved profit of the enterprise, of course, is calculated after tax and is equal to the increasing embedded value of the in-force business during the accounting period after shareholder dividends paid out and capital paid in.

The embedded value is calculated based on a projection of future cash flows to the shareholders and is discounted at a risk-adjusted discount rate. The projection includes cash flows from business in force and new business written during the accounting period. The risk-adjusted discount rate is based on a risk-free rate of return from the government bonds, which is net of tax together with a risk margin. The risk margin is to be set in such a way that the resulting rate of return gives a third party operating in a similar tax and regulatory environment the return they would require in order to assume the liabilities and supporting assets in the block of in-force policies. The guidance states that future experience should be based on best estimate assumptions, and since the risk margin is in a discount rate, it's intended to account for future improvements in experience assumptions. So when you're working on the risk discount index (RDI) you need to be careful to avoid double counting.

Bonuses on with-profits business should be calculated consistent with economic assumptions, bonus policy, and restrictions on shareholders' transfers in the company's Articles of Association. Any assets remaining at the end of the projection for with-profits business should be exhausted through the payment of a terminal bonus. The ABI's draft guidance issued in March of 1999 has an explicit requirement that nonbank insurers allow for solvency capital in the projections, and most companies do their projections of in-force business with a minimum level of solvency capital.

The ABI guidance calls for the disclosure of the projection basis, with special emphasis on the economic assumptions and the risk discount rates used; and of the components of total profit. While the practices vary in respect to the details shown, most companies include information on the value added or destroyed by new business written during the year: the impact of the significant assumption changes and the impact of variances between actual and expected results. Often the variance analysis includes some commentary and footnotes, and when presenting total achieved profit, most groups break this down into an operating profit component and a balancing item.

Our next speaker is Steve Mahan. Steve is a partner in KPMG's Dallas office and the leader of the life health actuarial services practice nationally. Steve spends significant time overseas servicing global insurance and reinsurance, mostly on U.S. GAAP-related issues. The countries he's worked in include Mexico, the UK, Switzerland, Germany, Japan, Hong Kong, Korea, Malaysia, Singapore, and that's just to name a few.

MR. STEVEN MAHAN: I'm going to be presenting material mainly with respect to

Switzerland, Germany, and France. First, I'll make a few general comments about the accounting principles in Europe. They do vary, but there are some similarities that exist. One of the similarities is that reserving assumptions are conservative and statutory like. That is, very similar to what we know as statutory in the US. In some cases, you'll see that hidden or equalization reserves can be set up, and we'll cover a few of those. They tend to have expense allowances similar to commissioners reserve valuation method (CRVM) expense allowances, presented either on the asset side or liability side of the balance sheet. This is often referred to as "Zillmerization."

Separate account-type products are held at market value, similar to the U.S. Participating business is very common in continental Europe and the UK, and there are often regulatory requirements as to how much profit sharing should go to the policyholder and the accounting follows that. For those of you who have ever worked in Europe, that's probably one of the more difficult issues. Sometimes you wonder, "Is this really a profit-making venture?" And then with GAAP conversions for companies over there that want to enter the U.S. markets, you say, "Why would anybody invest in this company? They give everything away to the policyholder."

Equities play a more important role in Europe. I can be in a conversation with a client in Europe in which they're talking about all their unrealized gains, and I assume they were generated by changes in interest rates on fixed-income investments, only to find out later that this is appreciation from equities. They do invest a lot more in general equities in Europe.

Now let me address Switzerland, specifically the assets. They hold the lower of amortized costs or market value, and separate account-type products are valued at market. Derivatives are presented on the balance sheet and are held at market value. There is no DAC or Zillmer asset in Swiss GAAP. Accordingly there is no expense allowance treatment of any type, no expense relief under Swiss GAAP, none on the asset side and none on the liability side. The reserves held are prospective net level premium reserves. They tend to have conservative interest rates, and mortality is recommended by their society body. Like our statutory, no lapse assumption is used. A floor surrender value is not required. They can choose to hold these in what we call global or unallocated reserves, which they often have in Switzerland.

Companies file dividend and/or bonus rates with the national insurance authority each year. Bonuses are dividends as we know them, typically in the form of additional paid up insurance for the policyholder. Some countries require that a certain percentage of profits, such as 85 percent, go to bonuses or dividends. In Switzerland, I believe it's often market practice to give 70 percent of profits to the policyholder in dividends or bonus awards, although there's no requirement to do that. There is a liability provision for current and future bonuses and dividends. When profits emerge, they hold back some of it and say, "We're going to give this to the policyholder at some point in the future." That is set aside as a liability, and

then in the future, it will actually be allocated to a policy in the form of additional insurance in force or possibly in cash. That's what we mean by current and future dividends. They deem those dividends to be declared because they are provided out of profits that have already emerged, although they are unallocated. This gives them some flexibility in hiding reserve in this category. The treatment of investment-type products in Switzerland with a retrospective accumulation account value type approach is very similar to that of U.S. GAAP.

As I mentioned, they have what we call global reserves or equalization reserves. I've had some experience with reinsurers in Switzerland, and they operate a little bit more with a property and casualty (P&C) mindset of setting aside money now for future contingencies in general for equalizing profit. I heard that that's one of the problems with Swiss Air's recent bankruptcy; they had noninsurance commitments, but they had a lot of hidden liabilities that, when released, showed how poorly that airline was doing. The same thing can happen in an insurance company. It is possible to manage earnings with these equalization reserves, and if you do a U.S. GAAP conversion, one of the first things you do is go on a search and destroy mission to find these and get rid of them.

As far as disclosures go—disclosures for Swiss GAAP are light compared to U.S. GAAP—one specific disclosure requirement is the market value of assets.

Let's go on to Germany. Financial institutions in Germany have an option for asset valuation: they can hold either the lower of amortized cost and market value, or they can use amortized cost unless impaired. Insurance companies currently don't have this second option, but that may change this year. The assets backing separate account products are typically valued at market.

In Germany there's no DAC. Derivatives are on the balance sheet and are held at the lower of cost and market value, but swaps and forwards are off the balance sheet, which sounds very similar to the U.S. before FAS 133.

On the liability side, Germany has Zillmerized net level premium reserves. It is common in Europe when you have Zillmer reserves to calculate your liability on a net level basis and then do a separate calculation of the expense allowance provision. You then net that expense allowance provision against net level premium reserve to get the reported reserve. That is what is done in Germany. That expense allowance is dictated by regulation and sometimes bears no resemblance to the expenses actually incurred by the insurance company, but it can exceed actual, and it has certain amortizing provisions under the Zillmer treatment. They have conservative interest and mortality and no lapses. Just like the U.S., they have a surrender value floor.

Germany has what we call a minimum profit distribution formula. They have required amounts of the profit that must inure to the policyholder. It's not straightforward and it has changed over the years, but there is a minimum

requirement and requirement causes them to hold what we call bonus reserves. The minimum amount that must go to the policyholders is not given to them necessarily in the year that the profit occurred. Sometimes there's actually a one-year lag, so it's raked over into an allocated bonus reserve so that it's allocated in the future. In this unallocated bonus reserve, a certain portion eventually becomes terminal bonuses, which are declared and awarded in the form of additional face amount and surrender value, but are not vested or guaranteed. If you die or surrender, you'll get it, but next year if the performance of the company is bad enough, it could be taken away before you die or surrender. The reserves for that terminal bonus could form part of the reserve for future policy bonuses. This creates flexibility in timing of when they give profit sharing to the policyholder. They rake it off and separate it, similar to some of the things we saw in the UK, and it belongs to the policyholders unallocated. Going forward, it gets allocated and awarded to specific policyholders.

They have equalization reserves that can be set up for a special purpose. This is typically only on the P&C side, and there are formulas that limit these amounts. These will be getting a hard look by the German regulators in the wake of the World Trade Center attacks. The German GAAP disclosures are moderate compared to U.S. GAAP, and they do disclose market value of assets and, interestingly, expense assumptions on paid-up policies.

Finally, let's move on to France. Most of the insurance companies here invest in government bonds. Amortized cost is held for bonds, cost for equities, cost less depreciation for real estate. They have separate account-type products similar to the U.S. The assets in these products are valued at market. There are no DAC-type or CRVM-type treatments on the asset side. Derivatives are usually off balance sheet, and the price paid for options are shown at cost unless there's a known permanent loss.

The policyholder liabilities—there are typical prospective reserves as we might recognize them. They have Zillmerized net level premium reserves, so they do get an expense allowance treatment and expense relief to the extent of the Zillmer reserve, and they have conservative interest and mortality set forth by the regulators. There are no lapses and a surrender value floor.

France also has some required profit sharing for the policyholders. It's a very complicated formula. You're lucky if you don't have to deal with it, but it results in bonuses being set aside at times in unallocated funds, and when they are set aside, they have a limit that could be basically allocated within eight years. This gives them some flexibility, but not as much as in other countries.

Investment contracts in France are very similar to those in the U.S., and an account value approach is used. They have some equalization reserves under French GAAP, but not as much as, for example, Switzerland, and these are primarily seen in group business, which raises a question in some cases that there may be very legitimate specific obligations of the insurance company if it's like a premium stabilization

reserve. Disclosures are considered moderate, but obviously the disclosures are nothing like U.S. GAAP. Once again, as in all these other countries, the market value asset disclosure is required.

MR. SMITH: Our next speaker is Jack Gibson, partner in charge of the Americas Life actuarial group for PWC Consulting. He's a leading expert on demutualizations, rehabilitations, mergers and acquisitions, and U.S. GAAP conversions. Recently Jack has focused on U.S. GAAP conversions of various companies in East Asia, and for the Society, Jack is the chairperson of the Joint Task Force on Financial Engineering.

MR. JACK GIBSON: I've done a lot of work in East Asia, and I'm going to focus my remarks pretty much exclusively on the Japanese environment. In Japan, they have only one accounting standard, so I'll first go through the Japanese GAAP in this presentation, but it's really the same as Japan's statutory.

The main reason I've been involved with comparing U.S. GAAP to Japanese GAAP is because some companies in Japan are looking to convert to U.S. GAAP financials. One reason would be that a company is being acquired by a U.S. entity. There have been a couple of recent failures of Japanese companies, which has led to them being acquired by a U.S. company, thus forcing their need to convert to U.S. GAAP. Another reason would be that a Japanese company is currently healthy but is looking to expand its options. Chart 1 shows some of the things that are driving them to at least consider their U.S. filing options and to work toward developing U.S. GAAP financials.

A comparison of the Japanese GAAP and the U.S. GAAP shows that they are as different as night and day. There's a dramatic difference in the detail of disclosure required in the U.S. The scrutiny of the content of financial statements by the SEC has no parallel in Japan. There are also different concepts of materiality. Maybe the most significant issue, though, is that the Japanese GAAP only requires annual reporting. Some six-month reporting occurs, but on a less official basis. This is a major issue, and it is a major undertaking to get these companies used to more frequent reporting.

There are huge systems issues and infrastructure issues; it's a whole different mindset. In Japan, there are a lot of both cultural and language-based hurdles that you have to get over. One of the cultural issues is that there is definitely a focus on perfection in Japan. They have one appropriate way to do a calculation, and they develop procedures to get down to the end in terms of accuracy. When you try to lay on top of that a monthly U.S. GAAP reporting process, you end up in an environment in which it may take more than 30 days each month to close their monthly books. There's a tremendous amount that has to be adapted to get these companies to understand how things are done in the U.S. and to do monthly closes on a quick basis.

The policy reserve calculation is very different in Japan and the U.S., and there's no

analogy to the product classification that we see under FAS60, 97, and 120. There are some similar issues to what we find in Europe, and certainly there are an awful lot of products in Japan that don't have a natural U.S. analogy, but on top of that, the language barrier makes it that much more difficult to delve into some of the more important questions of detail that will help you make classification decisions. In Japan, they have a contingency reserve as opposed to an equalization reserve. It is built up over time and then released either for specific known occurrences that require the offset of the contingency reserve or for much more ""fuzzy"" reasons, such as that they've had some unspecified losses. This has no U.S. GAAP analogy, and it is a major issue there.

I was involved in looking at one of the Japanese companies that failed, and in the year before it failed, it managed to report a small gain for the year and, amazingly enough, in that same year it had released roughly \$500 million worth of contingency reserves and just happened to offset what would have been a \$500 million loss, so it was an interesting coincidence that we ran into.

Table 2 refers to debt and equity security differences. On the asset side, I see more similarities than differences when comparing U.S. GAAP to Japanese GAAP. There is the concept of health and maturity, for example, on bonds, but there are different drivers when you're looking at the Japanese financials, which might cause you to want to categorize something as held to maturity, but then the decision that you make for your Japanese books is essentially going to force your hand compared to the U.S. GAAP, so you get into some tough issues.

Table 2

6

Key Difference - Debt & Equity Securities

> USGAAP

- > Market value accounting has been applied for many years following the introduction of SFAS115.

> JGAAP

- > New investment accounting requirements were introduced in April 1st, 2000. This makes JGAAP largely consistent with USGAAP.



There is no obvious DAC as under U.S. GAAP. All policy acquisition costs are expensed as incurred. There's no deferral permitted. Now, the important caveat to that is that most companies use zillmerized reserves for their Japanese financials. So the zillmer reserve, much like full preliminary term (FPT) type reserves in the U.S., builds in a form of expense deferral on a formula basis. That essentially replaces a more formal DAC. There's no value of business acquired (VOBA) under Japanese GAAP for similar reasons.

The product classification is a very complex question in Japan. A number of companies have traditional contracts that have a participating element, so there are some difficult issues of FAS 60 versus FAS 120. Most of the Japanese companies are mutual companies. Should you unbundle those coverages and classify the subcoverages separately, or should you look at the whole contract? There are no easy answers.

I'd like to focus on comparing profitability. When you compare a Japanese GAAP basis to a U.S. GAAP basis, you might think that the Japanese GAAP emergence of profits would look more like the U.S. statutory emergence of profits. If that were true, we all might feel that we have a pretty good intuition when comparing how Japanese GAAP and U.S. GAAP profits might look.

Maybe the most important factor is that you need to look at the kinds of products that are sold in Japan and the kinds of pricing realities that they face. The pricing is severely constrained on all products by the Japanese regulators, so all companies have very tight boundaries as to how they price these products. Currently, and in the recent past, the interest spreads have been very low or negative, combined with very sizable mortality and morbidity margins. So companies are not able to price their products the way actuaries would like to see them priced, creating a mismatch of losses on the investment side offset by very large mortality gains. As a result, the coverage-oriented products have, in some cases, dramatically more current profit potential than savings-oriented products.

One company related a story that it feels the returns it's seeing based on new issues for annuity and endowment type contracts should be in roughly the 4 percent ROI range. The whole life might be in the 10 to 15 percent range, but the coverage-based riders can be in the 30 or 40 percent return range. The mix of products analysis is one lever that the company tries to control to ensure that they get adequate profit levels.

Chart 2 compares whole life product, or actually a family of products. What you see under Japanese GAAP is a substantial delay in the emergence of profits. Basically what you're seeing driving this is not only the acquisition expenses, so that the surplus strain hits the numbers early, but you also see that because most of your margins are coming from mortality gains, those get pushed way out into the future, so in the early years you have a very small or negative interest margin. You're not getting that much in the way of a mortality margin, because not that many people

are dying, so you get a pretty severely elongated delay until you see profits emerge under the Japanese GAAP. This is ongoing sales, but you're probably driving the pattern with the delay on the mortality.

In Chart 3, interest-sensitive whole life, you see a similar pattern to what you saw under the whole life. The interest-sensitive is more of an emerging product. Interest rates in Japan are incredibly low—one or two percent is a high rate there—so even with interest-sensitive products, you're limited in the margins you can see.

For the medical business (Chart 4) you see more of an expected relationship comparing Japanese GAAP to U.S. GAAP. You have a fairly short amount of time in which you're able to turn around from the acquisition expenses to having fairly steady gains.

For endowment contracts (Chart 5) even under U.S. GAAP, you have a very long delay in seeing profits. This is partly driven by the low or negative interest spread. When you have these very, very small margins, even your non-deferrable expenses have a major impact on the numbers, and there is some hope that there will be greater spreads on newer issues as we move toward the future.

MR. SMITH: Our last speaker is Rob Daly from Tillinghast-Towers Perrin. Rob spent the last six years in Australia, and the previous eight years between the U.K. and Ireland. Rob has helped companies with U.S. GAAP conversions in Asia, and he's a Fellow of the Institute of Actuaries. He's also an Fellow of the Institute of Actuaries of Australia (FIAA), and a member of The Academy.

MR. ROBERT DALY: I'm going to do a fairly brief overview of Australian GAAP, which is also known as margin of services (MOS). Then I want to discuss some worked examples of profit emergence, look at some of the key differences, and touch on fair value.

Chart 6 is a quick structure that demonstrates the background of regulation of life insurance accounting. There are effectively two streams: insurance law and corporation law. Corporation Law is regulated by the Australian Securities and Investments Commission (a similar body to the SEC). This commission delegates its authority for accounting to the Australian Accounting Standards Board. You can download the relevant accounting standard from www.aasb.com.au. Insurance laws are regulated by the Australian Prudential Regulation Authority (APRA), which also looks after banking law and other financial services law regulation resulting in an integrated approach. It delegates authority for actuarial standards to the Life Insurance Actuarial Standards Board, and the relevant accounting standard is AS1.02. This one you can download from www.apra.gov.au. The two end products—standards AS1.02 and AASB 1038—are very similar. In fact, when AASB 1038 was issued, both accounting bodies explicitly stated that these standards are supposed to mean the same thing. The only difference is that AASB 1038 also applies to New Zealand, so it had to be differently worded, while AS1.02 is purely Australian.

Chart 7 shows the statutory requirements in Australia, which are integrated with the accounting system. The Life Insurance Actuarial Standards Board is also in charge of statutory regulations for life companies. The statutory regulations start by defining a base policy liability, which is the accounting liability, but add to it additional margins for solvency and capital adequacy to come up with a regulator's position. The asset side is simply the market value assets as per the accounting approach. Most of these regulations were brought in at the same time, in 1995 when there was a full modernization of Australian accounting and Australian regulation, and this resulted in a fully integrated system.

Now to provide an overview of the accounting approach in Australia. First of all, it's what is known as a deferral and matching system—effectively the same as U.S. GAAP. It is not a fair value system. Initial costs are deferred so that profits emerge matched to revenue, the so-called MOS. (There is no explicit DAC on the balance sheet, it's implicit in the calculation of the policy liability.) All assets are shown at market value, including subsidiaries. This is an interesting requirement, because subsidiaries that don't belong to an insurance company are held at net asset value in similar ways to the U.S. This difference in treatment between life insurance subsidiaries and other company subsidiaries results in a certain level of accounting arbitrage.

The basic policy liability is a best estimate liability, which may be negative, and it's commonly negative for some products (e.g. risk products). There is no requirement to set this liability to zero or to show it as an asset on the balance sheet. At policy issue (i.e. the point immediately before any premiums are received or expenses incurred), this best estimate liability will always be zero on a profitable contract. The policy liability is increased by a liability for future profits, such that the initial liability at issue is zero. The liability for future profits is released over the term of the policy as profit margins.

Let's take a quick look at an example of a universal life policy at issue (Table 3). I should stress that there are no universal life policies in Australia, so this is a little bit artificial, but it's the closest comparison. You're probably familiar with the U.S. GAAP earning statement. The important point is if you incur fixed acquisition costs (e.g. product development costs), those fixed acquisition costs will emerge as a loss at issue under U.S. GAAP. For Australian GAAP, such losses do not emerge as effectively all acquisition expenses are deferred. Under Australian GAAP the profit at inception is always zero unless the policy was loss making from inception.

Table 3

Universal Life Policy at Issue		
	US GAAP	A GAAP
Premium	1,000	1,000
Deferrable acquisition expense	-800	-800
Non-deferrable acquisition exp.	-200	-200
US DAC	800	—
US URL	-300	—
US benefit reserve	-700	—
Australian policy liability	—	0
Net profit at issue	-200	0

Chart 8 provides a projection of future profits. This projection is on a before-tax basis to compare with U.S. GAAP, but the Australian GAAP calculation looks at after-tax position in reality. The main difference occurs initially because of the non-deferrable acquisition expenses under U.S. GAAP. In the second year, there is a big profit release under U.S. GAAP because the DAC is deferred in line with profits. Under Australian GAAP, the DAC is effectively deferred in line with fees and a lower profit occurs in the second year.

Chart 9 shows the same graph, but it includes Australian tax. It's a bit smoother than the before tax, which is an interesting result. In this example, the tax is handled reasonably well, but the handling of Australian tax under U.S. GAAP can be very erratic after the first year because of how DAC unlocking impacts the calculations.

Now let's discuss some of the key differences between U.S. and Australian GAAP (Table 4). We spoke about the acquisition cost differences earlier on and we won't cover them again now. On a risk contract, under U.S. GAAP, the premium is the primary profit carrier but you also get provision for adverse deviation (PAD) releases linked to claims, expenses, and interest, which gives you additional profit carriers. Under Australian GAAP, the profit carrier is predominately claims, although in certain circumstances you can use premiums. The logic here is the main service

provided to the policyholder is paying claims on a risk contract, and, hence, profit should be linked to that.

On an investment contract, expected gross profit is the U.S. standard profit carrier. Under Australian GAAP, the profit carrier will be fees or expenses (or a combination), depending on how the actuary looks at this particular policy. You can come up with the hybrid position that gives you something very close to estimated gross profit (EGP), but most companies pick a simpler solution. Again, the consideration is that the principal service is investment management and therefore this is the appropriate profit carrier.

Table 4

Key Differences - DAC & Profit Carriers		
	US GAAP	Australian GAAP
Amount of acquisition expense deferred	Variable costs only	Fixed and variable costs
Profit carriers - risk contract	Premium + PADs from claims, expenses and interest	Claims (but Premiums are possible)
Profit carriers - investment contract	Expected gross profits	Fees or expenses (or a combination)








What are the differences in setting assumptions? The Australian basis for assumptions is current best estimate, which is revised in each accounting period, so the liability calculations are kept constantly up to date. Obviously if you keep on revising assumptions, there will be large changes in liabilities. Those changes are generally spread into the future in Australia, with the exception of changes that can be related to market value movements, which are netted against asset movements.

What about key differences in loss recognition and reversal? Very similar between U.S. and Australian GAAP as in both cases you compare the accounting liability to a best estimate liability and any shortfall gets recognized as a loss. An interesting oddity about Australian GAAP is that loss reversals are also allowed if subsequent experience improves.

I put in Table 5 because many people say Australia has a very up-to-date standard, and the question then is whether it represents a fair value standard. The answer is no, because it was not devised with this intention. It was devised to come up with a smooth emergence of profit. I want to go through a few fair value criteria and compare both U.S. GAAP and Australian GAAP to these. My criteria are quite subjective; you can argue with them. First of all, are assets at market value? This is a primary criterion for fair value and Australian GAAP gets a full tick. U.S. GAAP only gets a half score as certain assets are held at book value.

Liability assumptions are continually at best estimate, so Australian GAAP does score well here.

Table 5

Australian GAAP and Fair Value		
		
■ Assets are at market value		½
■ Underlying liability assumptions are best estimate		8
■ Liability margins reflect pricing risks		½
■ Sufficient liability margins for loss recognition		8
■ The retailing margins on new business emerge at policy issue		8

Australian GAAP probably outscores most other systems with the exception of UK achieved profits reporting. Nevertheless, it is still some distance away from being a fair value system

12

Australia does not include liability margins for pricing risks. It's not part of the system. In the U.S. under FAS 60, the intention with PADS is to give a liability margin and the result is that the U.S. gets half a score and Australia gets nothing. The next one is controversial, but in my view if you believe in a fair value method and you come to loss recognition, you should be comparing to a current fair value liability, which will have liability margins. You shouldn't be comparing to a best estimate liability because there are no liability margins in such a liability and both systems fail under that criterion.

The final criterion comes to the heart of fair value. On fair value, the margin you

make on selling a product over the wholesale costs of that policy should emerge as a profit at issue. In both cases, the profit at issue is zero or negative, so neither system got a good score. So overall, Australia does better, but a more modern system such as the UK achieved profit system (and probably also Canadian GAAP) would score better.

MR. SMITH: Recently, the European Union mandated that international accounting standards (IAS) would be reporting in European Union countries by 2005. What do the panelists see happening in Europe or maybe other places today regarding the expected impact of this decision and also the impact of the IAS and fair value initiatives when compared to local GAAP and to U.S. GAAP?

MR. MAHAN: I was just attending an internal meeting within KPMG with our insurance people in Europe, and they were talking about this EU initiative to be on IAS by 2005. Some of them expressed that they still thought that it was going to be aggressive for insurance companies to get there. It's still uncertain exactly what the accounting model will be when insurance companies do get there. Another question is what impact would that have on U.S. GAAP and the SEC? In response to a question about the influences, whether this could take over U.S. GAAP, one of our people said it wouldn't happen before 2005, so I guess we have a few more years left, but it is going to require a lot of work.

MR. GIBSON: Certainly it's clear that there are a lot of unknowns about exactly how this will be applied to insurance liabilities, but it clearly is something that could have a major impact on companies at least in Europe. I think we may be looking even more distantly for the impact on some other regions around the world, but it's something that I think we're all going to need to pay attention to.

MR. DALY: Historically Europe has used published accounts for statutory purposes as well as financial reporting, and fair value is therefore a real challenge for regulators. In Europe, not only will they have to develop fair value, but they will also have to revise their regulatory system at the same time, which creates more challenges for them. The regulatory system in Europe is not very up to date.

MR. SMITH: I think I would throw in a comment about the UK, and I realize that's not continental Europe, but I think one of the things that's interesting to observe about the evaluation, particularly the draft paper from the International Standards Accounting Board (IASB), which it was called at that point, was that UK actuaries are very fond of the achieved profits method. Many of them do regard it as a true fair value mechanism, and it has many appealing qualities. The preliminary decision by the IASB was that the embedded value method or the achieved profits method doesn't constitute a fair value. One of the board's concerns was that there is a fronting of profits, at least as a potential outcome of that system. So I look for actuaries in the UK to continue to strongly advocate their system, and they have a lot of influence in this process, so I think it will be interesting to see how all that plays out.

MR. DAVE PELLETIER: Jack, you've mentioned just now that you thought the IAS standards could be relevant quickly in Europe. I also wonder about the Far East, Japan in particular. As you said, Japan statutory and GAAP are basically outdated and in need of change, and one would think that instead of all this U.S. GAAP work that's being done there now, maybe focusing on the IAS could be more useful. Do you not think that the IAS standards could, in fact, come in there at the same time as they do in Europe?

MR. GIBSON: I think it's a possibility. I've heard some people speculate that, depending on how the IAS standards were defined with regard to insurance products, to apply them immediately might cause many Japanese companies to show up as having negative solvency. I think that clearly, to the extent that that may be true, that certainly could delay action by the Japanese regulatory authorities until they better evaluate that.

FROM THE FLOOR: I noticed on your graph that you showed U.S. GAAP as being high on risk management, and I would say that if U.S. GAAP doesn't do what IAS does, then U.S. GAAP isn't very high on U.S. risk management.

MR. GIBSON: Right.

FROM THE FLOOR: Robert, I was interested in your fourth bullet on Table 5: sufficient liability margins for loss recognition. You gave an X there to it. I would agree to the U.S. one. Can you explain again why you gave an X to the Australians?

MR. DALY: Yes. Both systems use the same system for loss testing effectively in comparison to a current best estimate liability, which is identical to the U.S. system. The difference in Australia is you calculate the best estimate liability every year.

FROM THE FLOOR: I had understood that the FSA was requiring Japanese companies to move to the net level premium reporting over zillmer.

MR. GIBSON: The companies I've been involved with are moving to that over time, so it's not an immediate impact.

MR. DALY: In Japan, zillmer reserving is exceptional for two reasons. Either it is used post-rehabilitation or for a new company. Old companies should all be on a level premium basis.

MR. SMITH: We had another question submitted: Can you give us a sense of how front end loads compare between the UK and the U.S. and how this impacts profit emergence? This issue is actually getting a lot of press in the UK now because there are some big differences for unit-linked products. As I mentioned in my presentation, these types of products typically have heavy front end loads, and because of the process of netting those out, it's possible under UK GAAP that you're going to get profits in the early years versus U.S. GAAP, and those profits emerging

later are just gravy. Part of that comes from the fact that when you put these products on U.S. GAAP, you often end up with an unearned revenue liability that's actually bigger than DAC, so both of these things contribute to the emergence of profit.

Chart 1

2

Potential benefits and objectives of a US filing

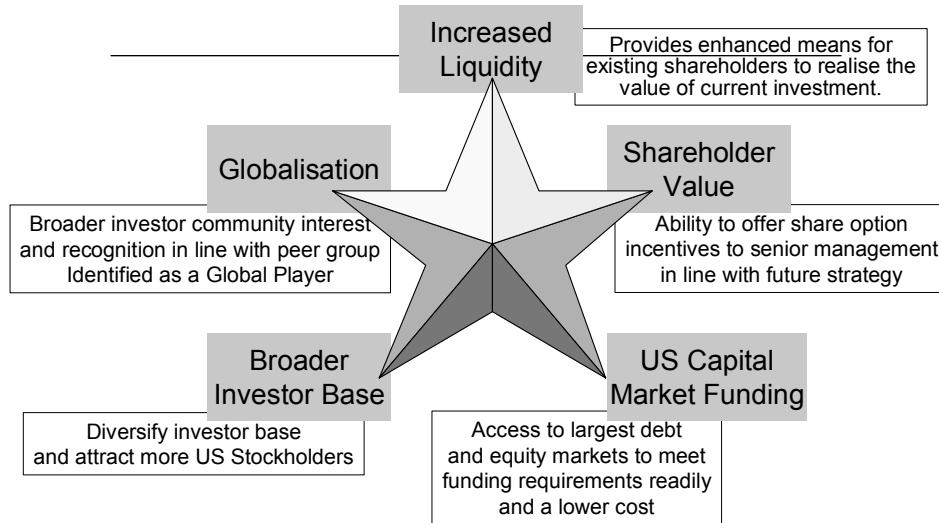


Chart 2

12

Profit Comparison of JGAAP and USGAAP (WL)

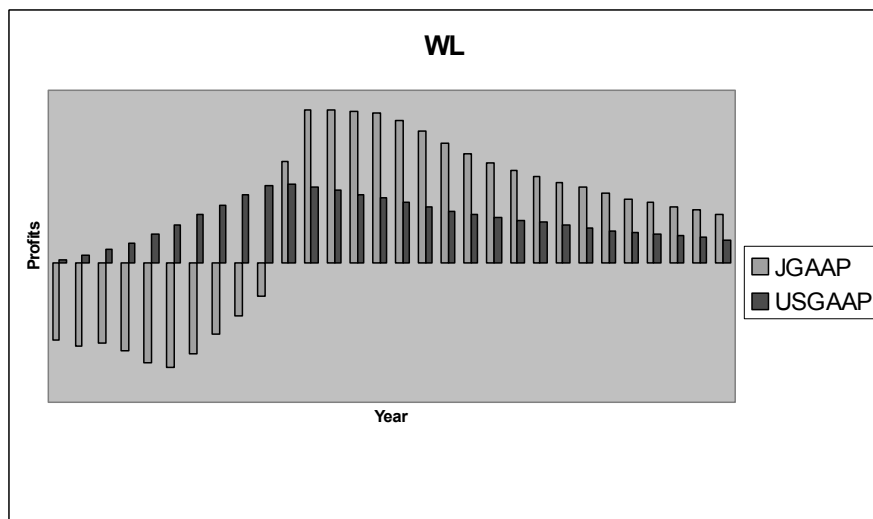


Chart 3

13

Profit Comparison of JGAAP and USGAAP (ISWL)

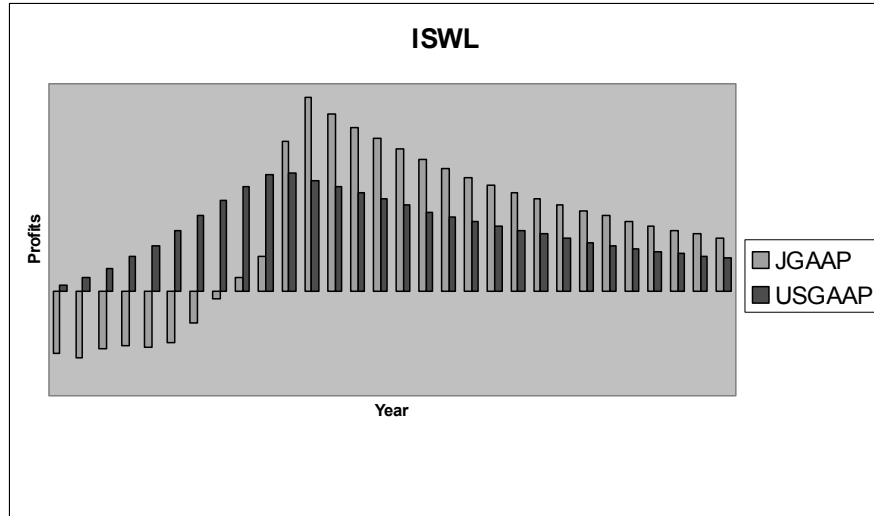


Chart 4

14

Profit Comparison of JGAAP and USGAAP (Medical)

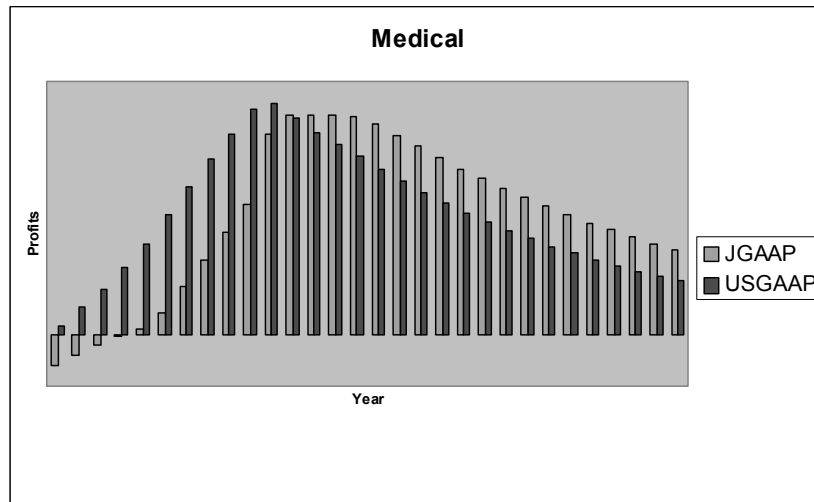


Chart 5

15

Profit Comparison of JGAAP and USGAAP (Endow)

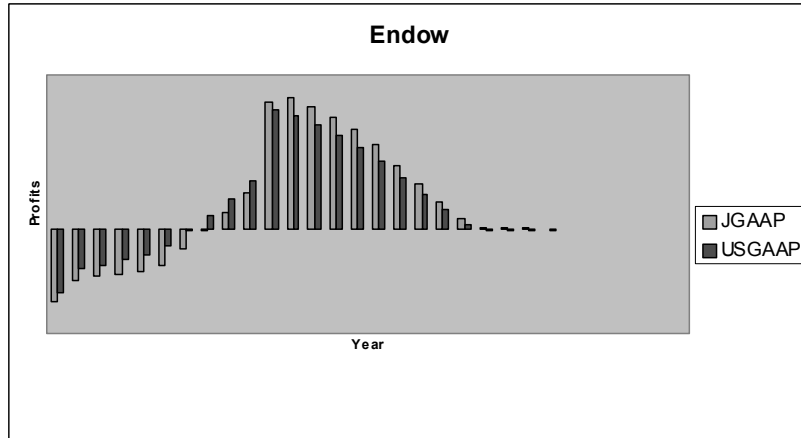
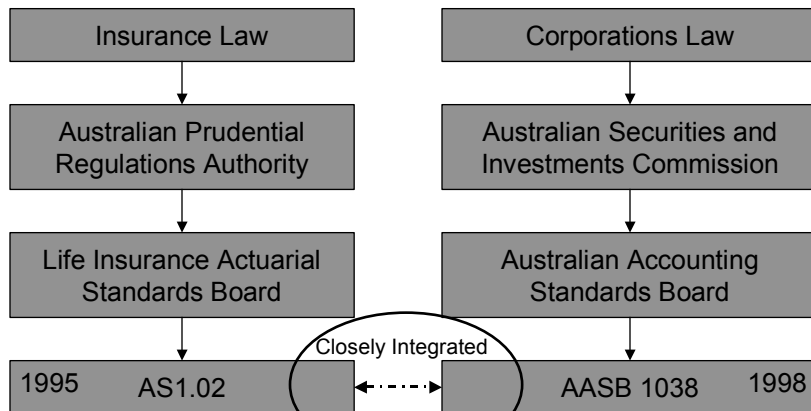


Chart 6

Life Insurance Accounting - Structure

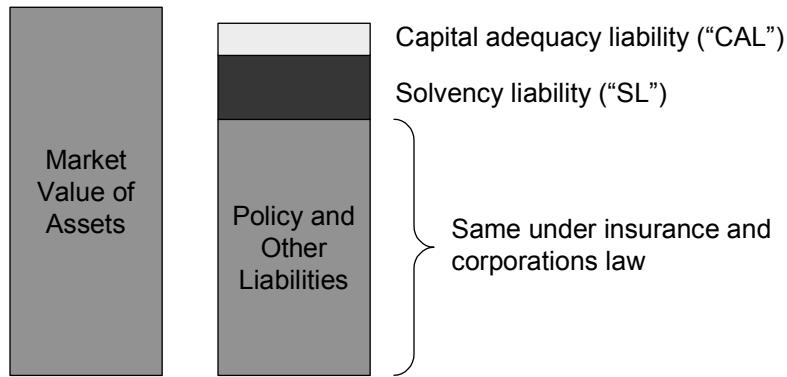


Download as PDF from
www.apra.gov.au under Life
 Insurance\Professional Standards

Download as PDF from
www.aasb.com.au under
 Pronouncements\Standards

Chart 7

Statutory Requirements in Australia

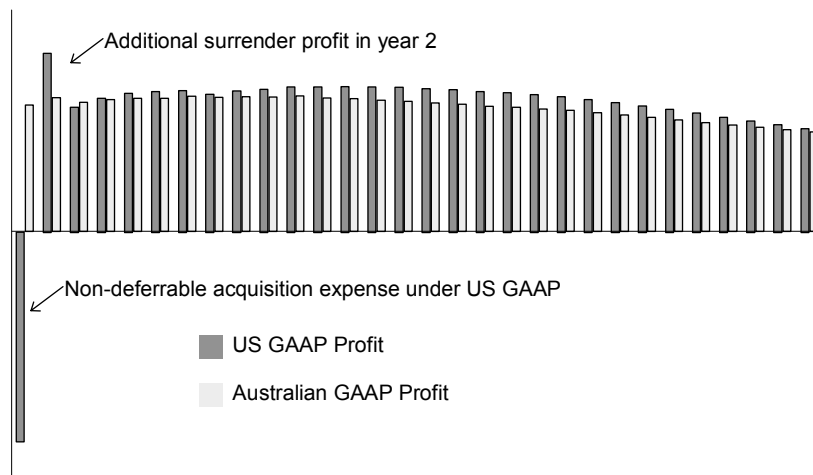


- All base liabilities are best estimates but with differing safety margins
- CA/S has additional asset and liability margins

4

Chart 8

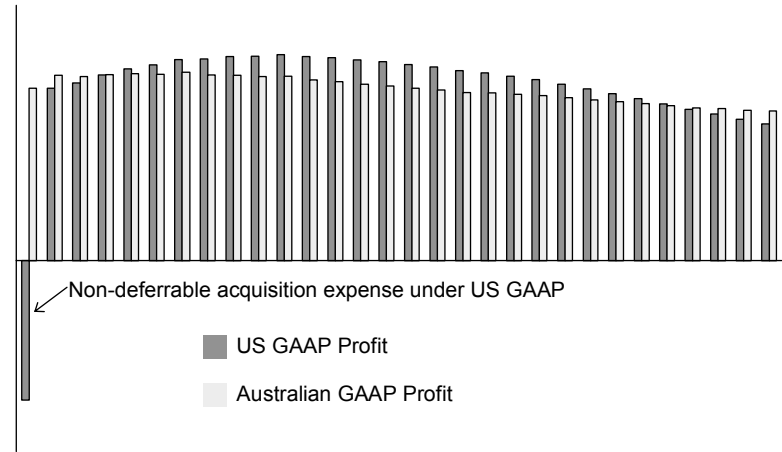
Universal Life Policy - Future Profit Emergence Without Australian Tax



7

Chart 9

Universal Life Policy - Future Profit Emergence With Australian Tax



- Tax is handled reasonably well initially - but can be very erratic with DAC unlocking