RECORD, Volume 29, No. 1*

Washington D.C. Spring Meeting
May 29–30, 2003

Session 3PD
International Accounting Standards Update

Track: Financial Reporting

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Summary: International accounting standards for insurance are in the midst of being overhauled. Panelists discuss the status of the most recent developments. Specific topics include an update of International Accounting Standards Board (IASB) developments related to the accounting for insurance products and practical implementation for Phase 1 conversion activities. At the conclusion, attendees better understand how the industry is preparing for the upcoming international accounting standard changes.

MS. EMMA MCWILLIAM: Welcome to the session on international accounting standards for insurance companies. It's my great pleasure to be moderating this panel again with William Hines. William is a known expert in the field of International Accounting Standards (IAS). He's been working closely with the American Council of Life Insurers (ACLI) and the International Actuarial Association (IAA) on looking at the impact of some of the proposals coming out with respect to both IAS 39 and the draft statement of principles (DSOP). He's a consultant at Milliman, and if you're here to hear some more about the ACLI and other work, you're in the right session because he's going to give us a presentation about some of the output of that working party.

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For those of you who don't know me already, my name is Emma McWilliam. I'm from Ernst & Young. I'm a U.K. actuary, but I'm here for two years leading Ernst & Young's global IAS insurance project on the actuarial side. My session today is going to give you a background on the IAS requirements, the phased approach for insurance contracts reporting. We will consider Phase 1, which will apply from 2005, and includes two key components for insurance companies; (1) insurance contracts, which will be dealt with under the Phase I Exposure Draft / International Financial Reporting Standards and (2) investment contracts, which will be dealt with under IAS 39. We'll also consider Phase 2, which will best estimate apply from 2007, and the fair value reporting requirements for insurance contracts. Finally, we'll look at leading edge approaches to deal with guarantees and options and business implications resulting from IAS.

The IASB is tasked with setting international accounting standards to apply for all listed companies in Europe. The main driver behind this is the need to harmonize what companies are reporting under because there are many differences that currently exist around the world, from U.S. GAAP to Margin on Services (Australian GAAP), to U.K. GAAP.

Because many companies have now demutualized in the market, cross-capital border flows are much higher, and there's a need to have consistent and understandable information in the market. The IASB has been considering fair value as the measure to ultimately meet this objective and there are concerns that FASB is also showing more interest in fair value. FASB has felt that some historical cost accounting approaches may lack relevance and a prospective fair value approach may be preferable. Some regulatory systems are also being evaluated in this light. The Integrated Prudential Source Book (IPSB) in the U.K. is a classic example of a solvency-based system that's moving toward more fair value.

So, all European-listed companies have to report under IAS by 2005, but what does this really mean? You can't wait until 2005 because one or two years of prior comparatives are needed. If you're reporting in 2005, you will need at least a 2004 profit and loss comparative and that means you need a year-end 2003 position—this is not far away. Furthermore, if you're SEC listed, you may be required to have an additional year of comparatives.

Here are some of the key industry players. The International Accounting Standards Board (IASB) meets almost monthly. Most of its decisions around the direction of Phase 1 and Phase 2 were discussed earlier this year during the months of January, February and March. They have issued excellent project summaries, which are posted on their Web site on both Phase 1 and Phase 2 tentative project decisions. We met with some board members back in February, and with Peter Clark, the senior project manager for insurance, and it is believed that the tentative decisions will form an outline for the exposure draft which is going to come out in late July 2003. We'll give you some highlights of what's contained in the project summaries later.

The International Actuarial Association (IAA) has a working party that has been convened to define the actuarial guidance to apply to the ultimate standards. They recently met in Sydney. The working party prepared a number of issue papers about a year ago, and then additional papers to reflect the more recent developments around Phase I / IAS 39. They are now working on writing the guidance. The topics range from product classification to how to calculate amortized cost or fair value under IAS 39.

The IAS Insurance Advisory Committee advises the board on the standards as they apply to insurance companies. There has not been much activity to report on from this group recently.

Here are some of the key industry players. The first is the European CFO group, which you can see in Chart 1. These are the major companies that have been following the standards closely and writing response letters to the board. They are also currently working on an embedded value guidance standard (similar to the Association of British Insurers (ABI) in the U.K.) that would apply across Europe. If there were standards for the disclosures of embedded values in the notes to the accounts then the market may accept these. However, there may be opposition from the IASB, which has already come out opposed to allowing for investment margins and linking the liability valuation to the assets backing insurance contracts, which are components of embedded value.

What are the two key standards that you need to be aware of ultimately for IAS? There's IAS 39, which applies to investment contracts and to most of the invested assets on the asset side of the balance sheet. In addition, there's Phase 2/DSOP, which is a fair value standard to apply to insurance contracts. They will ultimately make up most of the balance sheet items that you'd see for an insurance company. Other standards are also applicable, such as performance reporting and first-time application rules.

The industry appears to have been successful in delaying the ultimate fair value standards and we now have a phased approach for insurance contract reporting. Phase 1 requires companies to implement fair value disclosures in the notes to the accounts as of December 31, 2006. The main reporting in the accounts from 2005 will be local GAAP with some key modifications, which we'll talk about in a minute. The board's driver behind this is to implement as many of the components of the insurance project as it can without delaying Phase 2.

My best guess still is that Phase 2 will come in 2007 because this is consistent with the board's requirements for December 31, 2006 fair value disclosures, which would be the opening position needed for a 2007 profit and loss (P&L) to start reporting on fair value. Reporting fair value in the notes to the accounts is the original suggestion made by the industry to the board over a year ago—the suggestion was to get comfortable with fair value disclosures in the notes before

reporting in the main accounts—it appears that the board may have listened in this case.

What does it all mean for the timetable? There are three key timetable components (1) IAS 39 (2) Phase 1 and (3) Phase 2. From 2005, IAS results will need to start to be reported quarterly and at the year-end. For IAS 39 and Phase 1, internally companies are going to have to and have already started to consider the impact of what their results are going to look like for 2003-04. In addition, fair value disclosures will be required from December 31, 2006 as balance sheet items. Companies can't get out of this, and one of the difficulties is that fair value hasn't been fully defined so they are going to have to decide what methodology to use. For Phase 2, best guess is that this will apply from 2007.

What does Phase 1 look like for insurance companies? First, you have to decide whether contracts issued meet the definition of being insurance contracts. Then for these contracts local reporting will apply with some key modifications. Originally, the board had a definition that was narrow and based on changes in expected present value of cash flows if an insurance risk arrived. Now it's based on there being one plausible scenario that adversely affects the policyholder and gives you a loss if a risk occurs, which is a much broader definition.

Therefore, many contracts are expected to fall under the definition of insurance and get this easy way out because they can apply local GAAP existing accounting with some key modifications. Overall, the board thinks that will result in a more robust framework in the interim and not delay them with building out Phase 2 proposals.

However, many contracts may not meet that definition of insurance and would probably fall under IAS 39 and be an investment contract liability. Such contracts would include, say, single-premium deferred annuities without GMDBs attached to them.

Now going forward under IAS, if you have two related contracts that would be considered separately for valuation under U.S. GAAP, such as during the deferral phase and after the contract annuitizes, now under IAS you look at that contract as one whole contract and look at whether or not there's a plausible event that gives you a loss. If you've got something like a GMDB that's attached to a contract, that would make it an insurance contract and get you out of having to deal with it until Phase 2.

What are some of the key modifications that need to be made to your local GAAP in Phase 1? Catastrophe provisions and claims equalization reserves may no longer be recognized. If there's currently no loss recognition test (and when you project out your future cash flows you expect there to be a loss) then you have to start to apply a loss recognition test. You have to use the same basis if you are reinsuring liabilities as if you're accepting the liabilities, so there's not allowed to be any arbitration from discounting, for example, moving from an undiscounted to a

discounted basis. You have to have a gross presentation of your reinsurance as well, and you have to separate and identify any embedded derivatives that you've got, and for some companies that applied and converted to U.S. GAAP in Europe, they're able to grandfather some of these embedded derivatives, but there's no grandfathering allowed now under IAS going forward. The grandfathering issue probably is going to be one of the main areas of concern for some of the European companies.

Therefore, it sounds relatively painless if you get your contracts classified as insurance contracts, so you get out of all of this hard fair value stuff. However, it can ultimately lock you in to reporting under fair value when you could consider some contracts to be investment contracts under IAS 39. Under IAS 39, you would have an option to value these at amortized cost of fair value.

Therefore, when you're going through and looking at your impact studies, it might not be the best approach to pick the easy way out because you might lock into a basis of reporting that you don't want.

Under IAS 39, for contracts that are at fair value, if they contain any embedded derivatives, that's fine because the whole contract's been valued at fair value. If you use amortized cost, you have to look at whether or not three conditions are met to determine whether there's an embedded derivative there. If there is an embedded derivative, you have to separate it and put it at fair value, and if there's not, you're okay.

In addition, there's the concept of initial value when you write a contract. This is the same between whether the measurement basis is fair value or amortized cost. The initial value is premiums less transaction costs. At the outset it will be equal for both fair value and amortized cost, but it doesn't necessarily matter so much for fair value what the initial value is because at subsequent reporting dates, you're going to project out your future cash flows and calculate your value at that point. It comes into play when you're looking at amortized cost because you're going to use the interest rate method, and it's what you use to calculate the internal rate of return (IRR) in your interest method.

Amortized cost for IAS 39 uses the interest method, which is similar to something that you would use under Financial Accounting Standard (FAS) 91. The transaction costs that you set up in this initial value have a stricter definition under U.S. GAAP, where the definition is based on their being closely related to the contract. Here they have to be incremental, external and directly attributable. The one that's causing the problems here is being external because if they're not external to your company, you can't take account of them, and the whole thought behind transaction costs is deferred acquisition costs (DAC) go away under IAS.

The transaction cost is like a proxy DAC. If you can't defer as much under your transaction costs, you're going to have a problem with contracts at issue. The other

difference in using this method of amortized cost is that you're likely to be unlocking your assumptions from period to period, and you might get some volatility coming in through that.

To demonstrate some of the basic calculations to calculate the effective yield under this method and the impact of this external cost, Chart 2 shows a simple policy premium paying 1,000, commission 20, and now we're looking at the commission. Is it paid to an employee or is it paid to an independent? If it's paid to an employee, it's not external. If it's paid to an independent, it is.

A bonus that's paid is not directly attributable, so that doesn't meet the definition of transaction cost. A home office expense isn't either, and the contract matures in one year at 1,100. The initial value, which was the premium less the transaction costs for the independent case, is 980, and for the employee, it's 1,000.

You might see some companies trying to collude with each other to set up some sort of external company that they put all of their transaction costs through to get the result out that they want. It is possible the IASB will come to a more sensible decision concerning that definition, and this issue has been raised. We'll have to wait and see, but that's how it stands now.

Fair value under IAS 39 is defined as an asset that could be exchanged, a liability settled between knowledgeable, willing parties in an arm's-length transaction. What does that mean? That has more of an exit value approach to it, which then creates confusion because there's initial value that was mentioned, which is more of an entry value approach. Then we think about what actuaries use in the market. That's what we would consider embedded or appraisal value and is a discounted value approach. There's then the DSOP, which is based on expected present values, and is more of an option pricing approach.

All of these methods are causing pain for the IAA, but it looks like the direction is moving toward more of an entry value approach initially under IAS 39. It would seem unlikely that the board is going to have fair value under IAS 39 and fair value under Phase 2 DSOP to be that different.

Will there be a gain or loss issue on any of these measurement bases? Under amortized cost, the loss at issue is equal to the indirect costs. Otherwise, it's break even. Under fair value, it depends on which fair value approach you're using and we'll show you some illustrations under the fair value and profit issue later.

On the subject of profit at issue, we surveyed about 800 actuaries at a recent SOA event, and it was almost 50-50 as to whether or not there should a loss or profit or break-even issue, but almost 60 percent said that there should be a break-even issue requirement.

That gives you a flavor for Phase 1. To summarize, under Phase 1 insurance contracts are at local GAAP with some key modifications, and under IAS 39, which are your investment contracts, you've got the option of either amortized cost or fair value, with embedded derivatives being separated and valued at fair value.

Let's move on to Fair Value for Phase 2, which is potentially 2007 and beyond, and discuss some of the key decisions that have been made in the board's discussions in January and February that are expected to form the outline for the exposure draft. It applies to insurance contracts, not insurance companies. It's one single fair value type approach based on expected present value of cash flows: project your cash flows and discount them. Project them using best-estimate assumptions but discount using a risk-free rate.

The risk-free rate leads to lots of contention because that likely gives rise to losses at issue on products that are asset-intensive. There is some letup here, and the board has decided that credit standing should be reflected in the fair value, but this is credit standing in the sense of claims-paying ability of the company rather than on the company's credit standing.

Some companies do publish claims credit ratings on their Web sites. They're normally a couple of notches different from the company's own credit standing, and that would enable you to use a higher discount rate when you're valuing your liabilities and cause less of a strain at issue.

The board said that it wanted market assumptions to apply, but it recognizes that there isn't a mortality index out there, so for non-economic assumptions, an entity's own experience can be a guide. We have an entity-specific approach to assumptions with fair value for the rest of it.

Adjustments for risk should be made in the cash flows or in the discount rate, and they're known as market value margins. One thing that's come out of the board is that there should be no net gain at issue unless there's market evidence. Before, when we were doing these profit analyses, we were likely to get big profits at issue on some contracts such as term insurance and losses at issue on asset-intensive products.

Now the board is going to require you to pad your market value margins to get zero at issue, so that's implementing some sort of conservatism in there and in my mind that isn't fair value, but it's concerned about recent market events such as Enron and there might be other things embedded in insurance contracts. It doesn't want up-fronting of profits, so it's introducing this conservatism.

Another thing that it's been heard saying but hasn't actually reported is that cash value floors might come in as well, which could create even more conservatism in the results and cause strains when you compare that to the current environment.

There's uncertainty concerning the inclusion of renewals. That definition's still outstanding. Option pricing techniques need to be used for guarantees and options, and for performance-linked contracts, you can take into account the assets backing the business. For all the other contracts, you have to consider the valuation of the liabilities to be completely independent of the assets.

For those of you who have been to these presentations before, we've concentrated on U.S. products. Therefore, for a change we will consider a U.K. product in Chart 3. If you are interested in looking at the results for the other products, look at my former presentations on the SOA Web site. This is done in the spirit of giving something new up here.

This is an immediate annuity, with a single premium of £100,000, an annuity of £8,750 per annum paid monthly. The investment yield on this is 6 percent, and that's about 1 percent higher than the risk-free rate in this example. The AA-rated corporate bonds are an assumed half-a-percent spread. What do you think is going to happen at issue if we assume that there's going to be a risk-free rate in the valuation? What would you expect might happen?

You will have a loss. What do you think might happen under embedded value?

FROM THE FLOOR: You wouldn't have a loss.

MS. MCWILLIAM: Yes, the results are relatively better. Embedded value pricing reporting allows companies to indirectly take account of the higher investment returns in the valuation, whereas under fair value you cannot. The board has explicitly said it doesn't want companies taking into account the investment spreads, but for insurance companies, this is frequently done in pricing. Therefore, front-ending of profit will be deferred under IAS relative to embedded value because you're discounting at this risk-free rate, perhaps with an adjustment for the credit risk.

This is what the results look like (Chart 4). This shows U.K. GAAP. We disclose embedded value, which is more important, in our notes, and that gets a lot more interest. Profits at issue and investment spreads are taken into account there. Concerning IAS fair value, you have that big loss at issue. Thereafter, margins emerge together with the unwinding of discount and everything behaves if your expected experience is as expected. In this example, fair value is calculated using a risk-free rate. If you made adjustments for the claims credit paying, that would take you up a bit, so you wouldn't have such a big loss at issue.

The next slide (Chart 5) summarizes moving from the regulatory to the fair value DSOP approach. For regulatory, we have the prudent liability on the left. For embedded value, you're holding an asset on your balance sheet of the value of your in-force business. Using that, you can calculate what your embedded value liability is, and your embedded value liability can be calculated in one of two ways using

either an indirect or a direct approach. If you use your indirect approach, you can do that by taking the market value of your assets and subtracting from it the value of the in-force business, and that's your EV liability.

Equivalently, you can do it using a direct approach. Project your best estimate cash flows and discount them, but use something that you think is more reasonable. The DSOP approach is akin to the EV liability direct approach, but now we have an adjustment for credit risk in there.

To give you a flavor for some of the volatility that occurs under IAS, because any changes that you make are capitalized, and because you're always unlocking your assumptions and using your best estimates, Chart 6 shows a single-premium deferred annuity policy. It has interest-sensitive lapses when the product's not competitive. The investment strategy is one-, five-, and seven-year A-rated corporate bonds. The crediting strategy is portfolio book yield less 132 basis points. The company is leveraging its credit position. The credit spreads are quoted here as well.

What I'm going to show is that large changes in interest rates have a significant impact on the profit emergence, and under IAS, it looks like companies may need to move toward more of a matched position if they don't want volatility to be coming through into their balance sheets.

Chart 7 shows what happens if interest rates follow the forward curve. Returns are the same in both cases whether you have the one-, five-, and seven-year strategy, which is the blue chart, or the green chart, in which the company's invested longer in seven-year bond strategy (see Chart 8). What do we think is going to happen if interest rates pop up by 3 percent? How's that going to impact the baseline where the company is more closely matched and be invested in a longer duration liability?

Interest rates go up. The market value of assets falls and the value of your liabilities falls. Overall, in this example, there is a loss. In the blue scenario, the baseline position is matched and the loss is small, and we get a big loss coming through in year three in the unmatched position.

That gives you a flavor of some of the volatility and is a comparison to embedded value under IAS. Now we'll have a look at some of the things related to guarantees and options. Again, through the survey that we did at the last SOA meeting, we asked you what you would value guarantees and options at embedded in contracts, and it was overwhelming that almost 75 percent said it should be at fair value. Other options would be only when it's in the money or not at all.

Chapter 1 of any derivatives book that you pick up on valuing derivatives will separate the payoff matrix components, and this is where insurance contract guarantees are similar to embedded derivatives. A guarantee may pay the greater of quantity A and B, but the components of that guaranteed cost is the excess of B

over A and the underlying quantity, quantity A, and it's that piece that provides the link between looking at guarantees and options and valuing them using option pricing techniques. To value this, you need to consider the payoff, which is the maximum of that cost, and zero at all future times in your contract. However, IAS 39 makes it more complex because while we might consider many insurance items to be embedded options or guarantees in products, they do not meet the strict definition under IAS 39. If there's some insurance risk, it drops out, and it's not required to be reported at fair value in Phase 1. That's giving the board a lot of concern—that some significant embedded guarantees may not be captured at fair value.

Chart 9 shows the decision flowchart for considering whether something is an embedded derivative. First, does the value change with some 'underlying', such as the FTSE or the NASDAQ? Is there little or no net investment when it's settled at some future date? Is it exempted because it is insurance? If it's an insurance contract, it's exempted from having to be fair value in this case. Otherwise it will have to be dealt with and separated at fair value, and contracts that are in that troubling set are things like GMDB, where that's classified as an insurance contract, so it could be stripped out and go under Phase 1 and not need to be fair valued. The board is looking toward having some disclosures of these amounts at fair value, but now it doesn't look like it's going to require them to be fair-valued.

Let's consider other contracts. For example, is a guaranteed minimum income benefit (GMIB) a derivative or not? If it has a life contingent part to it, it's likely that it wouldn't be a derivative, and if it hasn't, it would be classed as a derivative and needs to be separated. As we mentioned earlier, some differences from FAS 133 are that there's no grandfathering here, and there are going to be implications for insurance companies because they're going to have to separate and identify these contracts and potentially go back to before some of these contracts are grandfathered.

If you are using a market-consistent approach to valuing your guarantees and options, two of the main approaches that you can use are replication and simulation. Replication involves replicating the liability cash flows with an asset or group of assets and observing the market price of these to set the value. Simulation involves performing many stochastic projections to value the guarantee.

Some shortcuts can be made by looking at whether there are any closed-form solutions, for example, Black-Scholes or lattice methods can be used from your simulations. In all of these approaches to get a market-consistent fair value, you're assuming you don't get anything free in this world—there is a complete market and no arbitration.

Chart 10 demonstrates replication. The first set of cash flows at the top includes the underlying contract (normal benefit) and the guaranteed cost. The next step of replication is to try to find an asset that replicates those cash flows. That's the

second one down. First, find a replicating asset for the normal benefit. If you have fixed and certain cash flows, such as a term insurance product, that would be easy because you could just use your risk-free forward rate. If you wanted to adjust that for credit risk, you may use a swap rate, for example. For the guaranteed cost, you separate it, and you would look to find a derivative that matched it. The result is a block of assets that replicates the value of your liabilities, and you can now put a value on your liabilities. You're not using the liabilities directly. You're pricing them by reference to something that's out there in the market.

The other alternative is not to use stochastic or simulation techniques, for which there are two main approaches under discussion. The first is a risk-neutral approach, which calibrates the stochastic projections to a risk-neutral (risk-free) position, and then the volatilities are calibrated to the market.

The second is a deflator approach. Deflator's a buzzword for companies to project out their stochastic projections using more realistic assumptions of what you would expect, so there's a premium for investing in equities, which will enable you to reflect more readily management's behavior according to different investment scenarios, but then you use a deflator to squeeze that back down into something that is risk-neutral itself. You're getting back to a risk-free idea, and the deflator's like a discount rate to achieve this. The overall results should be the same.

Some of the complex areas that you have to deal with when valuing these guarantees and options concern policyholder behavior, management decisions and the fact that these are pretty uncertain cash flows that we're dealing with. You're not going to find a replicating asset too easily. We've seen companies do shortcuts by using a swap curve for fixed certain cash flows, and then for the others, companies are investigating derivatives to match the guarantees. There may be some shortcuts available depending on the deepness of the guarantee. If it's way out of the money, you may decide to hold little or ignore it, but we've been burned by doing that before, or if it's way in the money, it's a lot easier to value.

When dealing with demographics, you may want to project the extreme scenarios. Look at what your lowest expectation is, look at what your highest expectation is, look at the range and then pick something within the range rather than trying to get the exact answer. Use correlations of results or pre-calculated tables. Having some sort of pre-calculated scenarios that you want to test and only using those at the valuation date helps to cut down the time that you're running with them. The advantages of using a market-consistent approach is that you get to understand the true value of these guarantees and options out there in the market, and it may help you with your hedging strategies and with mitigating the risk off of your balance sheet.

Let's discuss business implications. They are far-ranging for IAS for companies and could potentially impact product and investment strategies. Companies need to be more closely matched. You don't want to lock into products now that give you bad

results under IAS. Companies may start to look at products that give them favorable results. Massive retooling of systems is going to be needed to capture data.

Some of the qualitative disclosures under IAS are going to be the hardest to deal with. Concerning regulatory impacts, for some countries the tax is on the management basis, such as in Germany, so IAS is going to flow through directly to its tax calculations. Not surprising, it doesn't like getting rid of things like catastrophe provisions because that's going to require it to now have a hefty tax bill.

On the regulatory side, there seems to be a general trend in Europe of moving toward a risk-based capital approach behind regulatory regimes. Aligning the regulatory reporting and IAS will help to take some of the pain out of it. For analysts and investors, there's going to be a new way of communicating to these people.

After the end of December 31, 2003, analysts are going to start realizing that companies are reporting or at least internally understanding the effects of IAS because that's going to be one of the first numbers that they're reporting in their accounts, and they're going to be asking questions of people. Similarly, there's going to be a movement between balance sheet items that are classified as equity and debt, and that would change ratios that analysts use to assess companies. That communication needs to be happening with analysts.

Performance measures internally will change. We might see some stronger division of responsibility between those writing insurance risks and those managing the investment risks. Implementation's going to be a huge undertaking, requiring skilled expertise, and will no doubt provide many jobs for actuaries.

Companies aren't considering this to be a compliance exercise. They're using it as a strategic opportunity to evaluate some of the things that they're doing within their firm and making sure that this is something that embraces all components of the way that their firm does business on a global basis.

MR. WILLIAM C. HINES: I'm going to confine my remarks this morning to two specific topics. I'm going to talk about the project that Emma mentioned, which is the joint project between the ACLI and the IAA looking into the ramifications of some of the implications of the IASB proposals and other alternatives.

I'm also going to touch on the development of the international actuarial standards. I'm involved with that process. Emma talked about the recent meeting that we had in Sydney, Australia, and I'm going to talk a little bit about the specific issues that we think are coming up around Phase 1 of the project and talk about where we're headed.

First, I'll talk about the joint project. The purpose of the project is familiar to the SOA members. It fits what we're trying to accomplish. There's been a lot of speculation about the implications of the proposals at the IASB, but there's been little in the way of real-life examples that the IASB has had to understand how these proposals would work in practice. When the ACLI responded last year to the IASB about some of the proposals that it was coming out with, it had proposed an alternate method for valuing insurance contracts.

A subcommittee of the IAA suggested a joint research project to develop educational material essentially by exploring illustrations of the fair value approach that the IASB had been looking into for Phase 2, the held-to-maturity (HTM) concept that the ACLI was putting forth, and trying to put that in the context of a real-life product and real-life economic examples to see what would happen.

The focus is on Phase 2, but there are implications for Phase 1, especially as more fair value disclosures come into play in Phase 1 in 2006, as Emma was mentioning, as well as around IAS 39, which has the fair value option to value investment contracts.

Before I go into specifics of the project, I want to tell you that the conclusions of the project are not really earthshaking, especially for actuaries and especially for actuaries who have been involved with this project. However, they are important enough that the IASB has invited our working group to give an educational session on the project in July. The International Association of Insurance Supervisors (IAIS) has also asked us to join it some time this year to explain what's happening with the project. You'll find that some of the conclusions make a lot of sense, and maybe they don't jive with some of the accounting pronouncements that are coming out.

The joint project started with a simple product—a single-premium immediate annuity. This product was chosen because its financial performance depends on only two variables: mortality or survival experience and investment return. For this type of product, expenses for maintenance of the product tend to have a minor effect. Another issue is it's available in most countries that have life insurers. Emma mentioned earlier her illustration was indicative of the U.K. Other than the guaranteed annuity payments, there were no embedded guarantees, options or derivatives included in this product, so it was fairly simple.

We did look at both a life-contingent and a term-certain annuity. The life-contingent one would be valued under the insurance standard, but the term-certain annuity would be valued under IAS 39, and we wanted to explore the implications of that. As a starting point, we assumed that a deep liquid market exists for securities that can be used to construct a replicating portfolio, similar to what Emma was talking about, that can be used to construct a set of cash flows whose characteristics in aggregate can match the expected characteristics of the liability cash flows. We used fixed income. We based this on fixed-income security prices consistent with publicly traded bonds or Treasury securities.

We assumed that the contracts were issued on December 31, 1970. We priced the products then using measures that are appropriate for today, something like a 15 percent return on a statutory basis, but we priced using the economic and mortality assumptions appropriate to 1970. We then tracked the financial performance of the products from 1970 through 2002, a period of 32 years, using the interest rate paths or experience over that time frame, and that time frame had a lot of volatility of rates. You saw normal-shaped yield curves, steeply shaped curves, flat-yield curves, inverted-yield curves, high-yield curves and low-yield curves, so there were all kinds of stresses on the economic assumptions. We thought it was a good test of how valuation procedures would perform.

We evaluated combinations of asset and liability valuation frameworks. For assets we used two bases: amortized cost and fair value or market value. This is similar to the two methods you might find available under FAS 115. For liabilities, we valued them using the HTM concept that the ACLI had put forth and the fair value concept that the IASB had put forth. In addition, we had valued the liabilities under U.S. GAAP to give us a baseline comparison. We had a total of six combinations: three liabilities and two assets.

The fair value liability method that we modeled had the following characteristics: It's a fully prospective method. It takes into account all policy-related cash flows. That means not just the contractual cash flows, but also the administrative costs associated with that product.

We included a risk margin in the valuation, and this was done by adjusting the projected cash flows themselves. The risk margin benchmark was that it was set as a percentage of the underlying risk-based capital of the product. It was calibrated to the entry price criteria so that there was no gain or loss at issue. This is an artificial constraint put on the fair value process that, as Emma pointed out, has been discussed as a possible requirement by the IASB. Assumptions under the fair value approach are updated or unlocked at each valuation date, and the specific assumption that you need to worry about here or that's of concern is the valuation interest rate.

During the project, we looked at different sets of discount rates. We used high-grade corporate bond discount rates, essentially an A quality, and we also looked at using Treasury rates for discount rates as a proxy for the risk-free rate, and in both situations we imposed the artificial constraint of forcing no gain or loss at issue. We sent out an initial report and intend to issue a second report shortly. We're leaning toward discounting at the corporate A-quality rate.

The HTM valuation process as proposed by the ACLI was in response to a couple of issues that companies in general had with the single fair value approach that the IASB was talking about. One of the two of the major issues with a single fair value approach was that it emphasized exit price and the price at which you could sell it to someone in an arm's-length transaction.

There was a general feel that insurance liabilities are not managed on a trading basis. They're managed on an HTM basis. There is no secondary market for insurance products on a contract-by-contract basis, and in a lot of cases there are significant legal restrictions on selling the liability to another entity.

Another concern was that there's more than one asset valuation approach allowed under IASB rules. Under IAS 39, under which most financial instruments would be valued, it allows both amortized cost or fair value approaches. IAS 39 has similar characteristics to FAS 115 with the trading, available for sale and HTM categories. Another issue is that the banks are allowed special treatment for the loans that they originate, to treat them at amortized cost regardless of the category that they might otherwise put them in. It was felt that it may be appropriate to propose an alternative liability valuation method that's more consistent with an amortized cost basis.

The ACLI put forth this HTM valuation method, which is similar to the fair value approach except for the fact that assumptions are locked in at issue, and they're subject to a loss recognition test, where the loss recognition test would be based on something like a cash-flow testing asset adequacy approach that's used today.

I'll talk a little bit about the conclusions of the project, and I'll have some illustrations to help clarify the conclusions. We drew a number of conclusions, but the most important one is this: Consistent asset and liability valuation is necessary if you want to reflect the underlying business reality of the products. If you get inconsistent valuation, you're going to get significant noise, so much noise that you can't really discern what's happening underneath.

To start off the illustrations, what we did in Chart 11 was illustrate an inconsistent valuation approach. We considered where assets were measured on a market value basis, and the liabilities were measured under U.S. GAAP. This is an illustration of the product being issued in 1970 and the subsequent 32 years worth of financial performance. This is earnings, and there are no taxes involved in our illustrations at all. It's all done on a pretax basis. As in this example, you can see that the financial performance moves around quite a bit, and this is in relation to the fact that interest rates moved quite a bit over the intervening 32 years.

As interest rates increased, the market value of the assets decreased, and that amount flows through the income. You can see in years four and 12 or so, there are big drops in income. When interest rates decreased, market value of assets increased, and you see significant gains. The liability side doesn't have any offsetting volatility because under FAS 60, which is how we valued this product for U.S. GAAP, amended by FAS 97 for limited pay contracts, the liability assumptions are locked in. For the purposes of our illustrations, we assumed that there would be no loss recognition, just to try to show what would happen here. We did do subsequent illustrations where we unlocked the mortality assumption as well.

Chart 12 illustrates when assets are held at market and liabilities are held using the HTM approach as proposed by the ACLI. Under the HTM method, it locks in the initial spot yield curve as the discount rate, and unless you have loss recognition, that set of valuation rates would be locked in, and there'd be no change. It's a similar pattern to what you saw on the previous slide. Asset valuation is moving around. Liability valuation is not, and you get this pattern of earnings.

And third, what we consider an inconsistent valuation choice or set would be when assets are measured at amortized cost, but liabilities are measured under fair value (Chart 13). Here you get similar volatility, but in this case, all the volatility in reaction to interest rates is on the liability side of the balance sheet. You get an earnings pattern that's opposite what you saw on the other two graphs.

On Chart 14, they are all graphed on one, and you can see that given a choice as to how to value your assets, you could end up with companies that, for a given change in interest rates, have earnings that are moving in opposite directions. It's pretty straightforward.

Chart 15 portrays a situation where we consider more consistent asset and liability valuation. I've scaled this graph to be exactly the same as the three prior graphs, but you can see here assets are measured at amortized cost. Liabilities are measured under the U.S. GAAP basis, FAS 60. Both of them essentially lock in the valuation rates on the asset and liability side, and earnings emerge, as you might expect, with the unwinding of the discount and the release of the risk margins.

Chart 16 shows another consistent basis when assets are measured at amortized cost and liabilities are measured on the HTM basis. Again, you don't have the volatility associated with those three prior graphs.

Chart 17 is a situation where assets are valued at market value, and liabilities are measured on a fair value basis. This is an option under the IASB framework. Again, there is limited volatility because in this case both asset and liability values are moving in reaction to the interest rates, and they're moving fairly consistently here.

In Chart 18, the three of them are combined on one graph, and it shows us it's not as important how you measure the liabilities themselves, but it's really important how consistent you are in measuring the assets and liabilities.

Chart 19 is the same prior graph I showed you, but I've rescaled the graph to show you that those lines are not exactly the same and that you do get different earnings patterns. The earnings are consistent but not exactly the same. In all these illustration we've removed the earnings on surplus just to make the comparisons easier. Under the fair value approach, what you end up with is the release of the risk margins. That's the green line. Under the HTM approach, you would get the same graph or the same chart of patterns of earnings as under the fair value approach if the yield curve was exactly flat.

However, in 1970, when this product was priced and the valuation rates for the assets and liabilities under the amortized cost and HTM basis were locked in, it was a positively sloped yield curve, and under amortized cost basis of valuing assets, you lock in those specific interest rates, the specific spot rates there, and that tends to force earnings out into the future.

Under the U.S. GAAP basis, which is the red line, the reason why that pattern looks a lot different is that the risk margin included in the U.S. GAAP illustration was set on a different basis than the underlying risk-based capital. It was based on the mortality improvement using an expected mortality improvement of 1 percent annually, and so in the early years, it's building up the risk margin. In the later years, it's releasing the risk margin. In the fair value and HTM approaches, the risk margin is based on risk-based capital, which is the highest at the issue, and is released slowly over time as the capital runs off.

We came up with some other conclusions. This no gain or loss at issue requirement, or an entry value requirement, can lead you to some rather unusual results. I said earlier we had looked at and done most of our work on the A-quality discount rates. If we use an A-quality discount rate, and we set the risk margin as a percent of the underlying risk-based capital, what can happen is that the market value margin or the risk margin is 7.8 percent of the underlying risk capital. However, if we use a risk-free discount rate, and we force no gain or loss at issue, you have to have a negative risk margin, and that negative risk margin in this case was approximately 25 percent of the underlying risk-based capital.

If you start putting artificial constraints on the fair value process, such as cash value floor or no gain or loss at issue, and still require risk-free discount rates, you're going to get something that makes absolutely no sense at all. I didn't illustrate it here, but I can tell you the financial results that you get when using the risk-free rate and the negative market value margin are essentially the same as the financial results you get using the A-quality discount rate and the positive risk margin. It's forcing the valuation system to conform to these artificial constraints. It gives you some things that probably are going to be hard to explain.

Another conclusion was that discounting with nonlevel rates could affect the projected earnings pattern. We talked about how the earnings pattern—the difference between the green line and the yellow line—was impacted by the shape of the yield curve. We did some analysis on this, and it's the amortized cost basis of valuation of the assets that is affected by this. It's not the liability side.

But the steepness of the yield curve will affect how early you recognize earnings versus how late, and in the situation where you get an inverted yield curve, you'll recognize earnings earlier on an amortized cost basis than you would on a fair value basis. It may not be quite intuitive. Chart 20 shows it as a separate graph.

Emma talked about the fact that the IASB wants to value insurance liabilities independent of the underlying assets unless the liabilities somehow are impacted by the asset cash flows. In that situation you need to set a discount rate that may be independent of the underlying assets, and if you don't require risk-free rates, how do you set those valuation rates?

If you require a risk-free rate, how do you come up with a risk-free rate? What is risk-free? It's a significant issue, and the IASB does not seem intent on answering that question. It'll be up to the accountants and the actuaries to try to figure it out, but that is an area where it's going to take some significant interest here.

I want to touch quickly on the next steps of the ACLI/IAA joint project. We're going to be publishing a second and hopefully final report on the first phase of our project probably within the next couple of weeks, and we are talking about a second phase of that project to look at illustrations of performance-linked products, such as the universal life for participating products.

The IAA is looking to see if there are other jurisdictions or other industry groups outside the United States that might be willing or interested in doing a joint research project in a similar way, perhaps something that might illustrate non-U.S. products and non-U.S. economic environments. Look for that.

I'm going to move to the issue of actuarial guidance. As I mentioned, this is something that I'm involved in. I'm going to touch on development of actuarial standards or educational standards, educational material at the IAA, some of the issues for Phase 1 and where we are in the process to give you an idea of where we're going to head for next steps.

IAA is an umbrella organization representing the member associations in discussions with international bodies. The IAA has been involved with the IASB for five or six years on this insurance project and has done a lot of work commenting on early drafts when it was the old International Accounting Standards Committee (IASC), and it had the Insurance Steering Committee, as well as working with the IASB now. It's been heavily involved in the pieces.

The development of guidance is under the auspices of the Insurance Accounting Committee. The IAA does all its work through committees. There's an Insurance Accounting Committee that's headed by Sam Gutterman, PWC, and we've developed a subcommittee to develop actuarial guidance specifically with regard to actuaries working under IASB standards for insurance products.

Most of that work is being carried out by a smaller drafting group of five people, plus three to six others who provide oversight and editorial comment. The scope of the work is to provide guidance to actuaries working with IASB standards for insurance contracts and certain financial instruments. It deals with products that might qualify under IAS 39, might qualify under IAS 37, which is the provision for

contingent liabilities, and our charge is also to maintain regular communication with IAA member associations. I'm here to fulfill that obligation.

When we get educational material, we'll oversee the introduction of standards to the IAA members. The development process is straightforward. We took some time to develop a list of all of the potential issues we thought were coming about that would impact actuaries' work with regard to the DSOP, IAS 39 and any other IAS standard that might impact actuaries' work.

We started to develop discussion papers for every issue that was brought forth. Those issue papers are available on the IAA Web site. If you're a member of the SOA, you're a member of the IAA, and you can get onto that Web site and look at the papers. We want to solicit feedback from our members and from any actuary who has any interest in the topic, and we've set up discussion forums for every topic out there to solicit feedback. If you're interested, take a look.

The idea is to develop guidance from the feedback and from the discussion papers, and in doing that we're going to try to parallel the IASB timeframe the best we can. It's hard to develop guidance unless we have the accounting guidance that we're trying to develop actuarial guidance for, but we're trying, and the IASB has been cooperative with us to give us advance information to help us understand what's going on before it's publicly available.

One key thing I found that is noteworthy here is that there's a different mindset between the way actuaries approach problems and the way accountants approach problems, and it has led in the past to a lack of understanding as to what the IASB has been trying to accomplish.

Accountants try to approach valuation in two steps. They try to figure out what needs to be recognized, what qualifies to be recognized, in a financial statement and then they value those items that should be recognized. Actuaries tend to approach the problem of valuing everything that might have value and recognize the significant or material items, and this is a much different issue when you start dealing with different requirements for measurement and different requirements for recognition. Actuaries tend to see them somewhat similar or in one package, but it's different for accountants, and this is a particular issue around renewal premium.

The accountants were talking about how to reflect something that you can't force someone to give you. It's not a legal obligation on the part of the policyholder to pay a renewal premium in a lot of cases. How can you recognize something that you're not legally obligated to or can legally get?

For actuaries, you just stick in a probability that you're going to collect it, and you value it. It's a different mindset. It's an all-or-nothing type of thing in recognition, and for actuaries you're taking into account the probability that it's going to

happen. Probabilistic accounting is something that they seem to be coming around to for things like renewal premium, but it is a different mindset.

One of the issues that we've identified specifically for Phase 1 (most of our most recent meeting in Sydney was specific to Phase 1 issues) is the definition of insurance contract, although that doesn't seem to be too controversial now because it is so wide that a lot of insurance contracts are scoped in. What makes an embedded derivative? The definition of derivative is not the same as an embedded option or an embedded guarantee, so how do you distinguish them?

Amortized cost and fair value are allowed under IAS 39. How do you do them for insurance contracts? Best estimates, discount rates and risk-free rates have been identified. How do you come up with a risk-free rate? What is risk-free? It may be one answer in the United States. It may be one answer in an economically undeveloped country. It may be a different answer in an emerging country.

How do you adjust for credit risk? If we have to use stochastic models, if it's appropriate to use stochastic models, how do we determine that one is appropriate? How do we come up with something that can be audited? How is this going to work? The notes to the financial statements are audited in a lot of situations. If you disclose fair value in the notes, it's going to have to be audited. If you're using stochastic methods and stochastic models, those models are going to have to be audited. That's not something that accounting firms and actuaries are used to doing.

Emma mentioned that they're going to require a loss recognition test in Phase 1 if your current accounting system does not require one. I've also heard that they may use it as a minimum liability floor regardless of your loss recognition test. How are we going to implement that when there's no guidance?

FROM THE FLOOR: Could you explain the concept of loss recognition?

MR. HINES: The idea is that if you refreshed your valuation under current assumptions, the liability you would come up with would be higher than the one you're currently holding. You should recognize that liability at least as a minimum. In Phase 1 they're allowing current accounting guidance, your local guidance, to comply with IASB standards. In some jurisdictions, there is no requirement to do a loss recognition test. The IASB does not think that's appropriate and wants everyone at a minimum to have a loss recognition test in their accounting system regardless of what it says in their national accounting system.

The question is about how far you go with that loss recognition test if your current accounting system has a loss recognition test, but maybe it is not as stringent as what would be required under IASB framework. Should the IASB loss recognition test serve as a floor for that liability as well, even though you have a loss recognition test?

Some of the issues that we're trying to deal with is where do we put together actuarial standards versus where do we set educational material? What is going to be required of practicing actuaries versus what is a survey of current practice or methods that might get you there? How can you get involved? I mentioned the IAA Web site. You can become a member of some of the work groups that the AAA is starting to put together on this, and you can become involved in the IAA Insurance Accounting Committee or Subcommittee on Standards.

MR. MO CHAMBERS: I don't have a question, but I would caution people that becoming involved with the IAA's Insurance Accounting Committee may not be as straightforward as Bill indicated because you have to be representing an organization, a full member of the IAA, and most of the ones that would be here already have their representatives, but you can certainly become involved in the observer group, and I would encourage people to do that.

MR. HINES: You're right. Probably the better way is to become an interested party as part of the observer group. There is a listserv that Sam Gutterman chairs, and if you're interested in getting on that listserv, send Sam an e-mail at PWC or contact Chris Levac at the IAA.

MR. CHAMBERS: The other comment that I have is with respect to the joint project of the ACLI and the IAA. It's interesting that the pattern of emergence shows up that way primarily because the assets and liabilities in the model that you created are well-matched, and I would suggest that if the assets and liabilities are not well-matched, you're going to see with respect to the U.S. GAAP version and probably to some extent but to a lesser extent with respect to the HTM approach that the real bounces and real volatility that result when you are not well-matched will be masked by the reporting system in those two instances and that to really see what's going on you have to go to the fair value approach.

MR. HINES: That's an interesting observation. In the report that we're putting together on the project, we did look at a situation where the assets and liabilities were not well-matched. We used just a series of three bonds that tried to approximate the duration of the liabilities, and in that case the volatility associated with that was significant, but it was nowhere near as significant as the situation where assets and liabilities were valued inconsistently. It was significantly more volatile than when the assets and liability cash flows were matched.

MS. MCWILLIAM: In the single-premium annuity example that we put up in the first presentation where the interest rates popped up, the effect on the fair value liabilities was the same in both scenarios. However, the effect on the market value of assets in the longer duration scenario caused the assets to fall by more because they were longer duration assets, and that's why you get more volatility coming through in that scenario where you're not matched. That's also an illustration that you can look at.

MR. BOB WILSON: I have a question on one of your charts concerning the market value margin and the idea of requiring that there be no gain on issue, which, if we're using risk-free rates probably isn't the problem anyway. In addition, when I set my market value margins, and they're going to be different theoretically on every policy, and if I have to keep those market value margins for the rest of eternity, to go through with the policies as the policies run off, don't we lose about 99 percent of the benefit of going to a fair value, which is getting rid of having to keep historical information that has absolutely nothing to do with the current price of something in the marketplace?

MS. MCWILLIAM: I certainly agree that in moving to the no-gain issue we lose the benefits of moving toward fair value as conservatism is being introduced. The market value margins that you put in there are then dummy market value margins that may lose their meaning. If we were under fair value, you would be able to recalibrate your market value margins if you had a different view of what the market was on the risk of the product and this would impact profit emergence accordingly over time as your view of risk changed.

MR. HINES: The unit of account over which you determine those market value margins is probably going to be higher than at the contract-by-contract level.

FROM THE FLOOR: Although it's easier from a systems standpoint to do it at the contract level.

MR. HINES: That's right. If you force no gain or loss at issue, absolutely that would be easier.

MR. WILSON: The other issue is the example that you had, Emma, concerning the single-premium immediate annuity, which throws off a huge loss, and even if you put in the claims payment liability adjustment for the company, it probably wouldn't change much, especially if it was somebody like Standard Life, which I think for claims paying is still AAA, even though its bonds aren't.

FROM THE FLOOR: Just on the surface, considering the fact that we all sell these products, and, by definition, that is the market price, and you could lay them off at basically the same rate, if we go to where we price losses purely and simply because this is the "market price," isn't that exactly the opposite of market value?

MS. MCWILLIAM: I agree that the market price does seem to be more favorable and more akin to, say, an embedded value approach allowing for investment spreads in the pricing. The trouble is that the IASB has, is that it's trying to apply a consistent framework not only for the insurance industry but also with other industries such as banking and trying to gain comparability between these.

FROM THE FLOOR: What's going to happen with the banks? In Canada, I presume, banks sell five-year GICs at rates that are higher than governments and,

for that matter, higher than governments plus their spread to their own ratings. They're all AA, they're not going to add on 70 basis points and they're selling them at governments plus about 110.

MS. MCWILLIAM: Something like a GIC for banks would fall under IAS 39, and so in that case they would have an amortized cost option, which then potentially at outset would give them break-even at issue. If they use the fair value option, they would get a loss at issue, but they probably wouldn't be using that option, and that's where in my mind there's almost more uncertainty now going forward for companies because even if you decide to delay a lot of your contracts because you don't want to deal with them now and stick them under Phase 2, you miss this potential of being able to deal with some of the amortized cost and getting a much better answer than a huge loss at issue that's coming out.

FROM THE FLOOR: It's always nice to see that we will continue to have consistent accounting standards.

MS. MCWILLIAM: The conservatism is another one that beats me.

MR. JESSE SCHWARTZ: I have two related questions. Given the fact that historically the surveys that I've seen have always been critical of insurance accounting as far as facilitating the investment community's being able to identify truly what the value of the company is as opposed to using multiples of GAAP equity or earnings, how does the analyst community indicate with this approach that it really will enhance determining value? I have trouble with the fair value issue.

The other question is for this group of 15 that's putting together embedded value proposals. Where are they going with this? In other words, are they talking about standards or methodologies to do more stochastic modeling to determine embedded value, and are they talking more about putting in some kind of risk capital adjusted methodology? What's going on as far as the methodologies being used?

MS. MCWILLIAM: To answer your first question, on the analyst side or for the accounting community, regarding the concept of fair value, many things I have seen coming out of European analysts have said that the analysts liked it because it would help them to put a value on these insurance companies. The trouble is that fair value as it's defined by the board is not the value a company trades at, especially when you have this conservatism building in here. There's slow recognition of this. There are major concerns that if companies present fair value and call it fair value in the notes to their accounts, this is going to potentially damage their business. In addition, you can see that if you're writing new business and the value of new business needs to be separately disclosed, then you don't want that to be zero or negative. You want that to have a value, and that is why the driver is there for embedded value to continue. I still think embedded value

reporting is going to have a role to play because it reflects the value of the new business, as the market perceives it.

With respect to the actual standards that are being developed on the embedded value side, I haven't seen the standards myself. I'm talking to the companies individually. My general observations are that more people are moving toward the stochastic approach to value the guarantees and options embedded in contracts and then taking a haircut on their embedded value for that purpose. I would imagine that that would be part of the best practice, but they may not want to introduce that in the short term. I think they're trying to get consistency around the reporting and general standards, and an initial draft would probably come out in the next quarter to half a year on that.

MR. SCHWARTZ: But that includes some kind of required capital calculation consistent with the underlying risks of the company rather than an industry standard.

MS. MCWILLIAM: Yes, it probably would be based on the cost of the regulatory capital in the local countries that they're operating in. I'd imagine it would be very similar to the ABI standards that require it to be based on regulatory capital as well.

MR. VINCENT TSANG: (PolySystems) Every country has its own tax system, so would there be a special entry in the balance sheet that takes care of the individual country's tax differences or you defer tax liabilities?

MS. MCWILLIAM: Everybody's taxes are different, and the tax computations, I understand, are not going to be affected, so the same tax rules will apply. Unless, however, a particular country has decided to move onto taxation based on the management reporting basis. There is an international tax group that's being convened to look at tax, but I don't think there's going to be any resolution across taxation Europe-wide for at least the foreseeable future. You have to ask a tax expert.

MR. TSANG: How about the risk-free interest rate? I think you and I may have a different definition of what that should be, and it may even differ from country to country. At the end, would that be a set of risk-free interest rates for everyone around the world, or would they are by region or by country?

MS. MCWILLIAM: It's my understanding that they would be different interest rates depending on where you're writing the business. The initial stuff that came out from the IASB is that it would look to what the government yield was on, perhaps Treasuries, although the IAA is thinking more about using swap rates, which might give you better results and potentially reflect credit risk adjustment and also some liquidity premium for its being an insurance business.

MR. HINES: The IASB, in its drive to make a principles-based accounting system, is not interested in providing guidance such as you're asking. It wants to put more of the onus on the accountant and the actuary to use their judgment in coming up with those items. The definition of risk-free, as you point out, may be different in any given jurisdiction that you're in. Mainly the idea has been moving toward a definition of risk-free as being a minimum variance rate. What rate would give you the least volatility over time? For a given jurisdiction, it might not be the yield on a central government security. It may be a yield on some type of corporate bond. The industry may be more stable than the underlying government. It's definitely up in the air.

MR. TSANG: I think it would be a difficult issue for companies that have a multinational business because sometimes they reinsure from one country's business to another, and with this different set of risk-free interest rates, that would create inconsistencies once that occurred.

Chart 1

Key Industry Players and Events

- International Accounting Standards Board (IASB)
- International Actuarial Association (IAA)
- IAS Insurance Advisory Committee
- Industry Players

6 #

Chart 2

Example

Premium	=	1000
Commission	=	20
Bonus	=	10
Home office	=	5
Maturity in One Year	=	1100

Initial Value	=	980 (independent), 1000 (employee)
Effective yield	=	13.2% (independent), 10.0% (employee)

17 #

Chart 3

Immediate Annuity

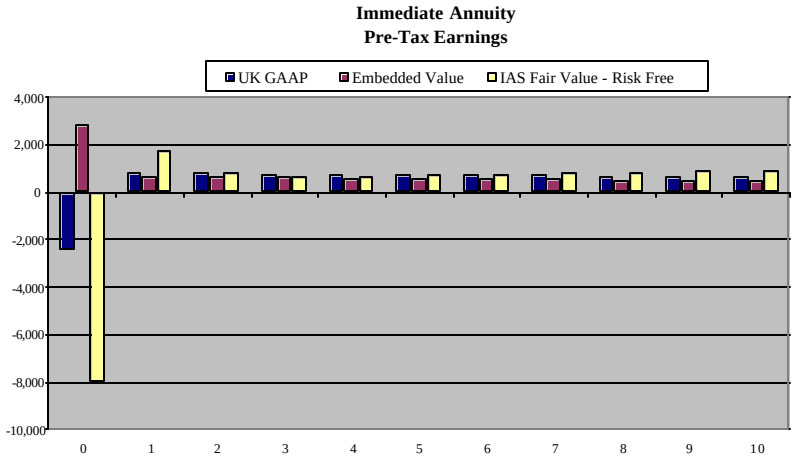
Assumptions

- Company is rated AA
- Single premium of £100,000
- Annuity income of £8,750 p.a. paid monthly
- Investment yield is level 6% market return, which averages about 1% more than risk free rates
- AA rated corporate bonds = 0.5% spread over risk free rates

24 #

Chart 4

Immediate Annuity



26 #

Chart 5

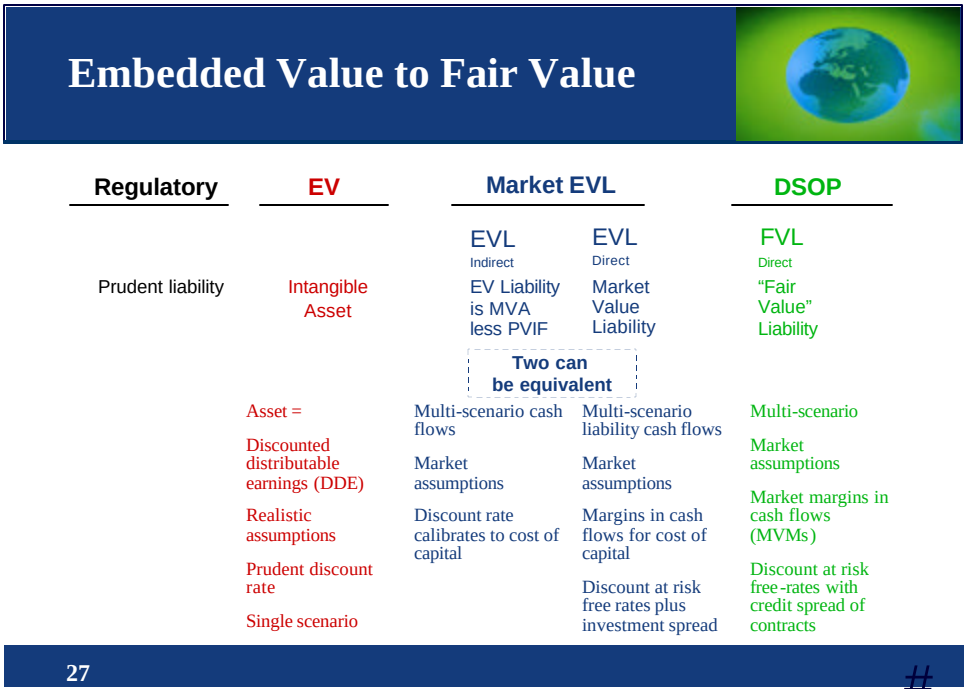


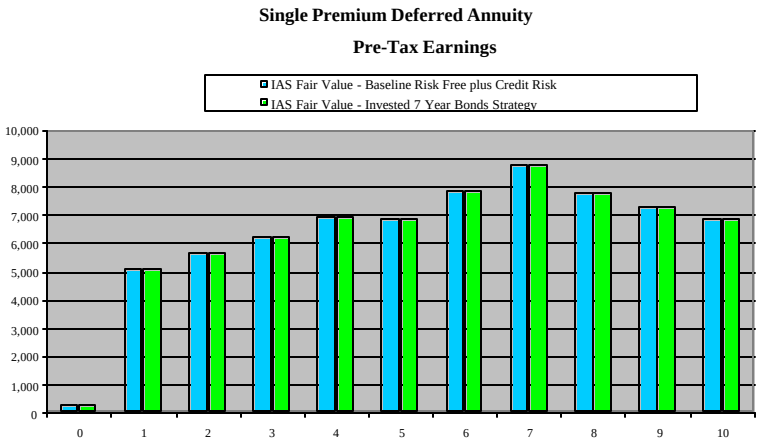
Chart 6

Assumptions

- Lapse rate in year 6 bumps up to 20%
- Interest sensitive lapses when product not competitive
- Future interest rates follow the implied forward curve
- Investment strategy: 1, 5, 7 year A-rated corporate bonds
- Crediting strategy: portfolio book yield less 132 bps
- Credit spreads (net of defaults) over treasuries
  - A-rated corporate bonds = 144 bps
  - AA-rated corporate bonds = 112 bps

Chart 7

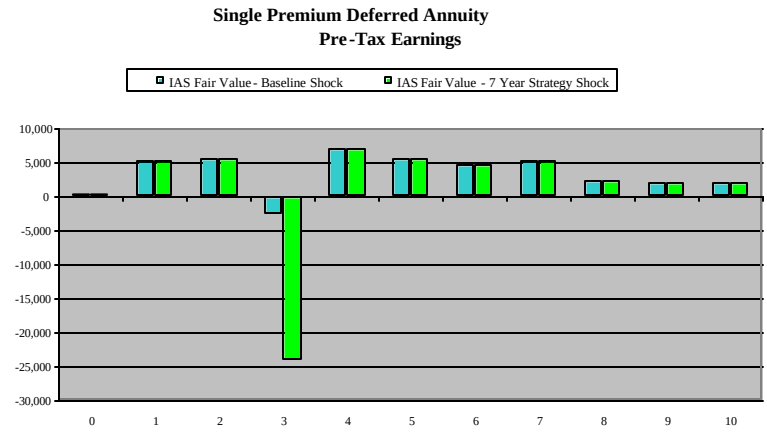
Different Investment Strategies



30 #

Chart 8

Impact of Interest Rate Shock



31 #

Chart 9

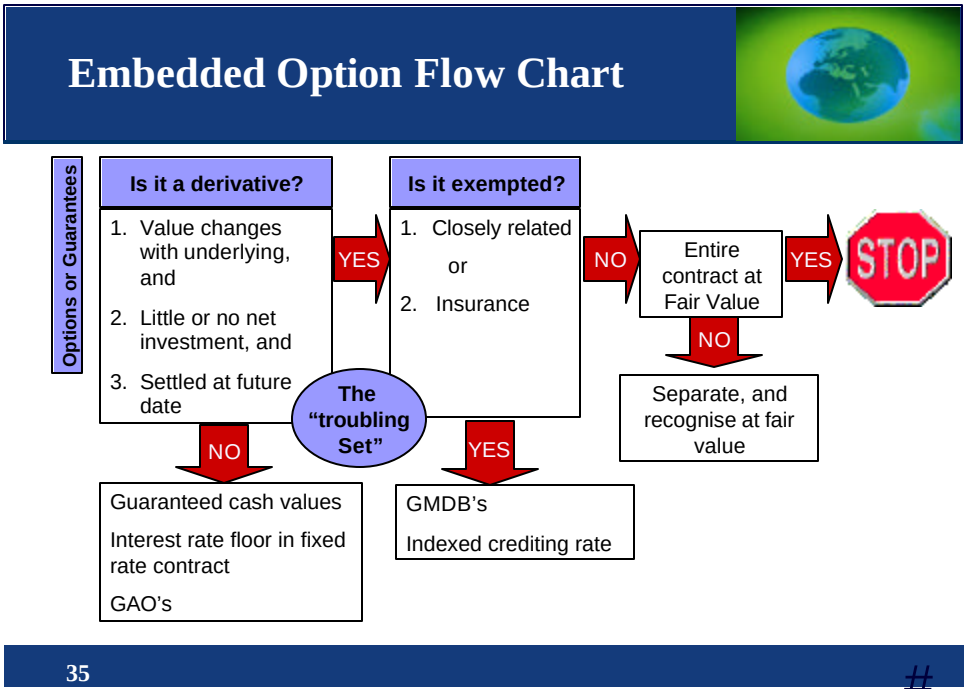


Chart 10

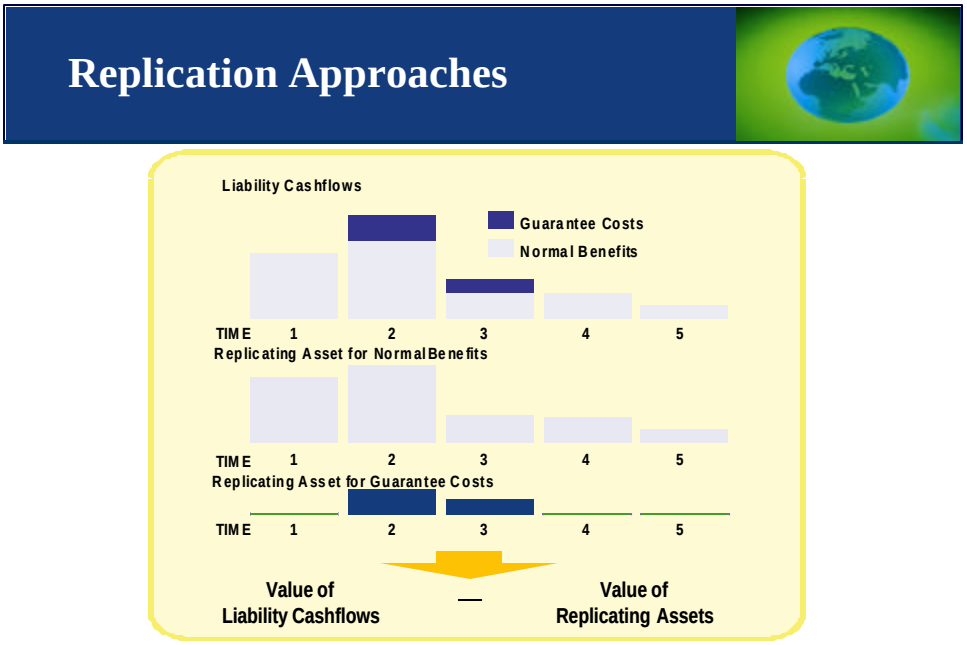


Chart 11

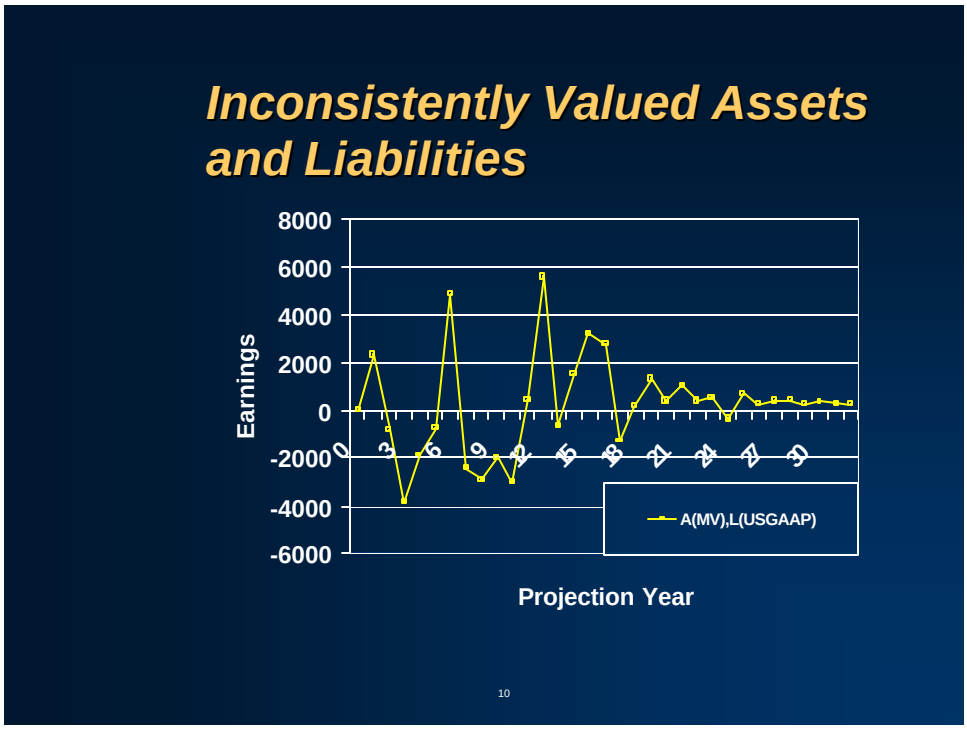


Chart 12

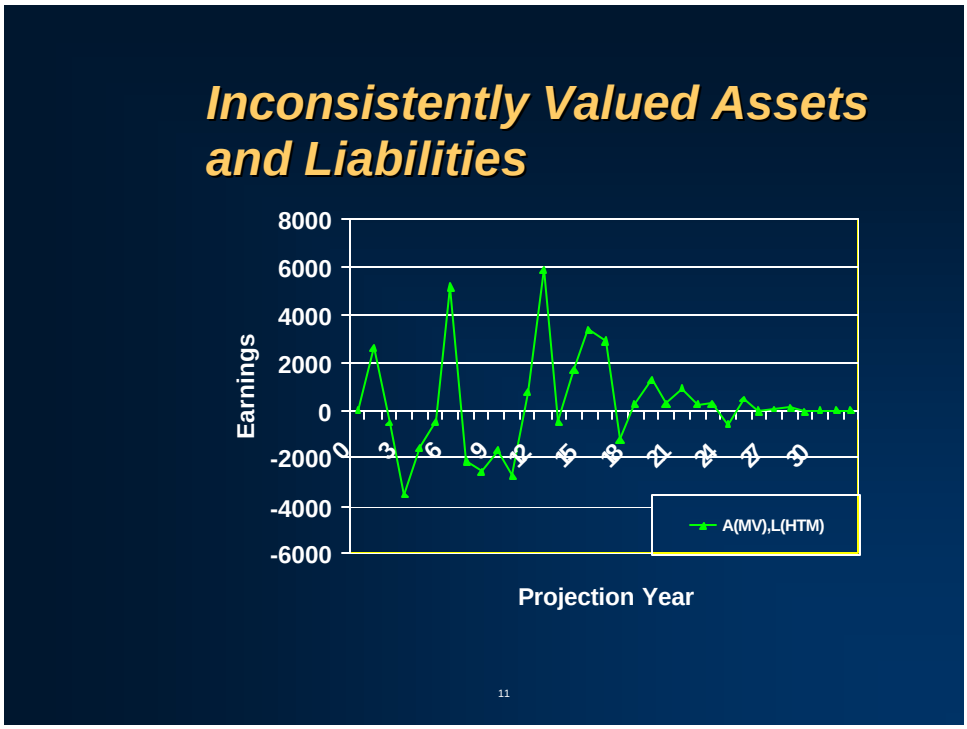


Chart 13

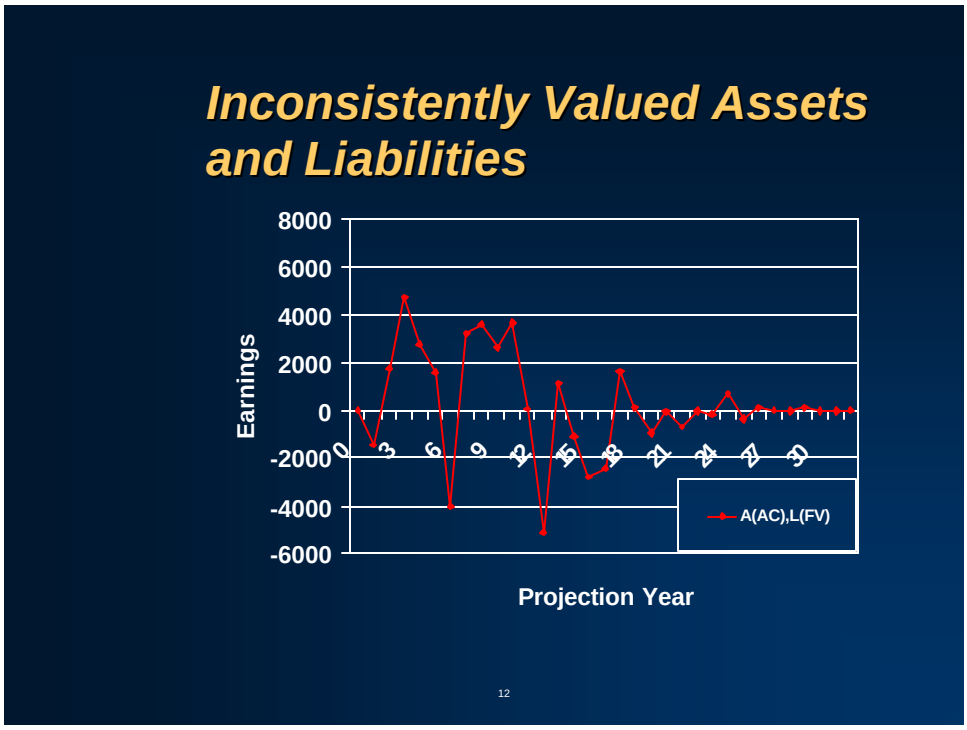


Chart 14

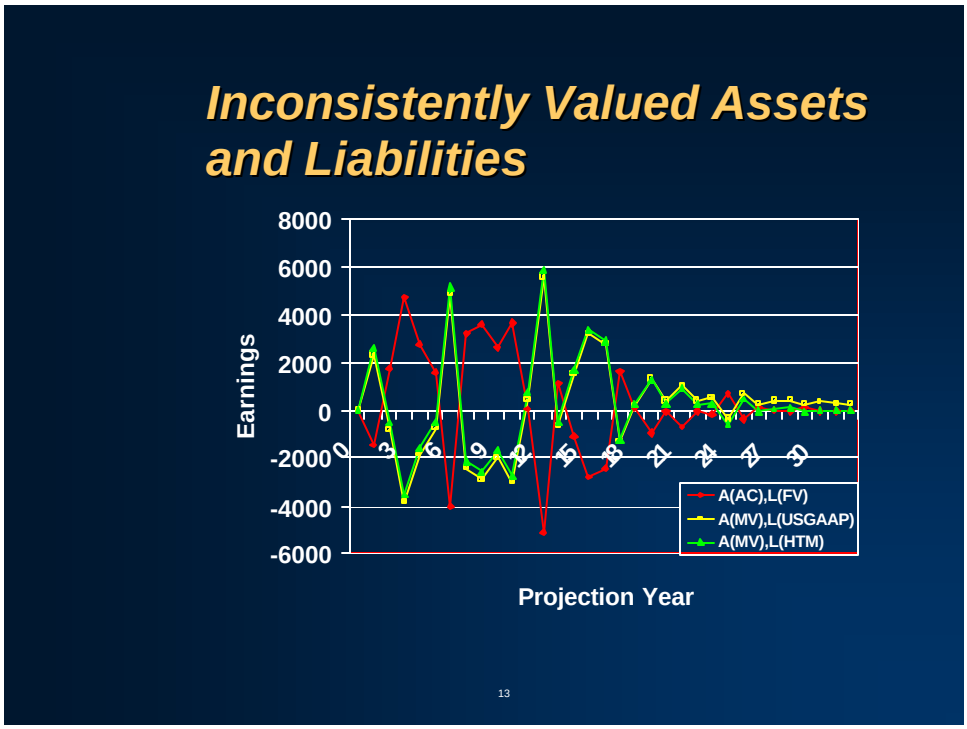


Chart 15

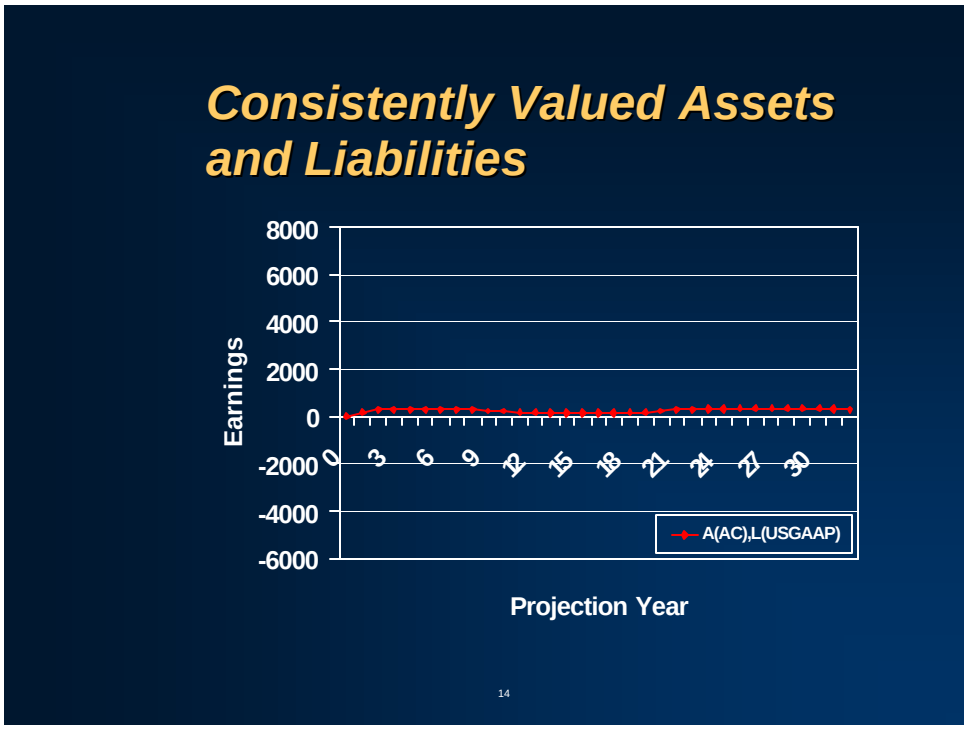


Chart 16

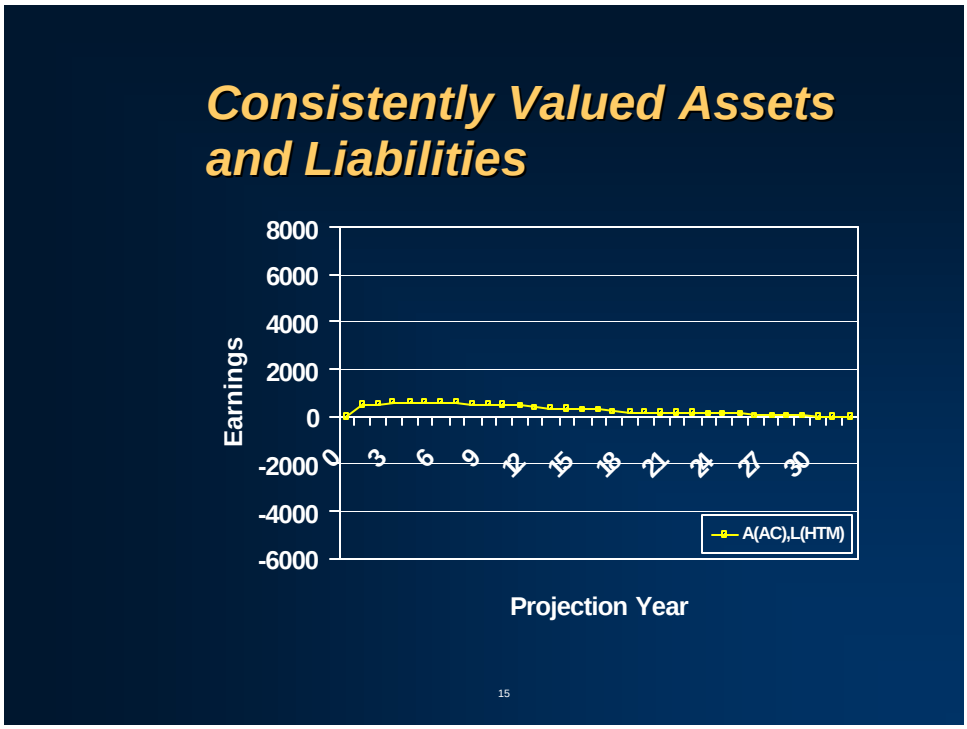


Chart 17

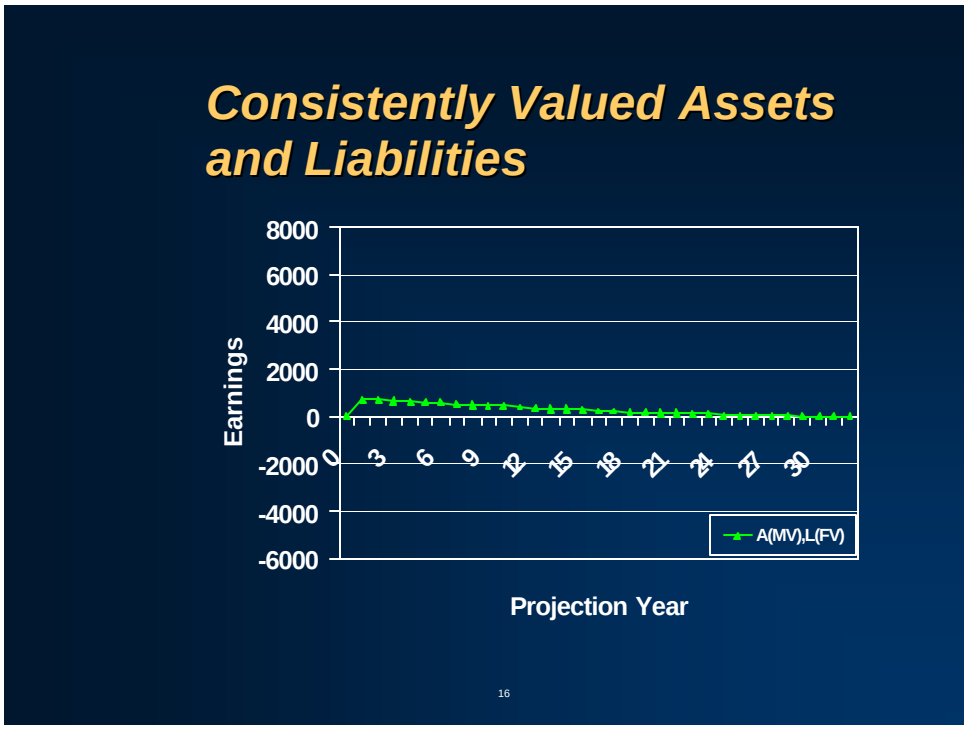


Chart 18

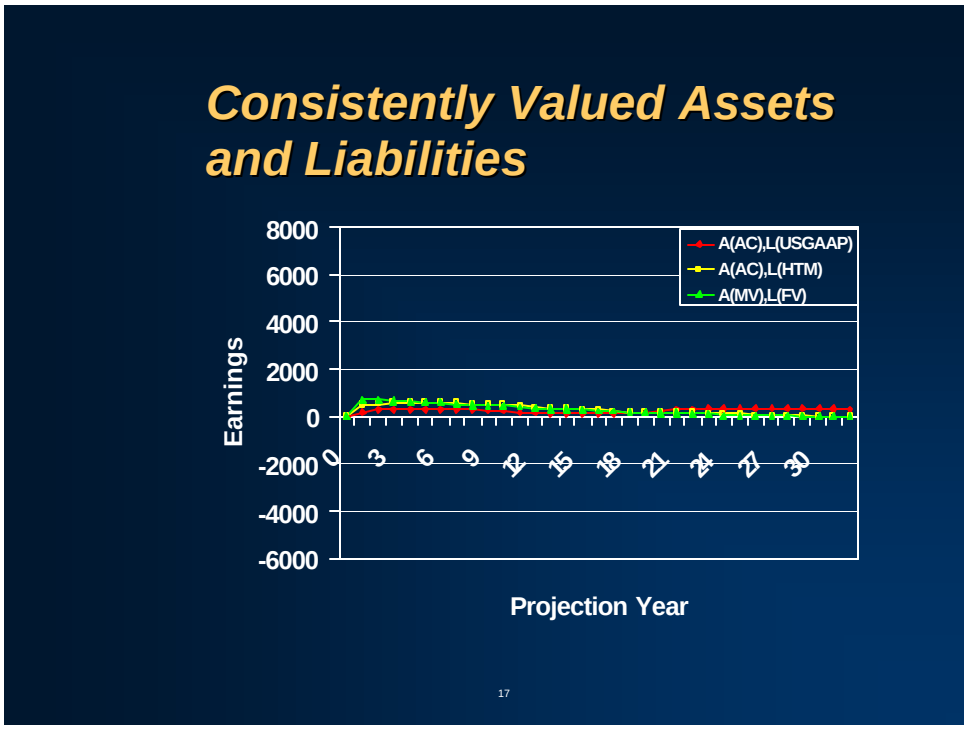


Chart 19

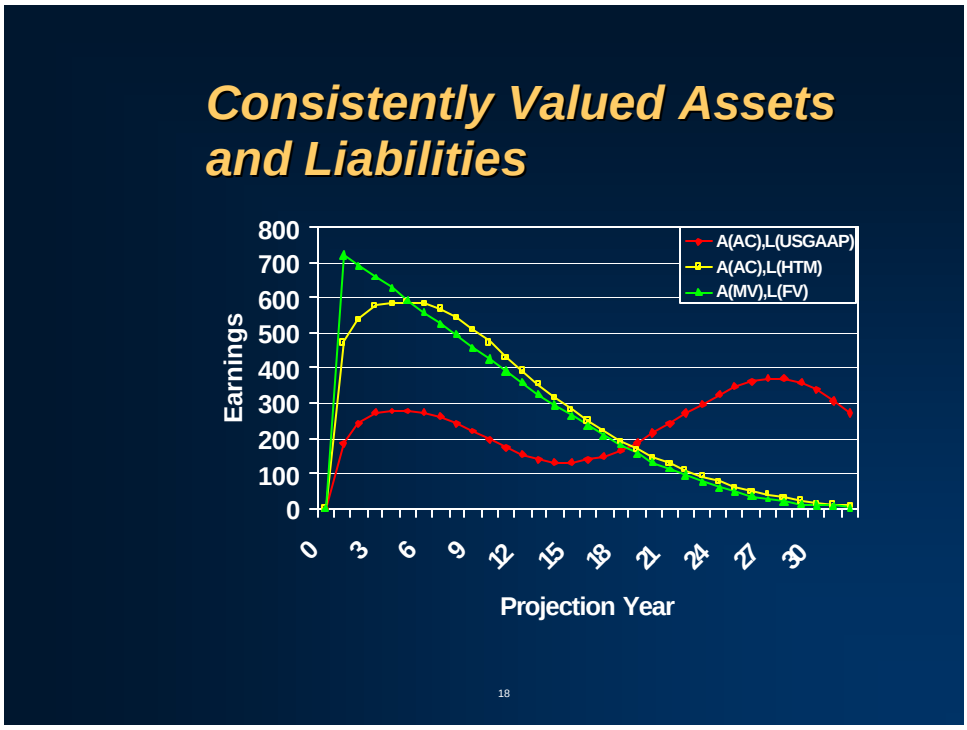


Chart 20