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International accounting standards for general insurance

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Phase 1 of the IASB's insurance accounting project was completed with the publication in March 2004 of IFRS 4. We attempt a guide to some of the main features of IFRS 4 and discuss some of the practical challenges, which should be of interest to actuaries and others.

We then go back to basics and attempt to develop ideas in connection with phase 2 of the accounting project, which will deal with the valuation of insurance liabilities and reinsurance assets. We look at some other industries in an attempt to identify some relevant accounting principles, and review a number of recent papers, both actuarial and non-actuarial. We then try to develop the ideas from these and other sources, in order to test possible solutions.

We suggest that, in a controversial area which could mean big changes for a number of companies, solutions need to be found which are as simple as possible, and that these solutions are more likely to be accepted if there are elements in common with existing accounting.

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1 Introduction

1.1 *What we hope you will get out of this paper*

- Our scope is limited to general insurance – we leave life insurance to those who are expert in that area.
- Not all readers will want to read all sections of this paper.
- IFRS 4, implementing Phase 1 of the International Accounting Standards Board (IASB)'s insurance contracts project, is with us already, and actuaries will play some part in implementing its requirements. For those who are concerned with the practical and professional implications, Section 3 discusses IFRS 4.
- For those who have followed the developments over recent years, but who would like a brief update on how the debate has moved on, we discuss some recent papers in Section 4.
- For those who are interested in the intellectual problems and the practical politics, we start in Section 2 by asking what is so special about insurance, review some recent papers in Section 4, and in Sections 5 and 6 we try to take the debate a little further.

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1.2 *Background*

This paper is one of a series of papers produced by the GIRO working party on International Accounting Standards (IAS) for Insurance. The first report of this working party was presented to GIRO in 2002, followed by a Sessional paper at the Institute of Actuaries in 2003. Later in 2003, a short paper was presented to GIRO focusing on the problem of estimating fair values of insurance liabilities.

The history of the IASB's insurance accounting project is explained in Section 3.1. In November 2001, a Draft Statement of Principles, the DSOP, was published. The DSOP served a useful purpose, setting out the thinking on a wide range of issues. It set out fair value as the preferred basis for valuing insurance liabilities (the same principles are applied to reinsurance assets), but left the question of how to determine fair value for insurance contracts unresolved. It asked for contributions from the actuarial profession, among others, to help solve the problem. Aspects of the DSOP have been much criticised, but it was in many ways excellent ground-breaking work and it did succeed in moving the debate forward. The IASB published some further tentative conclusions relating to Phase 2 in January 2003.

We would mention that the purpose of the 2003 GIRO paper was to look for practical ways of implementing fair values, and in particular the risk margin required within fair value, starting with the principles behind the DSOP. We found that we could not do this without amending the principles a bit, but the approach we settled on was similar to that subsequently used in both of the CAS papers reviewed in Section 4. The DSOP failed to be clear on a number of common-sense questions, such as whether a "fair value" of a particular insurance liability should be expected to be the same no matter who was responsible for the discharge of that liability.

Some decisions on aspects other than the basis of valuation of insurance liabilities were taken by the IASB, and these have been implemented in IFRS 4. But we are back to the drawing board on the valuation of insurance assets and liabilities. Even the principle of fair value is being questioned by many in the industry. IFRS 4 is discussed in Section 3.

In this paper, we have attempted to look at a number of accounting questions, including the basis which is set out in the standard applying to financial instruments, IAS 39. This standard will govern the treatment of the assets of insurance companies other than ceded reinsurance.

1.3 Summary

Why should we write yet another paper on International Accounting Standards (IAS) for insurance? Why should you read it? Why do we think we should continue to work on this in future years? What can actuaries contribute to an accounting problem? What's so special about insurance from an accounting perspective?

In spite of the fact that it receives little attention from actuaries, accounting does matter. It is changing, and the actuarial profession needs to contribute. Our paper is one small part of that process. The principles of accounting for unpaid claims, which are what most interest actuaries, are contentious and as yet no consensus has emerged. Our objective is to stimulate comment and further ideas. We do not pretend we have found "the" solution, but, particularly having regard to the flexibility permitted within IAS 39, we believe that there is every chance that a standard can be developed for valuing insurance liabilities which is practical and which will gain wide support.

The IASB has decided that it will go back to basics in the search for an approach for phase 2, and we too have gone back to basics; hence the length of this paper.

There are also immediate implications for actuaries. The IASB implemented Phase 1 of its insurance accounting project with IFRS 4. IFRS 4 included the definition of an insurance contract and introduced onerous disclosure requirements. One section of our paper therefore covers IFRS 4, summarising its more significant provisions and looking for practical implications for actuaries.

We attempt a brief review of some of the more recent discussion documents which have been published on the subject of the accounting treatment of insurance contracts - the big question which the IASB have deferred until Phase 2. In theory, accounting should not make a difference to how businesses are run. In practice the choices which are eventually made in Phase 2 will have a major impact on the insurance industry.

A later part of our paper, which we expect to cover more in a workshop than in a plenary session, is another look at the options available to the IASB for Phase 2. The debate seems to have moved on: "fair value" in the literal form of a willing-buyer-willing-seller test seems unlikely to be acceptable to the insurance industry; and it is also not consistent with the use of the mixed treatment of assets for the purpose of income statements. Our discussion includes the treatment of assets as well as liabilities, and also asks about the different purposes of balance sheets and income

statements. We identify a number of unresolved questions, and suggest answers for some of them.

In Section 6, we suggest that a solution need not be very complicated. A decision is needed on whether there should be margins in the discounting of reserves, and the precise method of implementing them. But we believe there exist solutions if there is the will to take a number of difficult decisions, such as specifying the parameters to use. We suggest that it may be worthwhile retaining the UPR concept, and that it is inappropriate to treat insurance contracts as financial instruments.

In keeping with the nature of the subject, and our decision to go back to basics, not all members of the working party are actuaries; two of our number are accountants.

We would like to thank the members of last year's working party, those other people who have contributed ideas, and in particular Professor Gerry Dickinson for discussing with us some of the issues raised by the Geneva papers.

As usual, we would like to emphasise that the views stated in this paper are not those of any of our past or current employers, but tend to represent a consensus reached among the authors. However, in many areas there is no "right" answer, and in a number of places we have highlighted the existence of a number of possible solutions. We do not claim to have identified all of the possible solutions to the challenges of accounting for insurance contracts.

We look forward to any comments and suggestions, whether at GIRO 2004 or afterwards.

2 What's so special about insurance?

There are good reasons why accounting for insurance is so difficult. The IASB has developed a conceptual “framework” containing principles that it believes should be appropriate for all types of business. We do not have specialist knowledge of this framework, but it may be that some aspects have been developed with particular industries in mind. We thought it would be useful to set out a brief summary of some of the ways in which insurance is unique, or is at least distinct from most other businesses. We also try to identify areas where the distinctness could be argued to be a matter of degree rather than black and white.

This section is not going to tell most readers anything they do not know already. The purpose is simply to put some business issues into context, before discussing the accounting treatment in more detail in later sections of the paper. There is inevitably some overlap between the various points discussed below. They generally apply equally to insurance and reinsurance. We have considered general insurance only.

The IASB’s definition of an insurance contract is “a contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder.”

This definition serves well, emphasising uncertain events which adversely affect the policyholder.

So, with apologies for the extremely simple and somewhat overlapping points, what’s so special about insurance?

1. Purpose: protection against an unknown event
2. Insurers take on elements from the financial uncertainty of others. Insurers rely on diversification to mitigate the impact of individual risks. But there are still unavoidable aggregations of risk within all portfolios, and insurance results are inherently volatile. Even if there were no underwriting cycle, the vagaries of claim experience would mean that the true results of insurers must vary, sometimes hugely, from year to year. Reinsurance is used to spread risks amongst insurers, though sometimes reinsurance results in unwanted concentrations of risk. But the fact of highly volatile results will always apply.
3. Insurance is a promise that a service will be delivered – the buyers rely on insurers being there to pay the loss at their time of need. Hence the importance of financial strength.
4. Customers pay an agreed cash amount at the start of the exposure period.
5. The claim cost element of the service is unknown at the time the customers pay for it – and this fact is the very reason that customers buy insurance

6. Uncertainties in the claims process are: whether a loss will occur, its timing, and the cost. Insurers do not always know whether a loss has occurred until some time afterwards – different classes have different reporting characteristics.
7. It can take a long time for total costs to be known.
8. Reserves for unpaid losses on past business can be large. For example, they can be greater than current premiums and will frequently be greater than shareholders' funds.
9. Reserves are difficult to estimate, sometimes almost impossible. This is so even without considering the potential for moral hazard.
10. There is great scope for moral hazard in managing insurers, and this mostly involves reserving. At one end of the spectrum there is wishful thinking associated with lack of objectivity and lack of understanding, such as "I don't write to a loss ratio as bad as that". At the other end, there is wilful deceit on policyholders, shareholders and everyone else. Somewhere in the middle there is the problem that management and employee incentives often relate to the share price, and the potential for smoothing of results via the reserves increases the importance of the integrity and consistency of the reserving process.
11. Underwriting is a difficult science. Estimation of expected costs is just one aspect, but in those classes where there is very great uncertainty in the outcome (which is true of most classes outside personal lines), the tendency for wishful thinking to influence estimates is strong.

A number of thoughts arise from the above that might be relevant for accounting.

- a) The importance of security and confidence in insurers' financial standing. Prudence is therefore required somewhere, whether in the form of well-understood and consciously-managed margins in financial estimates, in management and operation, or both. It will arise in any or all of dividend policy, level of free capital, investment policy, underwriting policy (exposures), underwriting policy (price), reinsurance policy, levels of and understanding of reserves, or any other aspects of risk management.
- b) We would suggest that all businesses should be run with a degree of prudence to protect customers and creditors. But the importance of prudence is especially high in insurance. This does not automatically imply prudence in reserves but it does imply no imprudence in reserves. Where reserve uncertainty is wide, many will argue for either a degree of prudence to mitigate this or for an allocation of capital to mitigate reserve uncertainty.
- c) There is a danger in blind prudence. There may be some deficiencies with the reserving approach, together with an element of caution, such as not discounting. Without a clear insight into the strength and weaknesses of the approach, there is no comfort that the margin from not discounting will be enough. A sounder approach is to estimate a mean best-estimate reserve as

part of the process, so that any margins can be understood and disclosed and appropriate action taken.

- d) There is great value in disclosures to accompany the financial statements in respect of the reserves, loss development, and risk management. (IFRS 4 picks this up, as explained in Section 3)
- e) Insurance is characterised by uncertainty and volatility of results, combined with high levels of capital.

Are there any other industries that provide a promise over a long period in the way insurance does? This question is relevant because consistency of accounting principles between different areas of economic activity must be a desirable objective.

2.1 Parallels in banking and long term construction

If we ignore banks' trading activities in financial markets, their core activity is lending. The term of the loan can be a few years. The premium is the excess of the interest charged over the bank's borrowing costs. The risk that the bank assumes is that the loan will not be repaid or will be repaid only partially, or late, or that there will be a shortfall in the interest received. This operates like a simple form of insurance. The equivalent to reserve estimation is estimating the future cost of default. Loans count for accounting purposes as assets - financial instruments which are originated by the bank and which, under IAS 39, can be accounted on an amortised basis up to maturity, thus avoiding the volatility that changes in market interest rates would cause. There do not seem to be any special principles arising from this. For many of their traded assets and liabilities, banks are able to close out their positions by buying back their debts or selling assets. Insurers are not able to get rid of insurance liabilities in this way, and do not regard their liabilities as financial instruments.

Long-term construction is another example of an industry which contracts to provide a service over a period. Which party takes what financial risk will be determined by the contract, but for our purposes we will assume that the company promises to build the product for a given sum with an agreed timetable.

There is a distinction compared with insurance in that the customers pay only as the work is done, generally keeping back a proportion of the payment to protect themselves in the event that the builder goes bust. The customer is, however, committed to pay if the work is done according to the contract.

We were interested to find that long-term construction has its own international accounting standard, IAS 11. IAS 11 prescribes the accounting requirements for the revenue and costs associated with construction contracts from the perspective of the contractor:

- When the outcome of a contract can be estimated reliably, revenue and expense are recognised by reference to the stage of completion of the project.
- If the outcome cannot be estimated reliably, costs are recognised as the expenses are incurred, while revenue is recognised only to the extent that contract costs incurred are recoverable.
- Any expected loss is recognised immediately as an expense.

2.1.1 IAS 11 – conclusions for accounting principles for insurance?

One difference between insurance contracts and construction contracts is that insurance premiums are paid in advance. However, the cost of providing the service is unknown, and this is a common factor. The difference is a matter of degree.

To be consistent with IAS 11, we suggest that where the cost of providing the service is not known at the outset, revenue should be recognised no faster than by reference to the proportion of the uncertainty which has been removed – the insurance equivalent of the stage of completion – and any expected loss should be recognised immediately.

Our first thought was to argue that IAS 11 implied that insurance revenue should be recognised across the period of exposure. This suggested a UPR-type reserve to cover the unexpired period plus a discounted (at risk free rates) mean best-estimate reserve for the run-off period, however long this might be.

However, we concluded that at the end of the exposure period some lines of business were almost fully developed with very little uncertainty remaining, while for other lines of business the insurer would not expect any losses to have been reported at all yet. This suggests more thinking is needed about the way in which the uncertainty is resolved as a cohort of general insurance policies ages.

3 Phase 1 decisions: implications of IFRS 4 for general insurance

3.1 Introduction

From 2005, at least 67 countries will require financial statements for listed (or large) companies to be produced in accordance with International Financial Reporting Standards (IFRS). The biggest driver for the increase in the use of IFRS is the European Union's decision that countries listed in Europe must report under IFRS. Australia is also introducing IFRS in 2005 whilst Russia intends to phase in requirements from 2005 to 2007. A further 22 countries permit the use of IFRS and others are planning its use in future.

The name IFRS replaces International Accounting Standards (IAS) but many of the existing standards still bear the name IAS. There are currently 37 standards covering different aspects of business. There is no one standard for insurance companies. Instead insurers will have to apply all relevant standards, which in practice will exclude only a few. IFRS 4 is the standard for insurance contracts.

The International Accounting Standards Committee, which was superseded by the International Accounting Standards Board (IASB), started its insurance project in 1997. In light of the complex issues surrounding the measurement of insurance liabilities and reinsurance assets, and the time constraints of addressing a number of outstanding accounting issues prior to the European Union's deadline of 2005, it was decided to split the insurance project into two parts: Phase 1 and Phase 2. IFRS 4 is the result of Phase 1 and is considered by the IASB to be an interim solution, to be replaced as soon as is feasible. The original proposal was to issue a replacement standard for implementation in 2007, but this timetable is now expected to slip.

IFRS 4 introduces some requirements for accounting for insurance contracts that are not expected to be removed in Phase 2, including a definition of insurance and extensive disclosure requirements. It does not provide a valuation basis for insurance liabilities and reinsurance assets. Instead it permits insurers to continue to use the valuation basis in their existing local GAAP, subject to some restrictions. This arrangement was necessary to ensure that insurers did not have to change their valuation basis in 2005 to comply with the IFRS framework, and then change it again a few years later when a measurement standard for insurance becomes effective.

The definition of an insurance contract is important, as it is not based on supervisory definitions. It excludes some products currently regarded as insurance, and may include products that are bought or sold by non-insurance entities, particularly banks.

The disclosure requirements represent a significant increase in the requirement compared with any existing GAAP. The type of information is similar to that required for SEC returns but some differences exist, most notably that all the IFRS disclosures will require auditing as they will form part of the notes to the accounts¹. Many of the disclosures relate to the assessment of the insurance liabilities and

¹ many of these disclosures for SEC registrants are contained in the unaudited Management Discussion and Analysis (MD&A)

reinsurance recoveries and how risk is managed within the business. These disclosures are not traditionally a function of the finance department. They clearly require a deep understanding of the nature of the business, and putting the disclosures together will involve most of the areas of the company. We would expect the team set up to do the work to obtain the input of actuaries, underwriters, risk managers, accountants and others. Already, concerns have arisen regarding how such disclosure will be interpreted and the possible consequences on analysts' views and competition. An overriding concern for many companies is how much information is really required.

In this paper, we describe the disclosure requirements at a high level only – we considered whether a checklist would help, but decided that we would end up simply reproducing the relevant parts of IFRS 4 in full. For those who will be involved in the production of material under IFRS 4, there is unfortunately no substitute for studying the Standard itself.

In the UK, the prudential requirements of the FSA already direct insurance companies to understand their risks, and to manage and report on them. The scope of this exercise is wide and includes all manner of risks. The aim is to ensure adequate policyholder security, so companies have to demonstrate they have adequate capital for the risks they are running. A similar regime is expected to apply in the EU; the FSA have been pro-active in bringing these requirements in before they had to.

Many countries in the EU will have a dual reporting basis from 2005, with listed companies reporting under IFRS and unlisted entities submitting accounts under the existing local GAAP accounting. It has been left to local territories to decide whether to require, permit or prohibit other companies to apply IFRS. In the main, local accounting-standards setters intend that the local standards should converge with IFRS over a number of years to achieve a gradual transition for smaller operations. In the UK this is the case, although unlisted companies are permitted to move to IFRS from 2005.

Subsidiaries of listed companies are not required to apply IFRS to their own accounts if they are not themselves listed. This means accounting numbers will need to be produced on an additional basis in 2005, as IFRS numbers will be required from each subsidiary for the consolidated accounts. The August 2004 draft HM Treasury consultation document on the implementation of the EU Insurance Undertakings Directive for Lloyd's does not provide an option for Lloyd's syndicates to use IFRS as an alternative to UK GAAP when the syndicate accounts move onto a Statutory annual basis of accounting in 2005. However, a number of syndicates are likely to be requested to provide IFRS conversion details for corporate capital providers who will be reporting under this framework.

For many operations IFRS means generating another set of accounting figures in 2005 and beyond. This may include differences in the valuation of insurance reserves. Most obviously catastrophe and equalisation reserves can no longer be insurance liabilities under IFRS 4, although they may be sub-classified as a separate component of equity. There will also be differences in insurance liabilities if certain product lines fail to meet the definition of insurance products under IFRS but are classed as

such under local GAAP. Similar considerations may also produce a divergence between the GAAP measured reinsurance asset and that under IFRS. When the Phase 2 insurance contract IFRS is issued, there are likely to be further, more significant, differences in valuation of reserves.

Even without a change to the measurement of insurance reserves, IFRS is bringing many new challenges to the insurance sector across the spectrum of financial reporting, including accounting for insurance contracts. These changes place new demands on companies and will require an integrated response across operations to ensure all factors are addressed. There should be some additional work for actuarial teams.

3.2 Product classification (is it insurance?)

The IASB's insurance project developed a definition of insurance contracts that is now applied consistently throughout all IFRS's. The definition is independent of legal form, being driven more by economic substance. It excludes some contracts that have traditionally been regarded as insurance, and includes some contracts written by entities that do not fall under insurance regulation. The aim of the definition was to ensure consistent accounting treatment for contracts that perform the same function.

In IFRS 4, the critical features of an insurance contract are that it should transfer significant insurance risk and that the policyholder should be adversely affected by the insured event. The assessment of significant insurance risk transfer applies at the contract level to ensure that more policies fall into the definition of an insurance contract than might be the case if the assessment were conducted at a class-of-business level.

The IASB does not define or attempt to benchmark the level of insurance risk that is considered to be significant. Instead IFRS 4 requires that there should be an insured event that could cause a significant change in an insurer's cash flows in any scenario that has "commercial substance"². Contracts commonly referred to as "finite risk" or as "financial reinsurance" are unlikely to meet the definition set by the IASB.

A short discussion is needed here of the three terms "finite risk", "financial reinsurance" and "alternative risk transfer" (ART). The terms are in wide use, but not all readers will be familiar with all of them. None of them amount to a clear definition, and we suspect that the terms were all created originally for marketing purposes. The purpose of finite risk and financial reinsurance was to influence accounting results without a corresponding change in economic reality. Frequently the purchaser of such a contract ceded substantial economic value without ceding significant insurance risk - a very attractive prospect for the insurer selling the insurance and not always understood by the shareholders of the purchaser.

These contracts generally used at least one of two mechanisms. The first was to take credit for the nominal value of a future stream of recoveries, whilst paying a present value. The second mechanism was to account in such a way as to ignore the economic reality of assets and liabilities. For example, a contract could set up an

² A scenario is regarded as having commercial substance if it has a discernable effect on the economics of the transaction.

experience account which would ultimately be returned to the cedant (or if negative would ultimately require the cedant to make good). Accounting for the premium as a reinsurance premium whilst ignoring the asset set up or the negative experience account had the impact of smoothing the insurance results. Some of the important terms were occasionally contained in “side letters”, rather than in the main policy wording.

If, as is expected, insurance liabilities and reinsurance assets are to be discounted for the time value of money in a way which reflects financial market conditions, the first mechanism would be ineffective even if it were still allowed to be accounted for as an insurance contract. The second mechanism is forbidden in IFRS 4 through the unbundling requirements in paras 10-12. It should also be noted that IFRS requires cedants to disclose the gains and losses recognised in profit or loss on buying reinsurance.

ART has the widest meaning, in that some people think of it as also including the other two. It was developed as a consequence of a shortage of traditional reinsurance capacity for risks such as earthquakes and other natural disasters. It is a continuing area of innovation, and enables non-insurers to provide what is in substance insurance cover, for example through bonds which pay interest only in years which are free of large catastrophes affecting the issuing insurer.

The increasing range of products providing ART arrangements represents a challenge to those involved in IFRS product classification. In the first instance it is necessary to establish whether the contract is an insurance contract. For those contracts that are insurance, it may still be necessary to unbundle deposit elements within those contracts. Unbundling of deposit elements is not permitted if the deposit element is closely linked to the insurance element and cannot be reliably estimated separately. Deposit elements that are distinct and are not fully reflected in the insurance accounting basis must be unbundled and accounted as financial instruments. For other deposit elements unbundling is optional.

The interpretation of complex ART contracts is not always immediately obvious. Whilst fund arrangements and experience accounts will give rise to deposit elements, these may also arise from side letters or addenda to the original contract that have the effect of passing insurance risk back to the insured party. The existence of this practice suggests that the parties may be trying to hide the true nature of the arrangements, thus implicitly admitting the intention of pretending to qualities the contracts do not possess. In many cases it is necessary to break down the contracts into their underlying cash flows in order to assess the accounting treatment. In some instances elements of contracts may give rise to special-purpose entities that have their own accounting treatment under IFRS.

Most general insurance contracts do not have large investment elements and their primary function is to reduce the risk to the policyholder of an insured event. A few contracts are, however, designed primarily to provide a claims-administration function with only limited insurance-risk transfer. This may be achieved by high aggregate deductibles so the likelihood of losses to the insurer is extremely small. Other contracts are specifically designed so that the insured meets the cost of claims

through a trust fund or payment of an adjustment premium or refund. Such contracts may continue to transfer some insurance risk, for example via a stop-loss arrangement. It is necessary to consider the overall contract, including any side letters, when assessing whether or not it meets the definition of an insurance contract. There may also be cases in which contracts are interdependent or arranged in conjunction with each other, when the correct approach is to consider them together. It is not unknown for “back to back” contracts to be arranged whose net effect is negligible risk transfer.

Embedded derivatives have to be held at fair value, except those that are insurance contracts themselves or closely linked to the host contracts. Since this excludes most guarantees, embedded derivatives are relatively rare, but a few do exist, such as minimum-residual-value covers based on price indices. A deductible which varies with an inflation risk is an embedded derivative, but because a claim is triggered by an insured loss, the embedded derivative is still an inseparable part of an insurance contract.

Credit insurance and financial guarantees have been subject to considerable debate, and although they are currently to be accounted for as insurance contracts under IFRS 4 there is already an exposure draft in place proposing that they should be accounted for under IAS 39. The proposal is that they should initially be accounted for at fair value (normally the premium) and then at the higher of (i) the amount determined in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets, and (ii) the amount initially recognised less cumulative amortisation in accordance with IAS 18, Revenue. Identification of these contracts would be helpful in order to assess the potential impact of the proposed changes.

Until Phase 2 comes in, there is likely to be a continuing industry in designing financial reinsurance products which just “get round” the classification rules and which, if not accounted in accordance with their economic substance, will have a distorting affect on accounting results.

3.3 IFRS exemption: limited use of existing local GAAP

IFRS 4 does not set standards for the measurement of insurance liabilities and reinsurance assets or for the measurement of revenue and expenses from insurance contracts. Instead insurance contracts issued, and reinsurance contracts held, are exempted from the IFRS criteria for companies to use in developing an accounting policy if no IFRS specifically applies to an item. This exemption permits insurers to continue to apply their existing local GAAP basis to insurance contracts whilst applying IFRS to all other elements of the business.

In Phase 2, IFRS 4 will be replaced with a full standard for insurance contracts, including measurement of insurance liabilities and reinsurance assets, although the valuation basis is still uncertain. Although IFRS 4 is often referred to as an interim solution, this does not mean its content will be replaced. The IASB has however indicated that it sees IFRS 4 as being a development stage towards reaching a full standard.

While IFRS 4 provides an exemption for insurance contracts, the IASB is keen to curtail practices not consistent with wider IFRS principles. Those affecting general-insurance business are described below.

3.4 Catastrophe and claims equalisation provisions

The IASB has prohibited insurers from holding liabilities in respect of future business. This has eliminated catastrophe and claims-equalisation provisions from most companies' accounts, although there is nothing to prevent them being re-classified as a separate component of shareholders' equity. In the UK this change has not caused much complaint, but for some of the major European non-life insurers this represents a fundamental change in the way they "manage" risks. For catastrophe reinsurers, the managing of insurance risk across successive time periods is as much a part of insurance business as the pooling and sharing of risks. It remains to be seen whether the IASB will be willing to reopen this debate in Phase 2, as smoothing of insurance result would appear to run contrary to the IASB's accounting framework. We return to the controversial issue of volatility and smoothing of results in Section 5.

3.5 Restrictions of changes to accounting policies

IFRS 4 permits insurers to change their accounting policies if the change makes the financial statements more relevant and no less reliable, or more reliable and no less relevant, judged by the criteria in IAS 8. This means that insurers are permitted to continue to use certain accounting policies, but not permitted to introduce them.

Accounting policies to which the restriction applies are:

- a) measuring insurance liabilities on an undiscounted basis;
- b) measuring contractual rights to future investment management fees at an amount that exceeds their fair value;
- c) using non-uniform accounting policies for the insurance contracts of subsidiaries;
- d) accounting for insurance contracts with excessive prudence; and
- e) reflecting future investment margins in the measurement of insurance contracts, for example by using a discount rate that reflects the return on the insurer's assets.

3.6 Other permitted accounting policies

IAS 8 requires that any accounting policy should be applied to all similar items, but IFRS 4 includes an exception to this in that it permits, but does not require, the measurement of designated, rather than all, insurance liabilities to reflect current market interest rates. Current market interest rates must be applied to the designated liabilities until they are extinguished.

In some accounting models, realised gains or losses on an insurer's assets have a direct effect on the measurement of insurance liabilities. IFRS 4 permits, but does not require, the use of 'shadow accounting' whereby unrealised gains or losses on an insurer's assets affect the measurement in the same way as realised gains or losses.

3.7 Liability-adequacy test

To ensure a minimum level of reserve adequacy in all territories applying IFRS, the IASB have introduced a test to establish a lower limit. The liability adequacy test is a two-step test. The first step establishes whether the reserving requirements under the existing local GAAP basis for insurance result in a reserve that will meet the cost of the expected future cash flows emerging from the contracts. If this is achieved there is no further requirement.

When the local GAAP basis does not ensure an adequate minimum level of reserves the IFRS liability adequacy test applies. This is based on the standard for contingent liabilities (IAS 37) and requires a minimum of the discounted best estimate plus a margin for risk. IAS 37 is not intended to apply to insurance contracts so there is no guidance on how to apply this valuation basis.

The UK GAAP basis is considered to require a level of reserves that is at least as large as the IFRS 4 minimum.

3.8 Impairment of reinsurance

IFRS 4 introduces an impairment test for reinsurance assets that is along similar lines to the test for impairment of financial instruments, rather than requiring the application of the standard for impairment of (non-financial) assets. This test may result in a lower reinsurance bad debt provision than currently held by many insurers, since it requires objective evidence of impairment resulting from an event occurring since initial recognition of the asset. This excludes provisions based on past experience of the incidence of bad debt, or based on benchmarking by credit rating and similar techniques. From an actuarial perspective this approach could perhaps be improved, and there is a possibility it may be changed in Phase 2. It should be noted, however, that although the bad debt provision may be less onerous under IFRS the disclosures are more extensive, being the same requirements as for financial instruments.

3.9 Disclosure

The biggest impact of IFRS 4 for most general insurance companies is the dramatic increase in disclosure requirements. Those companies that are used to producing information for the SEC and similar returns will find the changes less onerous, although some differences still exist. Also, information in the notes to the primary financial statements will need to be audited.

The disclosure requirements do not represent an absolute list of requirements. Instead the onus is placed on individual companies to decide on the appropriate level of disclosure. The standard sets out relatively high-level requirements on the information that must be provided. In order to meet these requirements, insurers must decide on what level of detail to include. The implementation guidance to IFRS 4 contains 20 pages on disclosures to assist insurers, but this does not replace the need for individual judgement. In practice the level of disclosures will vary depending on the size and nature of insurance operations and the types of risks written. A major international insurance operation will not provide the same level of disclosure on its UK motor portfolio, for example, as a company with a similar motor portfolio that represents a major subset of its overall operations.

The approach taken seeks to give the users of accounts a picture of companies' overall insurance business, drawing out the insurance risks inherent to the business. Information relating to the terms and conditions of insurance contracts sold, the insurer's objectives in writing insurance business, and policies to mitigate the risks, will give a general overview of the nature of the book. The more complex issue of aggregations of underwritten risks, as well as credit, interest rate and currency risks, will also need to be disclosed.

There has been considerable discussion relating to the need to produce loss-development tables for general insurance business which will draw attention to the movements in prior-year business. However, there are other challenging disclosure requirements that have not received so much attention to date.

Disclosure of assumptions underlying the claims-reserves estimates will be a challenge, particularly given that changes in these assumptions would need to be explained in future periods. General insurance reserves are usually based on a huge number of underlying assumptions. Most of these assumptions are not individually material at a balance sheet level, but in aggregate have a very material impact on a company's results. Disclosure of, for example, average costs and claims frequencies could be provided at an aggregate level, but for most general insurance reserving these are not assumptions but results of more detailed analysis. Where this is not clear to the users of accounts it may convey an inappropriate impression when trying to explain why the figures have moved in subsequent periods. The implementation guidance suggests that where assumptions are too numerous, descriptions of the process used to come up with assumptions and the sources of information relied on are more appropriate. Information on consistency with the market and other benchmarks, where available, is also considered relevant.

In addition to disclosure relating to assumptions and changes in assumptions, information from sensitivity analyses is also required. Effectively IFRS 4 is seeking a present, past and future view in relation to the current insurance reserves. This information will be of great interest to investment analysts and shareholders

The final disclosure for insurance contracts will be a balance between quantitative and qualitative information. Narrative will make up a greater proportion of the IFRS 4 disclosures than has been the case under the previous GAAP basis. The guidance notes indicate that good disclosures will reconcile back to the financial statements. This will generate some additional requirements, for example to distinguish between movements due to assumption changes and movements due to actual claims experience. This "analysis of surplus" may involve restating current reserves on previous assumptions, or previous reserves on current assumptions.

The requirements for insurance contracts disclosure are onerous but not prescriptive at a detailed level. The initial work to develop these disclosures is time-consuming for many companies, especially in relation to deciding what information should be included and excluded. Further, the disclosures do not fit easily into a pro-forma structure and are likely to require some specific consideration at each financial-reporting date.

The work to develop the disclosures will be considerable, and some managers will be less enthusiastic than others. Those managers who put in the work to produce more meaningful disclosures, and therefore more transparent financial statements, will be viewed favourably by investors and others.

3.10 Summary

Product classification has proved to be more onerous for general insurance operations than many initially anticipated. Although many contracts are straightforward, the treatment of a few policies, but often the larger ones, has been time-consuming. The materiality of product classification is difficult to determine until the exercise is complete and the consequential impact on measurement can be assessed. Problematic features vary from profit commission arrangements to experience accounts, aggregate deductibles to market pooling arrangements, side letters and addenda to special purpose entities.

The extensive disclosure requirements for insurance contracts are the biggest challenge for most general insurers. A far greater volume of information is required than under UK GAAP or any other existing accounting basis. There is some overlap of information with the requirements of the SEC, Lloyd's of London and regulators. The information in the notes to the financial statements will all need to be audited, which will present its own challenges, particularly for companies with relatively opaque approaches to reserving. Certainly documentation of business decisions affecting underwriting, reserving and risk management will be critical to this process. In most cases the practical problems will be greater than the theoretical ones.

Although much of the information that will now be required in the notes to the financial statements has been publicly available in the past, the change may make this information available to a wider readership with implications for its interpretation and use. Concerns have been raised in the market in relation to analysts' reactions, the risk of sharing competitively sensitive information, and how the information may appear under changing economic circumstances. Forethought can assist management to prepare to address these issues.

Historically, accounting has been seen as presenting what has happened in the past. IFRS 4 embraces the impact of future changes on the eventual result for past business and seeks to disclose these risks. It is an accounting standard that demands the skill of experts who can understand the implications of insurance risk both now and in the future, in order to produce meaningful information for shareholders and others. As such, we are inclined to applaud it.

4 Five recent papers

4.1 Introduction

In this section we first look at some of the recent research carried out by actuaries since last year's paper. The section summarises the work and the results; readers are referred to the original papers for further details. Three actuarial papers will be discussed. One of them was presented to the Staple Inn Actuarial Society in March 2004 and two were issued by the Casualty Actuarial Society in April 2004.

The last two papers discussed come from the International Association for the Study of Insurance Economics, also known as the Geneva Association. The first of these was available before the 2003 GIRO meeting, having been published in February 2003, but we were not aware of it at the time. The second was published in June 2004.

4.2 The SIAS paper

The SIAS paper was written by Julian Leigh, and is available on the SIAS website at http://www.sias.org.uk/papers/Fair_Value_GI.pdf. It took forward the principles set out in the paper presented to last year's GIRO by the International Accounting Standards working party, and developed them into a formula for calculating fair values. This paper is available at http://www.actuaries.org.uk/files/pdf/proceedings/cigi2004/White_GIRO2003.pdf. The conclusion was that, under certain reasonable conditions and assumptions, the fair value of insurance liabilities according to the IASB's definition of fair values is equal to the expected payments discounted at a conservative rate of interest. This interest rate is equal to the risk-free rate of interest, minus an amount that depends on the appropriate return for holding the liabilities and the proportion of the fair value that needs to be held as capital in addition to the fair-value liability.

This approach led to a fair value that would, in most cases, be less than the undiscounted best estimate of liabilities, since this deduction would, in most cases, be less than the risk-free rate. However, if the business was particularly risky, justifying both an unusually large risk-adjusted return and requiring an unusually large capital support, then the adjusted rate of interest used to discount the liabilities could be negative. It could also be negative if the risk-free rate of interest were unusually low. Discussion at the SIAS meeting included speculation on whether some risky tranches of claims, such as asbestos, could ever justify an adjusted rate of interest that was less than -100%. An adjusted rate of -100% or less would make the formula produce nonsense results. This could be regarded as a weakness in the formula, although it could also be interpreted as indicating that for certain risks there might be no amount that should satisfy a rational purchaser looking to take on the liabilities. That would mean that there was no fair value.

However, these would be exceptional cases. Using this approach most tranches of insurance liabilities would have a fair value that was slightly less than the undiscounted best estimate. The fair value is the discounted best estimate plus a risk- or market-value margin. It may also be expressed as the undiscounted best estimate,

less a discount for the time value of money, plus the market-value margin. Put this way, the paper's conclusion is that the discount is usually bigger than the margin.

When fair value accounting was first proposed, one concern that was raised was the possibility that the need to set up a market-value margin would cause a financing strain for insurers. The results of this paper suggest that this will not be the case: there will actually be a release of profit. There would be a strain if premium rates were low enough, but this would be true with current accounting standards, and reflects the economic reality that a loss is being made.

With undiscounted claims reserves the recognition of profit is delayed and at least part of the profit emerges over the period over which the reserves run off. With discounted reserves all the profit emerges when the premium is fully earned. Fair-value accounting, on this approach, amounts to using discounted claim reserves with (usually) a conservative rate of discount. This produces a reserve that is between the undiscounted and fully-discounted reserves; accordingly the release of profit is accelerated, but there is still a stream of profit earned over the run-off period that is lower than the stream generated by undiscounted reserves. We should note that this paper assumed that a UPR style reserve was held for unexpired risks; otherwise the surplus or strain would be recognised at point of sale.

The question of whether or not general insurance claims reserves should be discounted in financial statements is one that has been discussed frequently. Proponents of discounting usually claim that the reserve held should reflect the nature of the liability, which is that payments need not be made for some period, and that it is unrealistic to ignore the time value of money in the calculation. Opponents usually claim that the uncertainty inherent in reserves is greater than the difference between discounted and undiscounted reserves, and that to discount reserves is to introduce an element of spurious accuracy.

This approach to fair values provides a rationale for discounting at a conservative rate of interest. The degree of conservatism will depend on the riskiness of the reserves under consideration. When there is very little doubt about the final settlement amounts, then a rate of interest close to the risk-free rate will be required, and the time value of money nearly fully recognised. When there is a great deal of doubt then a very conservative rate of interest will be used, possibly even a negative rate, and little credit will be taken for future investment income.

The paper then examined the volatility of insurers' results using the three bases of fair-value (FV) accounting, undiscounted-best-estimate (UBE) accounting and discounted-best-estimate (DBE) accounting. It considered the case of an insurer always writing business at a fixed loss ratio with a constant claims-payment pattern. All assets were invested to yield the risk-free rate of interest, which varied from time to time.

It found that when all money was invested in overnight deposits FV results were marginally more volatile than DBE results, which were much more volatile than UBE results. However, when assets were assumed to be invested in bonds whose proceeds exactly matched the liability outgo, it was UBE results that were substantially more

variable. (A flat yield curve was assumed.) The difference occurs because with assets invested in bonds the values of assets and liabilities move in parallel. The variability that remains is real: the business is more profitable when interest rates are high.

4.3 The CAS papers

In August 2003 the CAS invited tenders from consulting firms to carry out a research project into the “practical implications of fair value of P&C liabilities”. After considering the tenders they decided to appoint two firms to carry out the research: PwC and Tillinghast. Each submitted a report in March 2004. The two reports are available together at <http://www.casact.org/pubs/fairvalue/FairValueBook.pdf>.

The researchers were asked to attend to the following questions.

- How would a typical US property and casualty insurance company’s financial statements be impacted by the change from current US GAAP accounting to a new GAAP accounting paradigm based on fair value?
- What issues might arise from such a change as to the usefulness of fair values presented in insurance financial statements? Particular concerns are with the relative reliability of the estimates under the current US GAAP accounting rules versus a fair value approach, as well as the relevance and transparency of the income statement impacts that result.

The calculations were to be based on real, publicly available information, not on hypothetical data.

The two reports use a basically similar approach, looking at three lines of business: personal auto liability, workers’ compensation and medical malpractice. Data were extracted for a number of companies. Both reports used data from the US statutory returns. The Tillinghast report uses a somewhat longer term than the PwC report: ten years instead of five. Both reports used US treasury bond returns to indicate risk-free rates of return. Tillinghast used the full yield curve rather than a single value for the risk-free return; PwC did the same, but also investigated the use of a single rate of interest for discounting, using a rate that was commensurate with the term of the liabilities. The use of a full yield curve rather than a single rate could be important for recent periods, in which the yield curve has been sharply upward-sloping and for which a single risk-free rate would not be realistic. However, PwC’s investigations suggested that it made little difference whether a yield-curve-based or duration-based approach was used.

4.3.1 Calculating fair values

The two reports used different methods of calculating the fair value, although both, at least for some of their calculations, used the approach of discounting at the risk-free rate and then calculating an explicit market-value margin.

Tillinghast’s approach was to estimate the actual reward for risk in the insurance markets concerned, calculate the risk inherent in running off the liabilities, and calculate the market-value margin as the product of the reward for risk and the risk. The rationale for taking this approach was that, where there are no actual markets for the risks concerned (which is the reason for fair-value calculations of this type being

necessary), the values used should be estimated by reference to real markets, as far as possible. The calculation was made thus:

- The return was taken as the average margin achieved on the class of business concerned over the period surveyed.
- The risk was taken as the standard deviation of the margin expressed as a percentage of the net present value of claims.
- The reward for risk was the average margin divided by the chosen risk measure.
- The risk inherent in running off the reserves was taken as the standard deviation of the discounted reserves expressed as a proportion of the discounted reserves.
- The market-value margin is then the product of the reward for risk and the risk in the reserves.

The risk in the runoff of the reserves was calculated using two methods: the Mack method and a stochastic method developed by Hodes, Feldblum and Bluhmsohn. The latter method was also adapted to make it more comparable with the Mack method.

The PwC project used four different methods, although the first was used to calibrate the other three. The first method was to choose the fair value that would give the acquirer of the reserves a specified return on capital. The level of capital was taken as twice the U.S. risk-based capital level and the required return on capital as 10%. This method is similar in philosophy to the method in the SIAS paper.

The second method was based on the standard deviation of the runoff of reserves, calculated using the Mack method with suitable refinements. The market-value margin was calculated by taking a multiple of the standard deviation. The multiple used was selected so that the resulting fair value as at the end of 2002 using this method was equal to the fair value from the first method. The multiple was set separately by class. This method is similar in principle to the method used by Tillinghast, but uses return on capital rather than reference to the market to calibrate the parameters.

The third and fourth methods used a stochastic simulation to derive the distribution of outcomes for the reserves. The market-value margin is then taken as, firstly, a multiple of the standard deviation of the distribution and, secondly, an appropriate percentile of the distribution. The multiple and the appropriate percentiles were again calibrated against the return-on-capital method as at December 2002.

4.3.2 Fair-value results

The two projects used methods of calculating fair values that were different, but not, one would have thought, incompatible. However, the results were significantly different.

In the Tillinghast study, composite fair values (that is, the fair value for the market liability as a whole) were always less than the undiscounted best estimate. For motor liability, out of 240 individual company results (20 companies for 12 years) only seven results in the first eleven years, plus about half the results in 2002, gave a fair value that was higher than the undiscounted best estimate. Only one single fair value out of 249 for workers' compensation exceeded the undiscounted best estimate.

Exceeding undiscounted best estimate was rather more common for medical professional liability, but it still occurred in under 20% of cases.

The PwC results for personal auto liability were almost all in excess of the undiscounted best estimate. The excess tended to be below 5% for large companies, but ranged between 20% and 50% for the smaller companies. For workers' compensation the results were more mixed. Small companies generally had fair values in excess of the undiscounted best estimate, generally between 20% and 40% higher, while medium-sized companies had fair values that were between 5% higher and 20% lower, and large companies were between a nil difference and 20% lower. With a couple of outlying exceptions, fair value was higher than undiscounted best estimate for medical malpractice, by between 20% and 40% for medium-sized and large companies, although the excess for small companies was up to 100% (that is, the fair value was double the undiscounted best estimate).

There is a clear trend in the PwC results for greater fair values for the smaller companies. A similar result is seen in the Tillinghast study, although the resulting fair values are still, generally, lower than the undiscounted best estimates. This phenomenon arises, presumably, because of the larger coefficient of variation likely to be present in a small company's reserves. It is doubtful whether this ought to be reflected in the fair value: the rationale of fair value is that it should reflect the price somebody taking on the liabilities should be prepared to accept, and that price should not reflect diversifiable risk, partly because the market should not allow the original insurer to charge for it and partly because if insurance liabilities were traded then diversifiable risk should indeed be diversified.

4.3.3 Comparison between PwC and SIAS paper

The SIAS paper concluded that the most appropriate way of calculating fair values was to find the value that gave the appropriate return on capital. This was a method used in the PwC paper, both in its own right and to calibrate the other methods it used. If the analysis in both papers is robust then one would hope for some reasonable level of agreement between the two papers' conclusions, at least in terms of the likely level of fair value.

One of the main results of the SIAS paper was that we might expect fair values to be less than undiscounted best estimates in most circumstances. However, the PwC paper produces the opposite result using an apparently similar methodology. The parameters used in the PwC research are set out in that paper (see its Appendix), and they can be expressed in the formulation of the SIAS paper.

To reiterate, the SIAS paper concluded that fair value to achieve a particular return on capital should be the best estimate of claims discounted at a conservative rate of interest. This rate of interest was $i - k(j - i)$, where i is the risk-free rate of interest, j the risk-appropriate rate of return and k the capital required to be held as a proportion of fair value. If this adjusted rate of interest is positive then the fair value should be less than the undiscounted best estimate; if it is negative then the fair value should be greater. It should be noted that this conclusion is independent of the actual runoff pattern of the liabilities.

The parameters used in the PwC paper, expressed in the terms of the SIAS paper, are set out below in Table 1.

TABLE 1

Comparison of fair values

Line of business	i	j	k	$k \times (j - i)$	$i - k \times (j - i)$
Auto	2.14%	10%	47%	3.7%	- 1.6%
Workers Comp	3.63%	10%	48%	3.1%	0.5%
Med mal	4.22%	10%	91%	5.25%	-1.0%

This seems to resolve the apparent anomaly. Short-term interest rates in the United States at the time of the study were very low, so the shortest-tailed class was discounted using a very low risk-free rate of interest. This is one of the conditions noted in the SIAS paper as being likely to produce a fair value that was higher than undiscounted best estimate.

The risk-free interest rate is higher for the other two classes because the term of their liabilities is longer and, at the time of the survey, there is a sharply upwards-sloping yield curve. Therefore the workers' compensation line of business, which is longer-tailed, does have a positive adjusted rate of interest, in the terms of the SIAS paper. However, this is the line of business that most commonly produces a fair value that is less than undiscounted best estimate in the PwC paper. Also, the adjusted rate of interest is only 0.5%, so it is not surprising that adjustments may cause the fair value to go above the undiscounted best estimate.

In the case of the medical malpractice liabilities, the capital loading is very large. It is based on US risk-based-capital factors, with the actual capital being held being twice the required RBC margin. It may be noted, by comparison, that the highest ECR factor for any type of reserve is 17%. Again, the closer investigation showed that the results of the two papers were actually consistent.

4.3.4 Further results

The Tillinghast paper went on to consider the effect of using fair value on the accounts of insurance companies. The use of fair values was found to reduce the volatility in reported operating ratios, but the effect was marginal and not consistent. Also, the use of fair values improved the correlation between the reported profits of the insurance company and the underlying economic result, but the improvement was trivial.

It is not difficult to see the reasons for these results. The study, in accordance with its objectives, used insurance companies' actual reserves, assumed that they had been set on a best-estimate basis (which is what they are required to be, legally) and turned them into fair values. However, over the twenty-year period reviewed there were substantial revisions to reserves in a number of firms. It cannot be surprising that

introducing fair-value reserves, which turns out to be a fairly marginal revision to the currently-held reserves, has a small effect on results when major revisions are made to the reserves from year to year because of changes in the assessment of the amounts that will have to be paid. There is a lot of variation in published results from year to year as a result of these revisions, and a move to fair values will not change this unless the quality of the underlying reserving is improved. We are not suggesting reserving will ever be perfect: it is subject to outcome uncertainty as well as estimation uncertainty.

Secondly, there is a lot of underlying variation in profitability from year to year. This comes from fluctuations in actual losses and in the adequacy of premium rates. Insurance results are volatile because the underlying business is volatile and a subtle change in the measurement of reserves will not alter that. A further source of variation in underlying profitability is change in the investment return earned on reserves. The SIAS paper showed that if assets and liabilities are matched by term then the move to fair values will reduce the volatility of reported profits, at least from this source, but if they were not matched then the gains or losses reported would be genuine and they would still need to be recorded.

The Tillinghast paper concluded that the implementation of fair values did not produce any benefits that justified the costs, and that there was no real demand for the introduction of fair values from any of the users of accounts. It should be pointed out that the Tillinghast paper was written in a US context, and also that if the question had been about the introduction of a compromise which also involved the discounting of liabilities, the conclusion might have been different.

4.3.5 Conclusions and further thoughts

Although the SIAS paper answered different questions about fair values from the CAS papers, the conclusions of the three papers were broadly consistent, in the terms of the levels that we would expect fair-value reserves to be compared to undiscounted-best-estimate reserves. However, fair-value reserves are likely to be an adjustment of the undiscounted-best-estimate reserves, and as long as great uncertainty attaches to the undiscounted best estimate, fair value is likely to be only a marginal improvement. It seems likely that efforts directed at improving our current reserving process will benefit insurance reporting more than efforts at getting the right formula for fair values.

It should be noted that all three papers were written from a point of view in which the starting point was assumed to be that accounts were prepared using undiscounted-best-estimate reserves and assets at market value. Fair-value accounting uses reserves that are undiscounted best estimates, less discounting, plus the market-value margin, and assets at market value. The only changes are the adjustments to the stated values of the liabilities. This is not a profound change to the accounting philosophy, despite all the concern that has been raised. Had the three papers been written from a point of view in which, for example, reserves were expected to be ample to cover liabilities but with considerable discretion as to actual amounts held and assets were held at book value or possibly lower, then the changes required by fair value would indeed be profound. If the existing structure were used to present smoothed results then fair-value accounting would indeed introduce significant volatility in the published

results. The fact that all three papers started from an accounting position that is intended to be as realistic as possible has an important effect on the thought process involved. Under some jurisdictions the introduction of fair value might be controversial, not because of the discounting and the market-value margin, but because of the move to best estimates and current values.

4.3.6 Availability

All three papers are freely available on the internet. Addresses are shown above.

4.4 Geneva association paper: the search for an international accounting standard for insurance

Our original focus was the second paper, the survey on the impact of fair value accounting, but we found the above paper, which was published first, gave useful background to the second and helped develop our thinking.

The Geneva Association, or the International Association for the Study of Insurance Economics, to give it its full name, has a membership of 80 Chief Executives of insurance companies from around the world. The membership is dominated by European companies (the UK is well represented), while there are very few members from the USA and only one or two from each of Canada and Australia. The Association established a Task Force on Accountancy in June 2002. This task force sponsored the work, and the first of the two reports was published in February 2003. The principal author of the reports is Professor Gerry Dickinson of City University in London. The second report was published in June 2004.

In Sections 4.4 and 4.5 of this paper, we will attempt to report on the contents of the Geneva papers, and on the views expressed in those papers. Where we make comments of our own, however, we will try to make it clear that we are doing so.

The first paper is available electronically as follows:

<http://www.genevaassociation.org/Geneva%20Association%20-%20Accountancy%20Task%20Force%20Report%20130203.pdf>

4.4.1 History

This paper explains the history of efforts to develop an international accounting standard, starting in 1997, when the IASB's predecessor, the IASC, started work on a conceptual framework which sought to measure all financial instruments at fair value, wherever possible. The paper contains too much material for us to provide a synopsis, so we will include only a few of the more significant points.

Fair value is defined as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable parties in an arms-length transaction. This is taken to mean market value if one is available, and estimated market value if not.

The paper reports (page 15) that the initiative to apply fair value to insurance has encountered opposition from insurance regulators around the world and from most of the major international insurance and reinsurance companies. The objections included: (i) the feasibility and appropriateness of applying fair value to insurance contracts (policyholder liabilities); (ii) the impact of a fair-value system on the

volatility of reported profits (net income); and (iii) a perception that more pressure is being placed on insurance companies to adopt a fair-value measurement system than commercial banks, since commercial banks would be exempted from the requirement to apply fair values to their core financial assets and liabilities under the general financial instrument standard, IAS 39.

IAS 39 has its origins in the late 1980s and early 1990s. There was a growing use of derivatives by many businesses, whether for hedging or for trading, and it became apparent that the associated unrealised gains or losses were not adequately disclosed in the published accounts.

Here we need to depart briefly from the Geneva papers to summarise our understanding of the main provisions of IAS 39 as they relate to the valuation of financial instruments.

Category of financial instrument	Instruments which qualify	Treatment in balance sheet	Treatment in profit and loss
Financial asset (or financial liability) at fair value through profit or loss	Those classified as held for trading and: Those other instruments designated on initial recognition by the entity as at fair value through profit or loss	Market (fair) value	All movements recognised in P&L whether realised or not
Held to maturity investment	Assets with clear maturity date and amounts which entity intends and is able to hold to maturity and chooses not to classify in any other way	Amortised cost	Change in amortised cost
Loans and receivables	These are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market	Amortised cost	Change in amortised cost
Available for sale financial assets	All non-derivative financial assets not classified in any of the other categories	Market (fair) value	Unrealised gains and losses to equity; realised to profit and loss

4.4.2 Assets and liabilities

In response to the representations of the banking sector in particular, IAS 39 does not require fair values for everything. The above table shows that an entity can choose the classification of its assets when they are first acquired (or when the standard

becomes applicable). It has a number of classifications for assets about which we will not go into in detail here. Certain assets, and by implication certain liabilities too, can be valued on an amortised or similar basis. In practice we believe most general insurers will classify their assets as available for sale.

We would observe that to the extent that liabilities are valued at a discounted present value (permitted but not required yet under IAS) with these liabilities being backed by assets designed to respond to interest rates in the same way as the liabilities, which themselves are valued at market value, the accounting would tend not to show volatile results caused by market fluctuations. Where there is matching of assets and liabilities (though this can rarely be done perfectly), there is minimal “economic mismatch”. Whether or not there is matching, there would be no “accounting mismatch”, in that the accounting represents economic reality faithfully. This is the sort of regime which the IASB ultimately has in mind.

Whilst the concept of “fair value” is being strongly resisted for insurance liabilities, we would suggest that the most significant components of the fair value theory are the use of a mean best estimate and the application of discounting for time value, always providing assets are available to support the discounting assumptions. The IASB has said that fair value is the sum of the discounted mean best estimate and a market-value margin, or risk margin. If that margin really is calibrated to some view of market conditions, it could vary greatly and introduce volatility which many would believe is unwarranted. On the other hand, it may be possible to specify the basis for the calculation of the margin which is stable from year to year. In Sections 4.1 to 4.3 above, we examine an approach which could simplify to making a specified reduction to the rate of interest used for discounting, with the amount of the reduction varying by line of business. Such an approach would not add significantly to volatility.

We discuss volatility further in Section 5.

4.4.3 The paper’s conclusions

In Section 9 of the Geneva paper, a number of factors are listed as relevant to the design of an international accounting standard for insurance. The following list gives a brief summary of each point. Readers who are particularly interested in this discussion should refer to the original by following the hyperlink shown above.

1. An international standard should be capable of adoption in emerging economies where local commercial and capital market conditions are still emerging. An evolutionary approach should be permitted.
2. Where there is interdependence between assets and liabilities, accounting should capture this. Also, the economic substance of a set of transactions cannot necessarily be captured by simply adding them up.
3. Comparability of information between insurers and other enterprises: a fair value framework for insurers would cause them to complain when other businesses are required to use fair values to a lesser extent.

4. The demand for greater transparency: post Enron and World-Com, financial analysts and users have demanded more meaningful information on insurers' financial condition. However, concern is expressed that fair value might involve the capitalisation of future profits.
5. Insurance companies and commercial banks should have a degree of prudence in their reporting policies because of the underpinning role they play within the financial system. This does not have to be at the expense of transparency.
6. The accounting standard should reflect best practice. Insurers frequently use market-based measures in their internal accounting, but not a full fair value system.
7. IAS are already mixed, i.e. not 100% fair value. IAS 39 is an example of this, and the valuation rules for the liabilities should be consistent with those for the assets.

Of the points above, we would suggest that the demand for greater transparency is the most important.

At the end of the paper, the author questions whether the income statement should necessarily be related directly to the changes in the balance sheet. He argues that balance sheets and income statements each have their own purposes, and implies that whilst, say, stock market volatility of equities should be reflected fully in balance sheets, it should not necessarily be reflected in the same way in income statements.

4.5 Geneva association paper: the impact of a fair value financial reporting system on insurance companies – a survey

4.5.1 Introduction

This is again available on the web:

<http://www.genevaassociation.org/ATF%20report%20survey.%20pdf.pdf>

This second of the two Geneva papers was about the impact of “full fair value” accounting, something which we do not now expect to happen. Discounting at risk-adjusted rates looks more likely, together with a more flexible regime for the treatment of assets. We suspect that some of the responses would have been more positive if the basis for measurement of liabilities proposed in the survey had been mean best estimates discounted at adjusted interest rates, those adjusted rates being risk-free rates less a fixed percentage chosen to represent a reasonable compromise instead of a theoretical “market-value margin”. (We understand that the IASB now uses the term “risk margin” in preference to “market-value margin”.)

The impact of the treatment of the assets was also a matter of concern. We understand that for the purposes of the survey, “full fair value” was taken to imply all assets are marked to market and the volatility reported in profit and loss each year.

We do not know the precise wording of the questions which were asked. We do know that none of the companies questioned came from Canada or Australia, two jurisdictions with an element of discounting of liabilities on a basis broadly consistent with assets at market value. We understand that the views of companies in Canada and Australia, who have become more used to discounting liabilities, would have been much less negative.

4.5.2 Survey results

We have extracted paragraphs from the Report's executive summary and reproduce these below, with our comments below each in italics. But we should first point out that we believe the major concern of all of the respondents was that the accounting system should not report earning streams which were misleadingly volatile. Whilst it is easy to agree with this principle, views vary widely on what is a misleadingly volatile income stream, and we do not expect all readers to agree with all of the comments in italics.

1. No insurance company in the forty international insurance companies that participated in the survey currently uses a full fair value system as a general accounting model for internal planning and control, nor would any company wish to do so voluntarily.

Full fair value here means "willing buyer, willing seller" – presumably using some of the concepts in the DSOP. This conclusion is not surprising.

2. Senior management in insurance companies consider that they would be under some pressure to change their internal accounting systems over time to realign them more with a new financial reporting system. This is in part to be consistent with investor and other user perceptions and in part because it would be costly and confusing to have two very different accounting systems running side by side.

A question here is whether the accounting tail should wag the business dog. The survey explains that in principle it should not. How should managers measure performance? Presumably, if we had a consensus on what was "economic reality" in insurance, we should get closer to a consensus for the accounting.

3. The introduction of a full fair value reporting system would significantly change the business strategies, corporate policies and systems over time in a way that most companies consider would reduce their competitiveness.

Should we have any sympathy here? If they are already managing the business in an optimum way, should the accounting rules make any difference? This does raise the question of what competitiveness means, and whether shareholders would look at the question in the same way. We discuss volatility later.

4. There is a high degree of agreement that the higher volatility of reported earnings would increase the cost of capital of insurers and that it would be more difficult to provide earnings forecasts or forward-looking information to the investment community.

This seems to be saying that investors do not understand, and would be frightened by more volatile earnings. Whilst there is truth in this, there is also a challenge to educate and communicate with investors. Perhaps investors deserve higher returns

and the cost of capital should be higher. Insurance results are inherently volatile, and the accounting should reflect but not exaggerate this.

5. Most insurers consider that measuring the fair value of insurance liabilities (insurance contracts) would be very subjective and there might be compliance problems under the Sarbanes-Oxley Act.

We have some sympathy with the first part of this, but have no expertise on the second.

6. A majority of companies perceive that the disclosure of fair values of insurance liabilities, even if they could be measured credibly, would be unlikely to increase the transparency of financial statements to users, but a significant minority, all outside of the United States, consider that it would increase transparency to some degree over the prevailing national reporting standards. However, nearly all companies consider that this increase in transparency should be provided in the notes to the accounts rather than distorting the primary financial statements.

The use of the word “distorting” is a little judgmental, but this point is tantamount to saying that many of the respondents thought the existing statements far from transparent.

7. There is a broad consensus that a full fair value reporting system would have some adverse impact on the risk transfer role that the insurance industry plays within the wider economic system.”

This may not deserve much sympathy. If companies think they can only absorb risk if they can smooth much of the impact in their accounts, it suggests they are not really minded to absorb risk at all. It also suggests that they might be inclined to absorb very large amounts of risk if they could hide it from their financial statements. If the “Available for sale” classification for the purposes of IAS 39 were not available, there could also be a deterrent to holding equities which, according to some theories, could make insurance companies themselves a less attractive choice for the long-term investor.

4.5.3 Some final thoughts

We found that, whilst an actuarial audience will not sympathise with some of the conclusions of the survey, the survey, together with the earlier paper, does serve to emphasise many of the concerns which the IASB must deal with if it is to achieve a sufficient consensus to implement Phase 2 of its insurance project. The survey also helped clarify our own thinking. We would emphasise that the context of the survey was the prospect of a full fair value system applying to both assets and liabilities.

We have sympathy with companies concerned at the additional volatility introduced by, for example, market-related risk margins, but we see no reason not to reflect basic insurance and reserve fluctuation immediately in both balance sheets and earnings.

We cannot fault the theory of discounting for the time value of money, and would point out that there are usually assets available which permit a degree of immunisation against changes in interest rates. If a company does not attempt to immunise in this way, it is difficult to justify accounting which fails to reveal the impact of the full economic mismatch if interest rates do change.

It is interesting that the importance or otherwise of prudence was not included in the survey results, but that may be a result of the questions asked. We have already considered the principle of recognising profit only as it is earned in Section 2 of this paper, and return to it briefly later. It was not a matter on which our working party reached a unanimous view.

The requirements of the EU Solvency I Directive for non-life insurers give rise to inconsistency between regulatory requirements and those of IFRS 4. For regulatory purposes, an insurer has to add back the discounting, if any, applied in its accounts so that it reduces its 'available solvency margin'. The Solvency I directive applies from 1 January 2004 (implemented in the UK as the Policy Statement based on CP181). Insurers which currently discount their reserves will be required to add back the discounting. This aspect was not touched on in either of the Geneva papers.

5 Volatility – a major problem?

5.1 *Undesirable income volatility*

Reported results reflect the accounting basis for assets as well as liabilities, and a mismatch caused by the two being treated on different and inconsistent bases would be severely criticised. As we found from the Geneva papers, perhaps the greatest concern insurers had regarding the fair-value proposals was their impact on volatility of reported results. As this is such an important issue, we use this section for a discussion on volatility before putting forward some tentative suggestions in the following section.

We are now not as concerned that there is a threat of what we might call inappropriate or unjustified volatility in insurers' results. In saying this, we assume that any market-value, or risk, margin added to the liabilities in phase 2 will not itself be highly variable from year to year. The DSOP proposals did raise this possibility, however.

IAS39 allows assets to be classified as “available for sale”, which means that their current market values go into the balance sheet, but that unrealised gains and losses do not go into the income, or profit and loss, account. Instead the movements are shown in equity. On initial recognition, insurers can choose to designate certain assets as “being at fair value through profit or loss”, which means that their unrealised gains and losses also go through to the profit and loss account. The IASB has issued an exposure draft on ‘The Fair Value Option’ which proposes the restriction of this designation to assets or liabilities where the fair value is verifiable. We expect the option of holding assets as “available for sale” will continue to be permitted under IAS 39 when phase 2 is eventually introduced.

So, to the extent that assets and liabilities are matched, there is no need for the income statement to be unduly volatile. When Phase 2 comes in, it is likely in practice that all general insurance liabilities will have to be discounted for time value using a current market-related³ interest rate. Any matching asset will then have to be classified as “held for trading” in order to minimise unnecessary volatility.

Insurers will have assets over and above those required to meet the liabilities. They have the option of classifying most assets as “available for sale”. Considering these assets in isolation, the fluctuation in their market values will not impact the income statement except when the assets are sold. But the market values will be fully recognised on balance sheets – and so the level of equity, and in many cases consequently their regulatory solvency margin, will be affected by market conditions.

³ It may in due course be permitted and theoretically possible for an insurer to regard a liability portfolio as matched against a portfolio of assets which are designated as held to maturity – thus effectively choosing a form of book value discounting basis. However, this would lead to administrative nightmares in the event that the liabilities did not behave according to the schedule in terms of both timing and quantum. Using a current risk free discount rate as a driver of the valuation basis would be a more practical option.

There are different views on these two effects. Within the working party, there is agreement that it is appropriate that fluctuations in market values be fully reflected in balance sheets. The balance sheet is a statement of financial strength, the ability of the business to cope with adverse experience.

But our views vary on the appropriateness of reflecting only realised gains on the profit and loss statement. Those who are not happy with this are comforted to a degree that the change in unrealised gains and losses will be disclosed. When looking at the income statement as an indication of the company's historic earning power, analysts would tend first to look at earnings before any gains or losses at all.

5.2 Desirable income volatility

As discussed elsewhere, we regard it as desirable that the true volatility of a company's insurance results is reflected in the financial statements. So a major reserve revision would be reflected immediately, as would the results of an underwriting year which, one year later, was recognised to have been badly under priced. Similarly, a catastrophe reinsurer should expect the results of a very good or very bad year to show up very quickly.

Insurers' true economic results are frequently highly volatile, and we see no reason not to reflect this in full in the financial statements.

5.3 Balance sheet volatility

Users of the accounts are interested in realistic statements of companies' assets and liabilities, and where liabilities are discounted for time value of money, there is no reason not to use current market values (adjusted for the impact of tax as appropriate) in the balance sheet. With some exceptions, for example certain assets which companies can select to be treated on an amortised basis, this is what IAS 39 requires.

Companies that wish to minimise balance-sheet volatility need to choose their assets appropriately. Whatever regime is set up in Phase 2 in respect of liabilities, we would not expect it to introduce an accounting mismatch where there was an economic match. But all assets other than cash have at least a degree of volatility, as does the amount sufficient to pay off claims liabilities.

6 Conclusion for Phase 2: elegant theory or untidy pragmatism?

Here we try to pull some threads together. Many of the ideas in this section have already been touched on in earlier parts of the paper. Some appeared in the 2003 GIRO paper, and some are developed here.

6.1 Practical politics, and what matters most

1. Our objective throughout has been to work towards the development of ideas which are of practical use. And here we mean ideas which are likely to help the IASB's project move forward by achieving sufficient consensus. There is natural resistance to all forms of change, and IAS for insurance will be a very significant change for insurers in many jurisdictions.
2. We suspect that a new standard is more likely to be accepted if it looks something like the existing system.
3. To get the likely changes into context, to date most of the headlines have focused on the introduction of fair-value principles, and the risk (or market value) margin. The principles themselves met with resistance, in part because of the non-tradability of insurance, and in part for the practical reason that a theoretically perfect fair value would not have given reliable results. But, in the areas where IAS will make most impact, the real change is towards transparent and best estimate reserves. We would suggest that it is lack of confidence in companies' reserves which worries investors more than anything else, and which prevents some jurisdictions from being what we might call "investor-ready".
4. The disclosure requirements in Phase 1 (IFRS 4) are capable of leading to a significant improvement in the transparency of reserves and in part meeting the concerns above.
5. An ideal could be where a time series of accounting results will provide a good reflection of the true economic risk of the company. Would fair value deliver this in either absolute or relative (both within the insurance sector and between industries) terms? Or would the fair value measurement itself introduce additional volatility into either balance sheet or income statement, over and above the true volatility to be expected from insurance results?
6. Perhaps this ideal would be asking too much of an accounting regime. Investors are interested in meaningful balance sheets and useful income statements, but these have to be supplemented by management's discussion of exposures, potential downside, competitive position and much else besides. Policyholders are supposed to be interested in meaningful balance sheets, after which their attention soon shifts to price and service.
7. To be meaningful, accounts must not permit the smoothing of volatile insurance results. Where there is an economic mismatch between assets and liabilities, the accounts should show this. However, we are comfortable that companies should have the option to treat assets they so designate as "available for sale", thus avoiding recognising unrealised gains in the income statement.

6.2 Recap from last year

Last year our main objective was a practical way of implementing a risk margin to be added to mean best-estimate undiscounted reserves. We also tried to develop a list of very basic requirements or sense checks for accounts, and we show some of these briefly here. Unlike this year, we did not consider the valuation basis of the assets or the extent to which the assets matched the projected cash flows of the liabilities.

8. Accounts should reflect economic substance – this leads to discounting for time value of money among other things.
9. Liabilities (here including reinsurance assets) should be measured consistently between different companies – this is at the heart of consistent international standards. If “fair value” of a liability is to include a risk margin which depends on the portfolio of which that fair value is part, this test is failed. And insurance accounts would become the opposite of transparent, with many distortions resulting from a reduction in risk load per unit of liability as portfolios became bigger.
10. A current market-price, or fair-value, concept need not be inconsistent with the point above, but insurance is not traded and the concept is somewhat stretched and could lead to some questionable conclusions
11. Towards the top of the list of questionable conclusions was the suggestion that the liabilities are reduced if the insurer itself is financially weak, and that the liabilities recognised in the balance sheet should be reduced accordingly.
12. Valuation principles should be reasonably simple to apply, giving liability estimates which are easy to understand, and are acceptable to both regulators and shareholders.
13. We ended by proposing an approach to reserving risk margins which used regulatory capital requirements as a start point, and which postulated a required rate of return (the extra rate) on that regulatory capital (or a multiple of it) over and above risk-free investment returns, assuming a risk-free investment policy.
14. We did not feel that the “extra rate” should be allowed to vary over time, and that it, and the capital requirements, would have to be laid down and not at the company’s discretion. This would ensure the valuation basis did not introduce unnecessary volatility, and would also ensure consistency between companies.
15. Since the 2003 Giro paper, the approach suggested in 13 and 14 above appears to have been accepted as potentially practical by the actuarial community at least.
16. The major difficulty with the suggested approach is that it requires a single external party to lay down the key parameters of the formula namely:
 - (i) For each line of business, the formula for capital requirement as a multiple of reserves by age of cohort and line of business; and
 - (ii) The extra risk return required on the regulatory capital, or on a multiple of the regulatory capital, which amounts to the same thing.- the operation of these parameters, and some illustrations of their potential values, are set out in some detail in Section 4 of this paper.

6.3 Some further considerations

17. The concepts of economic mismatch and accounting mismatch are discussed in a recent IASB document: *IFRS 4 Insurance Contracts ; Frequently asked questions, July 2004*. This is available on www.iasb.org/uploaded_files/documents/16_18_ifrs04-faq.pdf. Economic mismatch occurs when assets and liabilities are not matched in terms of cash flows, and accounting mismatch occurs when, despite the assets and liabilities being matched, the accounting shows volatility in response to changes in interest rates.
18. IAS 39, the standard for financial instruments, provides an option for companies to avoid taking unrealised profits and losses to the income statement – though the full market value of most assets will be reflected in the balance sheet. This is likely to be an important component in the development of a standard which achieves sufficient consensus among users and preparers of accounts. There is no way to avoid balance sheet fluctuations in respect of free assets over and above those needed to meet the liabilities – apart, perhaps, from holding the assets as cash.
19. In our study of the Geneva papers, the most significant concern of that organisation appeared to be the introduction of unnecessary volatility into their income statements. We concluded that “full fair value”, along the lines of the DSOP could indeed introduce unnecessary volatility. This was because using a current market risk appetite to determine the additional loading required would give loadings which themselves fluctuated greatly. But it also appeared that the companies surveyed had not yet fully embraced the principle of transparent financial statements which reflected the full volatility which we regard as the economic reality of the insurance business.
20. We now consider the question of how profits should be recognised, including whether initial recognition or UPR-type adjustments might make sense. Initial recognition, estimating on day one how profitable the business is, can be a healthy discipline on the underwriting. But it is not consistent with allowing profit to be recognised as the risk runs off.
21. We found allowing profit to be recognised as the risk runs off to be an appealing concept, especially as the standard IAS 11, which applies to long term construction contracts, appears to give some support to this conclusion. The question remains: how should the reserves be calculated so as to permit profit to flow over time, but losses to be recognised immediately?
22. A purist might argue against holding an unearned premium reserve (UPR). But in spite of its being an old-fashioned concept, it does have great practical advantages. If the valuation regime is to hold a UPR in respect of any unexpired period, together with a discounted reserve for the prospective liabilities in respect of the expired period, the discounting basis used for the reserve will control the extent to which profit is held up as the risk runs off. If, for example, the last year’s premium rates have been very high, the vast bulk of the profit will be recognised within one year of writing the business. And the same principle applies to losses – losses would probably have to be recognised in full, however, as soon as the company became aware of their likelihood.

23. How is this consistent with profit emerging as the risk runs off? For catastrophe business, it is very possible for business to be written at a level at which profits are expected, only to be disappointed by a bad year for catastrophes. Holding a UPR and only releasing it as the season passes, though perhaps not necessarily at the same rate throughout the year if the catastrophes covered are seasonal, will give a perfectly satisfactory representation of the economics of the business.
24. At the other extreme, a long tailed line of business will probably require a heavy risk margin, and hardly any claims will be expected in the first year. Using the UPR for the first year, providing the company is confident that the business is not at loss-making rates, simply avoids taking any profit for the first year and will tend to permit only a very slow recognition of profit. This would be consistent with the line of business having a high capital requirement in respect of its reserves.
25. We have given limited thought to outward reinsurance. Assuming that bad debt is provided for, one would expect the application of a risk-adjusted discount rate to give a higher asset value than at a risk-free discount rate. But some care is needed. It is important to note that the correct theoretical approach to evaluation of the mean expected cash flow must recognise the way in which the reinsurance responds to the gross losses. A stochastic approach is needed. We will not develop this theme much further here, but a simple example will illustrate the point. A reinsurance policy which is expected with some confidence to exhaust does not justify a large risk premium in the books of the reinsurer, and the same applies in the books of the cedant. Its economic substance is close to a bond, barring the timing issue. On the other hand, the value of a reinsurance policy which provides large cover at just above the current gross expected loss is high.
26. The above problem is difficult to resolve, but such problems should not be permitted to get in the way of developing a standard which works well enough, if not perfectly.
27. We understand that the concept of prudence appears in the accounting framework, but that the emphasis is on the degree of prudence being appropriate given the uncertainty which is present. This does not seem to be inconsistent with a reserving approach which requires a safety margin related to the amount of regulatory capital.
28. A bit of additional prudence within the accounting framework will not give sleepless nights to the hard-bitten actuary. The challenge is as likely to be the need to counter management optimism.
29. We are confident that a “good enough” solution can be found to the problem of applying a reasonable margin to the discounted reserves, thus broadly recognising the reality that companies should factor their cost of capital (or, more accurately, a market average cost of capital) into their pricing and reserving.
30. But “good enough” could in practice be very simple. Unfortunately, applying a single margin in the discount rates (such as always using risk free rates less 2%) for all lines of business would give results which failed to capture the risk profile of the business. Whilst we are not concerned here with life business, we would note that a treatment of that kind might be draconian and totally impractical for

life business, and we presume that the IASB is looking for an approach which makes sense for all types of insurance.

6.4 *How a practical solution might look*

To summarise the key points from the discussion above, we have:

- IASB decides on the approach to the risk margin. It could decide that nil is the right answer, but we think that is unlikely.
- The method chosen should give the same results for the same gross risks, irrespective of the identity or other characteristics of the insurer.
- The reserve held is UPR in respect of the unexpired period plus a discounted outstanding reserve in respect of the expired period
- The assets held to back the liabilities may be either “at fair value through profit or loss” or “available for sale”, and the same applies to the other assets of the company (barring any decision to use the other classifications under IAS 39, if available). The company would need to understand the extent of any economic and accounting mismatch, and communicate this to its shareholders.

6.5 *Link to regulation*

The commercial accounts are usually the start point for regulatory returns. If and when a new IAS for insurance contracts is established, we would expect regulators to adjust their requirements to avoid double counting.

It is at the regulatory level, rather than at the accounting level, that we would expect the larger companies to gain from a credit for diversity – the additional capital required, over and above that held as a margin within the accounting provisions, would be a matter for the regulator.

We have mentioned the fact that the EU has recently required all general insurance companies, to the extent that they are already discounting, to top up their reserves by adding back the amount of the discount. If Phase 2 were already in place, this would impose a large capital cost to long tail lines, and could significantly distort the market. We would therefore expect the regulatory requirements to be changed again on the introduction of Phase 2.