

# **International Diversity in Measuring the Fair Value of General Insurance Contracts**

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## GIRO Working Party IFRS v SII

### **Abstract**

This paper discusses international diversity in accounting for insurance contracts as reported under SII and IFRS. Relative to SII, IFRS allow considerable diversity in practice and insurance firms to match income to expenses over the term of an insurance contract in order to provide a more 'realistic' basis for reporting to shareholders. However those GAAPs do not employ a coherent and consistent view of how to measure the fair value of a life insurance firm's business. The International Accounting Standards Board (IASB) has tentatively concluded that fair value should be used in accounting for insurance contracts. This paper discusses how existing GAAPs differ from fair values, simulates their impact on the profits emerging on a simple endowment policy, and proposes we also consider Solvency II as providing a broader conceptual fair value based framework within which additional risk-related disclosures can address currently unresolved conceptual and practical problems in implementing fair value for insurance contracts and related financial instruments.

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# 1 INTRODUCTION

## 1.1 Insurance accounting regimes

The determination of profits attributable to insurance business is complex, due to (i) uncertainty as to future cash flows emanating from an insurance contract at the point of sale; and (ii) different approaches as to how those cash flows should be incorporated into the entity's financial statements (Adams and Scott, 1994). Thus a major problem in accounting for general insurance contracts is how to determine an appropriate way of reflecting the riskiness of a general insurance firm's activities in its published financial statements. Since the economics of insurance transactions differ substantively in this respect from other enterprises, another major issue facing accounting standard setters is to ensure that these treatments are broadly consistent with both their conceptual frameworks and similar non-insurance transactions that are entered into by these same enterprises (e.g. pensions, financial instruments, banking).

In a number of jurisdictions (including European Union and Australia) some insurers were expected to be required, by 2005, to have financial statements that comply with International Financial Reporting Standards (hereinafter 'IFRS'). There was therefore pressure on the International Accounting Standards Board (hereinafter 'IASB') to issue a standard applicable to insurance contracts at an early date. However, resolving the many issues was taking a long time, since there was no consensus over the measurement of assets and liabilities (Economist, 2004, 23 October). Consequently, the project was divided into two phases.<sup>1</sup> Phase I concentrated on removing those insurance accounting practices regarded as most clearly inconsistent with IASB principles, and the outcome was a standard, IFRS4 (IASB, 2004), effective for annual periods beginning on or after 1 January 2005. This introduced some new requirements on disclosures by insurers, namely the disclosure of assumptions, sensitivity analysis and information about the management of these risks.

Phase II aims to conclude on the more significant conceptual issue of the recognition and measurement for insurance contracts; however, the IASB indicated its tentative conclusion that the assets and liabilities of insurers should be measured consistently at fair value (IASB, 2004). Insurance firms therefore provide an important test case for the potential breadth of the applicability of fair value accounting. Fair value is "the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction" (IFRS 4, para 23

However the IASB's views on fair value for insurance does not accord either with existing practices under national generally accepted accounting principles ('GAAP'), nor with the lack of observable market prices for insurance liabilities. This paper proposes a general conceptual framework which recognises three elements of valuation and their various purposes. We argue there is tension between the stewardship, performance – efficiency and conservative valuation purposes of general insurance accounts, for a number of reasons. First, it is recognised that the fair value of insurance liabilities can be difficult to determine as such liabilities are not

commonly traded, Second, we provide a critique of the proposed fair value measurement basis for general insurance contracts. In the absence of market evidence to the contrary, the estimated fair value of an insurance contract should be not less than the insurer would charge a new policyholder for a new contract with identical terms over the remaining duration of the contract. Third, the currently reporting framework does not explicitly identifies the regulatory risk of insolvency associated with various complex options underlying insurance business. We propose Rayman's (2006) framework of dual purpose reporting in order to address these issues.

## **1.2 Structure of this paper**

The rest of the paper is organised as follows. First, the principles of general insurance valuation are outlined. Then major differences between statutory accounting principles ('SAP') and insurance GAAP in the UK, and their differences from the 'fair value' approach favoured by IASB are outlined. In section 4 we evaluate the impact of IFRS 2. Section 5 discusses the major approach taken by IASB for phase II. Major conceptual difficulties in using fair value for insurance profit reporting are then discussed in section 6. We then draw conclusions and propose a broader Solvency II-based conceptual financial reporting framework in section 7.

## **2 GENERAL INSURANCE VALUATION PRINCIPLES**

### **2.1 Introduction**

In order to put these developments in context it is important to review the principles of insurance valuation. This is an area where actuaries (e.g. Skerman, 1966) have made important contributions in developing insurance accounting.

Insurance firms manage assets in order to meet present and future policy obligations which possess three particular features. First, it is generally the case that most assets of general insurers are cash or financial instruments that are readily realisable, and the fair value can be determined without undue difficulty (assuming that definitional issues such as use of entry or exit price have been decided). Second, many of the assets held by life insurers are equities, where amortized value is impracticable. Third, some authors highlight the importance of prudence (Welzel, 1996): confidence in the sector may be enhanced if insurers are seen to be solvent with a deliberately prudent value placed on their assets, for example by using the lower of purchase price and market value. However, this reduces comparability between insurers.

Valuing liabilities raises some difficult issues. There is no liquid, active secondary market in insurance policies, at least in most cases, so it is not surprising that insurers have, to date, shied away from trying to estimate what a market value would be.

The IASB's Issues Paper (1999) on insurance accounting raised a number of questions about the liability valuation. This process requires assumptions about, for example, future rates of mortality, expenses, taxes, investment returns. A number of questions were identified, such as whether the future cashflows used were based on assumptions about mortality that were decided at the outset when the policy was sold; or are the assumptions updated as estimates of future conditions change? If there is a change in, say, assumed mortality rates, is the effect capitalised into the year's result or is the effect spread over time?

Harrington (1990, 675) provides a conceptual overview of general insurance accounting. In this section we follow the framework set out in Harrington (1990, 675-699) to provide an overview of basic general insurance accounting rules and identify some alternative income measures to help interpret financial results and to understand how cost of capital estimates can change depending upon these assumptions. We first define the concept of profitability under both statutory and accounting (IFRS 4 acceptable – GAAP). If a few simplifying assumptions are made and arcane factors such as deferred income taxes are ignored, the major measures of profitability can be made fairly clear. We begin with the standard definition of SAP and UK GAAP. We then derive an economic profit measure which is equivalent to IFRS. Finally we discuss the issue of how solvency affects the calculation with Solvency II.

## 2.2 SAP and UK GAAP

### 2.2.1 Introduction

Insurance company annual returns that must be filed with the UK Financial Services Authority are prepared using statutory principles as set out in the UK SORP (Statement of Recommended Practice issued by the Association of British Insurers). The principles tend to be more conservative than GAAP in that income and surplus tend to be less than income calculated using GAAP. A major difference between SAP and GAAP is that treatment of acquisition expenses, those incurred in selling and issuing insurance contracts. SAP requires that acquisition expenses be charged against surplus when incurred. GAAP requires that revenues and expense be matched, which means expenses are deferred compared with SAP.

### 2.2.2 Earned premiums and incurred losses

Two important concepts in both SAP and GAAP accounting are earned premiums, EP, and incurred losses, IL. Premiums are written when the policy is issued and the premium becomes payable. Premiums are earned evenly over the duration of the policy period. A principle liability of general insurers is their unearned premium reserve, UPR, which reflects the amount of written premiums, WP, that have yet to be earned as of the statement date. The relationship between these items in a given year is given by  $EP = WP - \Delta UPR$ . If earned and written premiums are equal during a year, UPR does not change.

Incurred losses are defined as losses paid, LP, plus the change in the general insurer's second major liability, the loss reserve, LR:  $IL = LP + \Delta LR$ . The loss reserve is the estimated liability for all unpaid claims that have occurred as of the statement date. Since future claim payments traditionally have not been discounted, the book value of the liability, if accurately estimated, overstates its market value. Moreover, incurred losses for a given calendar year will be affected by revisions in reserves for previous years' claims to reflect new information about expected total claims. That is, increases in the loss reserve in year  $t$  for claims that occurred in year  $t - n$  will affect reported incurred losses in year  $t$ .

SAP surplus,  $S$ , is given by the basic accounting identity

$$S = A - LR - UPR \quad (1)$$

Where  $A$  is the SAP value of assets, which reflects bonds at amortized (book) value and common stocks at market value. The change in surplus during a given period can be written

$$\Delta S = \Delta A - \Delta LR - \Delta UPR \quad (2)$$

The change in SAP assets equals premiums written less losses paid, underwriting expenses,  $E$ , policyholder dividends,  $D$  and income taxes,  $T$ , plus total investment gains,  $IG$ . Substituting for  $\Delta A$  in equation 2 and using  $\Delta UPR = WP - EP$  and  $\Delta LR = IL - LP$  gives

$$\Delta S = (EP - IL - E - D) - T + IG \quad (3)$$

The first four terms total SAP underwriting income. IG has three components; net investment income, I, which consists of interest (including changes in the book value of bonds due to amortization), dividends, and rents, less investment expenses; realized capital gains or losses on stocks and bonds, RCG; and unrealized capital gains or losses on common stocks, URCG. A popular measure of income is pretax operating income, which is defined as SAP underwriting income plus I; after-tax operating income deducts T.

### 2.2.3 From SAP to GAAP

The principal modification of SAP surplus to obtain GAAP surplus involves creating an asset account to reflect prepaid acquisition expenses. Assuming that all underwriting expenses are acquisition expense gives the following definition of surplus adjusted for prepaid expenses (SA);

$$SA = A + (E/WP)UPR - LR - UPR \quad (4)$$

Where E/WP, the underwriting expense ratio, is assumed to be constant from year to year. This treatment essentially adds to SAP surplus the amount of the unearned premium reserve being held for acquisition expenses associated with the remainder of the policy period that have already been paid. Using the definition of  $\Delta A$ ,  $\Delta LR$  and  $\Delta UPR$  gives the following expression for the change in adjusted surplus:

$$\Delta SA = [EP - IL - (E/WP)EP - D] - T + IG \quad (5)$$

Pretax GAAP underwriting income is given by the first four terms of this expression. As noted, the difference between GAAP and SAP underwriting income is that GAAP automatically matches expenses with revenues as premiums are earned.

### 2.2.4 Combined ratio

The most common summary measure of underwriting profit is the combined ratio, CR, either before or after policyholder dividends. If after dividends it is defined as the sum of the ratio of incurred losses and dividends to earned premiums plus the ratio of underwriting expenses to written premiums:

$$CR = (IL + D) / EP + E/WP \quad (6)$$

One minus the combined ratio gives the pretax GAAP underwriting margin relative to earned premiums:  $(1 - CR)EP = [EP - IL - (E/WP)EP - D]$ . The pretax GAAP operating margin including net investment income is given by  $(1 - CR) + I/EP$ .

Another measure of income that analysts have looked to in recent years is the operating ratio, which is defined as

$$OR = CR - a(I+RCG)/EP,$$

Where  $a$  is the amount of net investment income plus realized capital gains that is allocated to insurance operations (or for results by line, to a given line of business) as opposed to surplus. Thus the operating ratio equals the combined ratio minus the ratio of investment income allocated to a line to earned premiums for the line. The operating ratio differs from the pretax GAAP operating margin in that it reflects realized capital gains, and only net investment income and realized capital gains allocated to operations are included. If the operating ratio for all lines of business were equal to 1, a pretax increase in adjusted surplus would equal all unrealized capital gains plus the share of net investment income and realized capital gains allocated to surplus. A ratio greater than 1 indicates that the increase in adjusted surplus would be less than this amount.

The operating ratio essentially measures profit from insurance operations under the assumption that net investment income and realized capital gains on surplus plus all unrealized capital gains should be credited to owners. Critics have however argued that all capital gains should be included when assessing the profitability of insurance operations. Does the operating ratio provide a good measure of whether insurance operations in any year or over time even if one assumes that the underlying assumption about investment gains is appropriate?

## 2.3 Towards IFRS

### 2.3.1 IFRS reporting

To illustrate how IFRS might be reported in a way which is more consistent with an economic profit basis of performance measurement, let the market value of an insurer's surplus for all business written (old and new) before the SM, be defined as

$$SM = A + B - PVL \quad (8)$$

Where  $A$  is the SAP value of assets,  $B$  is the market value of bonds less book value, and  $PVL$  is the market value of unpaid claims, that is, the present value of unpaid claims discounted at a market-determined rate of interest. The change in  $SM$  is:

$$DSM = [WP - (LP + DPVL) - E - D] - T + IG' \quad (9)$$

Where  $IG' = IG + DB$ , that is, net investment income plus realized and unrealized capital gains on bonds (inc excess of bond amortization) and on stocks. An expression for  $DSM$  that is more comparable to equations (3) and (5) can be obtained by defining  $PVL$  as the present value of unpaid claims only for incidents that have occurred by the statement date and by noting that the unearned premium reserve less the adjustment for prepaid acquisition expenses would approximately equal the present value of unpaid losses for claims that are expected to occur after the statement date for policies written as of the statement date. Using these results gives

$$\Delta SM = [EP - (LP + DPVL') - (E/WP)EP - D] - T + IG' \quad (10)$$

The quantity in brackets equals UK GAAP underwriting profit using discounted losses.

### **3 EVALUATING ALTERNATIVE GAAP: ALTERNATIVE PERSPECTIVES ON IFRS v SII**

The multiple purposes served by both IFRS and SII highlights the importance of the regulatory, accountability and managing the business perspectives on general insurance firms. Below we summarise our latest thinking on each of these areas. Appendix 1 contains a general overview of the different perspectives as they relate to different attributes of financial reporting, in terms of general principles, qualitative attributes, financial statements, elements of financial reporting and measurement issues.

#### **3.1 Challenge and Appraisal of Solvency 2 in terms of Policyholder Protection**

##### **3.1.1 Introduction**

This section briefly overviews the major reporting and accountability issues affecting the policyholder protection aspects of Solvency 2. We avoid a detailed appraisal of Solvency 2 outside the major reporting requirements. The discussion is kept at a fairly superficial level given the familiarity of most actuaries with this regime. Specific areas of Solvency 2 that we consider to advantages and new insights of Solvency 2 relative to existing accounting requirements are marked with (+ve) and vice versa.

- a) Policyholder protection a fundamental objective of S2
- b) S2 is prudential regulation regime, of which valuation of assets and liabilities and reporting is one part.
- c) More strongly capitalised than under previous regime, better able to withstand adverse events.
- d) Improvement to risk management.
- e) Holistic regulatory regime (not look at silos of an insurance companies operation)
- f) Consistency, comparability is a general objective of S2, though there is potential for inconsistency in reporting of some financial items.
- g) Improved transparency, particularly on risks

##### **3.1.2 High Level Issues on Reporting of Capital**

- h) SCR is the main indicator of whether an insurer's capital is adequate
- i) Capital (own funds) split by quality – tiers 1 to 3, basic and ancillary (+ve)

##### **3.1.3 Valuation of Assets and Liabilities other than Technical Provisions**

- j) Article 74 (fair value), consistent with IAS 39 (not insurance liabilities), mark to market, but valuation of illiquid assets not resolved
- k) Value of participations (>20% interest): mark to market (+ve), otherwise mark to model (-ve) with every 3-yr independent verification (+ve), otherwise net asset accounting under S2 economic values (+ve).
- l) Goodwill ignored (+ve)
- m) Deferred tax recognised ? (UK lobbying against, others for) (-ve)
- n) No account taken of own credit rating [for valuing debt obligations] (+ve, but may not make sense from the insurer's

- o) point of view) appropriate for technical provisions but yet to be resolved for non-technical provisions, i.e., whether use risk free rate(decrease in equity) or risk free rate + plus own credit standing at inception (unchanged equity)

### 3.1.4 Valuation of Technical Provisions

- a) Basic principle of three components: undiscounted best estimate (mean) of future cash flows, discounting on risk free rate and risk margin. (CEIOPS CP 35) (+ve, as provision higher than discounted best estimate.) Hedgable risks valued market consistently, while non-hedgable on BE + risk margin
  - i. Risk Margin based on cost of capital model: consistency with IFRS definition of risk margin?
  - ii. Best Estimate: Potential for inconsistencies between entities on undiscounted best estimate (mean) due to differing views of reserving practitioners. (This is the situation currently and is arguably unavoidable, though benchmarks and standard setting might reduce inconsistencies.)
  - iii. Discounting: Potential for inconsistencies between entities if level 2 or 3 implementing measures give entities the option to discount at different rates. Risk free rate need to be defined
  - iv. Discounting: Potential for inconsistencies between entities due to differing views of reserving practitioners on duration of liabilities. (Though benchmarks and standard setting might reduce inconsistencies.)
  - v. Risk margin: Consistency only all firm's use the same formula.
  - vi. Risk margin: Correlations may be inadequate in stressed conditions.
  - vii. Risk margin: Questionable clarity between amount of adverse experience to be absorbed by risk margin and amount to be absorbed by SCR.
  - viii. Transparency improved if undiscounted best estimate, discounting reduction and risk margin reported separately. If just overall provision reported, transparency to policyholders reduced.

## 3.2 Challenge and Appraisal of Solvency 2 from a Shareholder Perspective

### 3.2.1 Decision Usefulness vs. Stewardship

“Stewardship” reporting focuses on the “custody and safekeeping of enterprise resources” [ASB 1978:25 Rayman 15] whereas performance reporting is focused on “their efficient use”. Rayman contends that a major problem with current accounting is that the accounts try to satisfy both these purposes and thereby fall short on both measures.

Decision-usefulness is deemed by some commentators to be of the highest importance in determining the desirability of accounting information. Essential ingredients to making accounting information useful are **relevance** and **reliability**. Relevance is driven by the extent to which information is timely, has predictive and/or feedback value. Reliable information depends on the degree of verifiability and

representational faithfulness.

Other criteria in deciding on the quality of information are:

- The decisions to be made
- Information already available
- Decision maker's capacity to process the information (alone or with professional assistance)

A challenge for insurance business is that it is so driven by the estimated cost of future promises that stewardship records will need to involve a high degree of subjectivity. However, in concept they should be more consistent with historical cost accounting and the recognition of capital gains and investment income as they are realised. While this information is reliable it may be of less relevant to judging the underlying performance expectations and economic return being generated by the business.

### **3.3 Some notes on managing the business**

#### **3.3.1 Preamble/context**

*(Perspective of management team as a whole) (accounting and solvency, given new challenges to regulatory and accounting practices )*

Background to include “lessons learned”, as well as discussions elsewhere on lessons learned for banking regulation, and governance of financial institutions (Walker Review)

#### **3.3.2 On managing the business**

We are trying to be radical and free-thinking. So whenever we notice conventional wisdom, cover it in such a way as to take nothing for granted.

Managing the business includes a number of aspects. A non-exhaustive list is as follows

- Understanding, in order to decide strategy
- Communicating, in order to gain support for strategy and also as part of executing it (support needed is external – clients, suppliers, capital providers) – as well as internal.
- Executing
- Appraising, reconsidering strategy
- And on to communicating and executing again.

Communicating is both formal and informal. Formal: most important is shareholder accounts, but also for insurers, the “solvency accounts” (term intended to capture all

regulatory reporting).

There is some scope for informal communication within the accounts, or within the document that includes the accounts.

For each of staff, customers and shareholders the “culture” of the business is an important consideration – however it frequently is ignored. “Culture” includes the openness and honesty with which the business is run, as well as how other parties such as customers and shareholders are communicated with. One could even include the regulators as beneficiaries or otherwise of the corporate culture. (just think of Independent Insurance, for an example of how this matters to the regulators – it has arguably been a more important and more typically catastrophic failure for banks, though)

Solvency – what is the role and impact of solvency numbers and solvency reporting from a perspective of managing the business?

- Solvency tends to be given huge prominence
- Reason is that so many companies’ operating models are to “sweat the capital”.
  - Arguably this places them too much at the whim of the cycle.
  - Either companies are trying to over-trade for part of the cycle
  - - Or they simply do not have enough capital
  - the “cost of capital” in the unconventional sense of “how much damage is done to the shareholders’ wealth compared to investing it in a different industry from insurance” is an important consideration. If the cost, eg through tax or other inefficiencies and frictions, of holding incremental capital, is high, then the “sweat the capital” model is understandable. If so the sensible strategy is to sweat it only at the high price points in the cycle. If the incremental cost is not high, or can by adopting certain strategies be kept relatively low, there will be a more intelligent response to the cycle.
- One could argue that it solvency should be second order importance.
- Its (solvency’s) real importance is twofold, with the first typically getting too much attention compared to the second:
  - The coveted good AM best , or Moody’s rating. AA or better – happy, A or less – nervous. There is a HUGE temptation to FIDDLE, or more kindly to self-delude, with regard to reserving strength and resilience and stability of earnings
  - If the company is **managed to stay comfortably solvent in all conceivable contingencies** then from the point of view of staff and

shareholders, and to a slightly lesser degree the customers – this is a very attractive situation. But, it is suggested, few companies spend much effort casting round to wonder “what might conceivably go wrong?”

- So solvency is in most circumstances a “hygiene factor” rather than a value driver – only in very rare cases do companies look to extract extra value from an outlying position of huge relative financial strength. Apart from BH I don’t know anyone who really does this. Some may have claimed to do so in the past, but the claims were perhaps a little hollow.

Accounting results / profits / balance sheets / GAAP / SORP / IFRS

We have the question – how do accounting results, the accounting conventions and practices, and the associated disclosures and disciplines in relation to communication hinder, or help the efficient management of the business?

## 4 IMPACT OF IFRS PHASE 2

The discussion of general insurance GAAP and its relation to the various tasks undertaken by the actuary highlights the multiple purposes served by insurance accounts. Given the global significance of the insurance industry in the transformation of risk, these variations pose an important challenge to the ongoing development of global accounting standards. See appendix 2 for a summary of the major issues.

### 4.1 Challenge and Appraisal of IFRS Phase 2 in terms of Policyholder Protection

#### General Principles

- p) Intended for on shareholders, not policyholders
- q) Only publicly quoted entities, therefore possible comparability issues (-ve)

#### High Level Issues on Reporting of Capital

- r) Market view is the main indicator of whether an insurer's capital is adequate.
- s) No split of capital by quality (-ve)

#### Valuation of Assets and Liabilities other than Technical Provisions

- t) IAS 39 (fair value not, insurance liabilities), consistent with Article 74, mark to market, but valuation illiquid assets not resolved.
- u) Value of participations (>20% interest), IAS 28 for associates, net asset accounting (+ve)
- v) Goodwill –recognized under IFRS3
- w) Deferred tax: IAS12 acceptable proxy under S2 except for unused tax losses and unused tax credits to be at 'nil' value.
- x) Own credit standing taken into account [for valuing debt obligations] (-ve)

#### Valuation of Technical Provisions

- y) Basic principle of three components: undiscounted best estimate (mean) of future cash flows, discounting and risk (+ve, as provision higher than discounted best estimate.)
  - o <Same issues as listed under S2 (apart from vi). However, as IFRS is not a regulatory regime, rules may be less prescriptive and thus greater potential for inconsistency between entities (-ve)>
- z) Revenue recognition
  - i. IASB DP on revenue recognition, uniform model (asset liability approach)
  - ii. Profit on sale
  - iii. Reinstatement premiums

Intangible Assets: via contractual rights: IAS 38; S2 only if it can be fair valued (?), else 'nil'.

Investment Property: IAS 40 cost model initially, and cost or fair value later; after

initial cost model, S2 requires fair value only with 3 yr independent verification

## **4.2 Challenge and Appraisal of Solvency 2 in terms of Policyholder Protection**

aa) Revenue recognition

- ix. Profit on sale
- x. Reinstatement premiums (CEIOPS CP 30 – only if lead to increase in liability)

## **4.3 Challenge and Appraisal of IFRS 2 from a Shareholder Perspective**

### **4.3.1 Volatility of Reporting**

Market asset values are volatile so Exit liability values are volatile. Is this a true balance sheet measure? Is this a useful balance sheet measure? Do fundamental values really change by that much in a reporting period? Is this a useful profit measure? Should there be disclosure of how much is due to market movements (parameter change) and how much to "fundamental" movements?

### **4.3.2 The impact of the Underwriting/Reserving cycles**

The underwriting cycle for general insurance business will affect the premiums charged. Typically, in a hard market premiums will be higher than in a soft market, all other things being equal.

If the IFRS mandates “no day 1 profit”, then the true economic profit may not be reflected until the end of a given contract lifecycle in a hard market compared to a loss-making contract in a soft market.

### **4.3.3 Range of best estimates**

The IFRS will require the first building block to be an undiscounted best estimate of future cash flows. This is, obviously, a subjective amount. There is a range of best estimates and so the reserving strength will impact on the liability values and emergence of profit.

### **4.3.4 Comparability and consistency of reporting framework and disclosures**

An important attribute of a good reporting standard from a shareholder perspective is consistency and comparability between organisations and time. Assuming the FASB ultimately adopts IFRS, comparability between jurisdictions will be better.

However, the potential for differences in reserving strength between companies may not be ideal for an equivalent comparison. If disclosures are strong, then changes in reserving strength may be apparent. If not, comparison over different time periods may be problematic.

### **4.3.5 Measurement issues - Day 1 Profit and Revenue Recognition**

Exit value is what would be achievable. Entry value is what was actually achieved. Exit value (best estimate plus risk margin) is theoretically consistent between parties but practically difficult to achieve because subjective. Entry value is objective. Exit

value takes some profit at time 0 and spreads remaining profit over period of exposure as risk margin runs off. Entry value spreads all profit over period of exposure (in arbitrary manner unrelated to risk?).

With Exit value, we still have the principle of recognising profit as service is provided. It's just that now we say that the services provided are writing the policy (acquisition costs), and then over time servicing the policy (running expenses) and bearing risk (risk margin = cost of holding capital).

Issues with risk margin are not only how to calibrate it for Day 1 Profit but how to release it over time for Emergence of profit. Is the calculation transparent? Does it give shareholders the correct information?

#### **4.3.6 Decision usefulness vs Stewardship**

IFRS II is aiming to get closer to the economic returns generated by the underlying business using market values as a basis for performance measurement. However, there is a trade-off because much additional disclosure will be required to give users a clear picture of underlying performance. For example movements in profit caused by investment conditions may not reflect underlying underwriting profitability.

Stewardship accounts may be described as non-transparent and result in the retention of hidden margins. A desired outcome of IFRS II is greater transparency and comparability across insurance companies.

### **4.4 Some notes on managing the business**

#### **4.4.1 Preamble/context**

*(Perspective of management team as a whole) (accounting and solvency, given new challenges to regulatory and accounting practices )*

- Rayman (2006) explains the original, and arguably still core purpose of accounting, which is to account to reflect the proprietary interest of shareholders. Count what money flowed where, and what undertakings – assets or liabilities – were created in relation to these money flows.
- This is a backward-looking measure / mindset but gives us confidence in what transactions took us to where we are today, as well as of certain measures which are applicable today.
- This contrasts hugely with a forward-looking view.
- The extreme version of the forward looking view is where a balance sheet purports to give some indication of “value” looking forward.
- However “value”, as well as potentially meaning different things to different people and needing preceding words to define the context better (market value, for example) **generally** implies something looking forward. The only

exception is “book value”, which is typically the number which reconciles with the backward looking bean-counting accounts.

- In recent years, there has been a tendency for companies to try and convey forward-looking information in their financial statements. The most extreme example of this is in the life insurance business, where the convention for drawing up accounts has been to follow the solvency (prudent, slow recognition of profits, cautious values placed on liabilities and assets) principles. This has meant that the “surplus” emerging each year has typically been much less than a more realistic shareholder-perspective of profit
  - However, in a capital-constrained business, it is the solvency numbers which determine the amounts of cash which are free to distribute to shareholders. This is therefore a real measure – it makes a difference to the commercial choices available for how to deal with available capital, including distributing it, retaining it, or even raising more.
  - If the business is not capital constrained, the dynamics are quite different. Avoiding unnecessary acceleration of tax then becomes important.

**Everything depends** on the attitude of the managers and the shareholders. Is accounting a servant:

- To show information
- To help make decisions about managing the business

Or is it a master

- To be overcome
- kept in its place
- Be “managed”

This in turn depends to a degree on how observers view accounting numbers.

Unfortunately, where trust does not exist, either has not been earned, or has actually been forfeit through past conduct, the accounting numbers, though mistrusted, will be subject to some sort of verification (professional standards and the audit should achieve something), will be the only signal that is listened to.

## **5 THE IASB'S PROPOSALS FOR IFRS PHASE 2**

The discussion of general insurance GAAP and its relation to the various tasks undertaken by the actuary highlights the multiple purposes served by insurance accounts. Given the global significance of the insurance industry in the transformation of risk, these variations pose an important challenge to the ongoing development of global accounting standards. In April 1997 the former IASC began to address this issue by appointing an Insurance Committee of the International Accounting Standards Board (hereinafter 'Steering Committee'). Its purpose was to develop uniform international GAAP which is intended to achieve acceptance by the stock markets, national accounting standard-setters and the international insurance industry.

Subsequently the Steering Committee published an 'Issues Paper' in November 1999. This set out some preliminary views on what could be a suitable way forward, but its review of current practice showed ongoing diversity in international accounting practices of life insurance firms, with no current practice meeting what the Committee envisaged as the way ahead. The Steering Committee was also conscious of the broader debate taking place on the valuation of financial instruments, and therefore worked on the assumption that IAS39, Financial Instruments: Recognition and Measurement, would be replaced by a new standard requiring full fair value accounting for the substantial majority of financial assets and liabilities. On this basis the Steering Committee believed that portfolios of insurance contracts should also be valued at fair value.<sup>6</sup> However, it also recognised that determining the fair value of insurance liabilities on an actuarially objective and verifiable basis poses difficult conceptual and practical issues, given that there is generally no liquid, active secondary market in the liabilities arising from most types of insurance contracts.

The Issues Paper generated a large number of responses, with a debate over whether fair value was an appropriate way forward and, if it was, what fair value meant in this context. This was followed by the Steering Committee preparing a Draft Statement of Principles (DSOP), published (though not completed) on the IASB website [www.iasb.org.uk](http://www.iasb.org.uk). The DSOP indicated that, if IAS39 changed so that non-insurance financial instruments were to be measured at fair value, then fair value should also apply to assets and liabilities arising from insurance contracts. If there was to be no such change to IAS39, then entity-specific value should apply to insurance, though, in practice, this was expected to produce results very similar to fair value.

The Steering Committee rejected the deferral-and-matching approach used in existing G4 GAAP, i.e. deferring income and expenses so that they can be matched against each other, on the grounds that it is inconsistent with an fair value accounting model. It also rejected the implicit or "deductive" methodology under which the value of liabilities is calculated by subtracting the surplus emerging from insurance contracts from the market value of assets. This deductive approach has a problem in that the surplus emerging is typically assessed using a projection of future financial conditions without reference to the full potential impact of options and guarantees as would be incorporated in a market-consistent valuation of financial instruments. In the absence

of consistency the valuation of assets and liabilities on such an approach is problematic.<sup>7</sup>

## 6 UNRESOLVED ISSUES IN INSURANCE ACCOUNTING

The comprehensive Solvency II framework that models expected future cash flows related to various types of life insurance contract requires that a consistent valuation methodology be employed across various components of life insurance contracts. However the IASB's latest Discussion Paper (2007) raises a number of unresolved measurement issues associated with any effort to explicitly estimate the fair value of life insurance contracts under a more comprehensive IFRS. These issues were also discussed within the context of financial instruments by a subsequent discussion paper issued by the Joint Working Group of the G4+1 (Joint Working Group, 2001).

Solvency II also highlights the potential role for additional risk disclosures as a solution to resolving such uncertainties. Yet unlike banks, general insurance firms currently provide very few disclosures about the explicit and implicit risk exposures involved in the management of their contracts (Multidisciplinary Working Group on Enhanced Disclosure, 2001). This perhaps reflects the lack of a coherent conceptual framework, to date, for insurance accounting, to which systematic risk disclosures could be applied along the lines of those required by IFRS 4.

We now briefly discuss the implication of this framework in resolving a number of major contentious issues covered under general issue 11 of the Issues Paper.<sup>9</sup> Table 1 summarises each of these six issues and outlines our associated proposals for enhanced risk-related reporting.

Table 1: Unresolved issues in Insurance Accounting

Issue	Outline Proposal for Enhanced Risk-Related Reporting
6.1. Are Insurance Contracts Financial Instruments?	No – they are insurance contracts which transfer risk from the insured to the insurer under specified conditions which are idiosyncratic to the contract
6.2. Is fair value appropriate?	It is unlikely since most general insurance contracts are not easily tradeable and rely on absence of moral hazard subsequent to the contract being initiated
6.3. What should be the general approach to applying fair value?	Fair value is of limited relevance to general insurers except insofar as future activities and exposures are discounted to reflect risk and uncertainties, and their investment-related activities
6.4. Should the Fair Value of	This may be relevant to Solvency II but is unlikely to be acceptable under IFRS

Intangibles be Included?	given constraints as to performance reporting
6.5. Unit of Account	Should be at the group level to allow for the value added benefits of risk sharing
6.6. How is the Liability Extinguished?	Credit risk should not be taken account of as it does not bear on the execution and extinguishment of most general insurance contracts per se.

### *6.1. Are Insurance Contracts Financial Instruments?*

Question 1 of the IASB's Discussion Paper (2007, para. 30) asks whether insurance contracts are financial instruments. One fundamental issue in the debate on an international standard for insurance contracts has been whether to regard them as financial instruments or as service contracts. If the former, it is logical to base the accounting for insurance contracts upon IAS 39. If the latter, then the contents of IAS 18 ("Revenue") appear more relevant. In essence, an insurance contract has elements of both. Viewing insurance as a service contract is more likely to lead to a smooth pattern of profit recognition consistent with profits reflecting performance over time. On the other hand, treatment as a financial instruments could, on certain assumptions, lead to significant profits being recognised at the outset of the contract. The diversity in current approaches illustrates the range of possible solutions.

The Steering Committee (1999) viewed that many types of contracts have features of financial instruments, although it acknowledges that they also have non-financial attributes (para. 537). However there are a number of problems associated with estimating the fair value of life insurance firm liabilities, especially since the majority are not actively traded in a deep and liquid market. This is one reason why insurance contracts have been exempted from the requirements for fair valuation of financial instruments in other standards (e.g. SFAS 133, IAS 39).

For example, in the absence of a deep and market for insurance liabilities, it is thought that liabilities would have to be valued by making a discounted "best estimate" of expected future cash flows and adding a "market value margin" to reflect the premium required by the margin to assume the risk (Hairs et al., 2002). However, in addition to problems in determining these best estimates, how is the market value margin calculated, and should it ignore risk on the grounds that the market would not reward such risk-taking?

### *6.2. Is fair value appropriate?*

Question 2 of the IASB's Discussion Paper (2007, par.a. 119) asks whether the concept of fair value, as presently applied to financial instruments (IAS 39), is also appropriate to financial reporting of insurance activities. The Steering Committee asserted that consistency between the treatment of assets and liabilities of an insurance enterprise is of primary importance, and assumes that the IASB will adopt a comprehensive approach to reporting all financial instruments at fair value (para. 557).

Fair value gives more volatile results than other methods of measuring assets. This leads to concerns by insurers about reflecting the complexity of life insurance business (Dickinson & Liedtke, 2004). Because assets and liabilities often involve complex actuarial estimates of distant future events that frequently depend on the exercise of options written by insurers and held by policyholders.<sup>10</sup> A non-trivial degree of inaccuracy in the estimation of the value of these written options is therefore to be expected; yet such inaccuracy could have an enormous impact on the solvency risk of general insurers.

It is therefore important that these risks be disclosed and understood within an overall fair value framework. The general conceptual framework explicitly accounts for the option to terminate life insurance business in the put option at the enterprise level. The contract-specific framework consider the impact of market risk associated with the various major classes of insurance contract. However, users of accounts also need to have an understanding of credit risks and liquidity risks in an insurer's assets. IFRS4 will require information about credit risk as if insurance contracts were within IAS32, which applies to non-insurance financial instruments.

### *6.3. What should be the general approach to applying fair value?*

Question 5 of the Discussion Paper what should be the general approach in applying fair value to insurance contracts. It proposes a 'current exit value' approach. By contrast, the Steering Committee recommended that the measurement approach described in IAS 37 provides a general model for estimating the fair value of most insurance obligations. IAS 37 (para 37) defines a provision as the 'amount that an enterprise would rationally pay to settle the obligation at the balance sheet date or to transfer it to a third party at that time'. However this definition does not necessarily accord with an entity's own assumptions about future cash flows.

The conceptual fair valuation framework embedded in IFRS 4 is static in the sense that changes in firm valuation over time resulting from the effect of unexpected changes in the environment, as opposed to the effect of deliberate management actions to exercise control over the business, is not explicitly measured.

The Solvency II framework instead appears to assume that the insurer calculates the present value of liabilities on an assumption that the obligations to policyholders are satisfied with certainty, and to compare this with the fair value calculation allowing for credit risks, or perhaps some calculation made assuming some specified credit

rating.

The concept of liquidation value in general insurance has received little discussion, although cash flow statements are produced, they are relatively uninformative, and the relevant standard (IAS 7) has not been updated for a number of years. The discussion within the Discussion Paper however implies that separate disclosure is required, at least in summary terms, of the outcome of the statutory accounting principles for the insurer, and the extent to which the excess of assets over liabilities on such basis exceeds the minimum capital requirement set by the regulators (i.e. the market value of tangible assets).

#### *6.4. Should the Fair Value of Intangibles be Included?*

Question 6 of the IASB Discussion Paper (2007 para 174) asks whether the fair value of an insurance contract should include the fair value of intangibles related to 'policyholder behaviour', such as deferred acquisition costs. The Steering Committee argued that they should not be included as they do not represent the value of the financial assets or liabilities embodied in the insurance contract (para. 576). But what if the fair value of insurance business includes an element of 'inherent goodwill' or market risk margins that is incorporated in third party's estimates to take over the business (or 'franchise value')?

Perhaps the most difficult part of implementing any new accounting paradigm that incorporates these issues explicitly is the determination of the market price of risk. The Draft Statement of Principles requires that insurance contract liabilities include a provision for risk to be based on the market's price for that risk. However there is very little evidence available to determine prices associated with the sale of blocks of business or reinsurance arrangements, since such transactions in general insurance are relatively rare and in any case often do not meet the typical transaction cost constraints needed for the application of theories of financial economics (Babbal et al., 2002).

A further risk disclosure that would be helpful is the value at risk, although further work is needed to understand what is the appropriate way of interpreting this in the context of long term insurers' liabilities. Value at risk measures the worst expected loss over a given time interval under normal market conditions at a given confidence level (Jorion, 1997).

Moreover, such aggregate market risk measures are typically oriented towards short-term period exposures and assume normal loss distributions. They may thus provide little insight into the impact of risk management tools, such as diversification and pooling that ameliorate exposure to market risk over longer time periods where interest rate duration is problematic (Guterman, 2001). Indeed, there are alternatives to using value at risk, for example the conditional tail expectation. Moreover, market risk differentially affects life insurance firms' assets and liabilities, and is likely to interact with other sources of risk, such as interest rate risk, credit risk and liquidity

risk (Babbel and Santomero, 1999). Information about firms' operational risk and internal risk models used would also help clarify the overall risk position of the enterprise: such information is specifically required by the German Accounting Standard No. 5-20 (GAS 5-20).

The Solvency II framework appears to endorse intangibles by incorporating estimates of implicit and idiosyncratic risk into the formula. It also incorporates forward based estimates into the liability, e.g. expected losses. By contrast IFRS Phase II only proposes incorporating reserves on the basis of what has been incurred. This issue has implications for performance reporting, as indicated by the FCAG (2009) in connection with banks.

#### *6.5. Unit of Account*

Question 11 of the Discussion Paper (IASB 2007, para. 233) asks whether the fair value of insurance contracts should be based on individual contracts or books of similar contracts. 'Unit of account' refers to the level at which the accounting results are measured. This is an important concept because accounting orthodoxy requires that the accounts reflect 'probable' events. For most general insurance contracts, the 'probable' event is no claim in any year – which might lead to the erroneous conclusion that there is no liability in respect of most insurance liabilities, whereas most actuaries consider 'expected events' in terms of the application of probabilities in the future (McCrossan, 2002).

The Steering Committee favours focusing on groups of insurance contracts that have substantially the same contractual terms (para. 580). Should this be the amount which would need to be paid to a third party to take over the whole of the existing business? This is effectively the amount payable in a business combination. It would ordinarily be regarded as including a payment for goodwill, not meeting the requirement for recognition in financial statements.

The alternative would be to treat each contract separately. However this will lead to inconsistencies between 'probable' and 'expected' events, since these concepts only converge if the 'unit of account' is a portfolio of like contracts large enough for the law of large numbers to apply (McCrossan, 2002).

#### *6.6. How is the Liability Extinguished?*

Question 14 of the IASB Discussion Paper (2007, para. 233) asks whether the fair value of insurance contracts should be estimated using an allowance for credit risk. It has been argued elsewhere by the IASB that own credit risk should be included in assessing the fair value of liabilities. However, by contrast, the Steering Committee favoured exit value, i.e., the amount that the insurer would pay another enterprise to assume all of the risks (para. 597). The Solvency II framework also implies that part of the value of an insurance contract incorporates an expectation that profits will emerge from future business, (e.g. franchise value), as well as any exit price (e.g. default risk) (Dullaway and Bice, 2002). Therefore, considerable care is needed to

ensure that the values estimated for accounts do not include items such as the concept of 'franchise value', that do not meet the recognition requirements.

However the debate concerning credit risk is not over. IASB has the tentative conclusion for Phase II that entry values may be used if valid information about market values is not available. It remains to be seen what conclusion IASB reaches and why.

## 7. CONCLUSION

A major problem in producing a single set of internationally harmonised set of accounts for insurance enterprises is the lack of consensus about how best to meaningfully describe the financial position today in respect of an insurance contract sold in the past that will involve payments in the future. In response to both economic and legal pressures in recent years, accounting standard setting bodies in the UK developed GAAP which incorporate various methods for dealing with this issue, in order to serve both stewardship and valuation purposes?

The lack of any consistent method of objective risk-adjustment in G4 GAAP also leads to conceptual difficulties which may limit their reliability and comparability to investors. However this in turn raises significant unresolved issues in determining the 'fair value' of insurance contracts. Since fair value liabilities change constantly because of changes in the discount rate and other assumption changes, traditional concepts of loss recognition, income smoothing and accounting practices that vary with product design are no longer applicable.

The existence of major, unresolved IASB accounting issues between existing matching-based UK GAAP on the one hand, and the IASB asset-liability approach on the other, highlights the continuing difficulties underlying insurance accounting. The ongoing convergence, consolidation and globalisation of the financial services industry also raise unresolved issues concerning the consistency in measuring insurance contracts and financial instruments.

By contrast, the alternative fair value 'constructive' method as proposed by the IASB is an evolving system, which focuses on assets and liabilities being measured consistently. Consistent with this proposal, the Solvency II provides a more model-based fair valuation framework, which potentially implies that there are various contingent assets and liabilities which should be additionally recognised on the balance sheet. Such an accounting valuation system is at odds with the traditional residual income valuation framework, since it is asset-liability based, and thus does not provide for deferral and amortisation practices that enter into earnings multiple calculations, nor does it permit variation between book value and market value of various assets and liabilities.

The Solvency II conceptual framework can facilitate the analysis of unresolved problems in fair valuation to financial reporting by identifying separate components of a consolidated balance sheet which incorporate various sources of credit, market and business risk associated with fair valuation principles. We also propose a series of risk disclosures to overcome exposures that can otherwise potentially lead to a mismatch between economic and accounting performance measurement of these various components of fair valuation. Some but not all of these disclosures are already included in IFRS4, which are generally limited to disclosures about amounts in financial statements and the amount, timing and uncertainty of future cash flows. By contrast, our recommendations for risk disclosure go further by identifying areas of risk allocation, e.g. operational risk and information about internal risk models, that

are not generally covered by a fair value reporting system. Nevertheless we find that the positive aspects of Solvency 2 are somewhat mitigated by the uncertainty and lack of clarity of their comparability to IFRS Phase II. This is especially the case given the lack of clear separation of objective concerning stewardship versus decision usefulness purposes of financial reporting, both in IFRS and in Solvency 2. Appendix 2 outlines the main areas where these issues remain. Consequently, we endorse Rayman (2006) who proposes a new conceptual dual valuation framework that can address the various multiple roles served by general insurance actuaries in both valuation and accountability contexts.

### Endnotes

- 1) The project was initiated by the IASB's predecessor, the International Accounting Standards Committee. The Steering Committee has subsequently been issuing sections of a Draft Statement of Principles (IASB, 2002).
- 2) In the UK there are a number of firms who buy and sell with profit endowment insurance contracts. The trading values exceed the surrender values offered by life insurers (McGurk, 1998). The market does not cover all policies, e.g. short-term policies and it may not be regarded as especially liquid. Nevertheless, it is a useful point of comparison for the tests being carried out on what fair value calculations might be.
- 3) SAP typically uses assets at market value or below and liabilities which are inflated by conservative assumptions regarding future investment returns and mortality, which are typically set aside in the form of provisions or reserves. Reserves are retained to meet future policy liabilities, expenses and contingencies and to fund a smooth distribution of surplus (Horton and Macve, 1995, p. 270).
- 4) However while SFAS 115 required U.S. insurance firms to adopt partial fair value for their investment securities, their insurance liabilities were still subject to conservative book value amortization rules in accord with SFAS 60 or SFAS 97, thus potentially understating the net worth, and created a higher probability of negative amortization of DAC. In December 1993 the SEC realized the potential impact in financial reporting for financial institutions due to SFAS 115. As a result, the SEC issued instructions that insurance companies compute a contract premium margin valuation for each of its lines where SFAS 60 or SFAS 97 applied (Becker, 1999, 222).
- 5) The U.K. Accounting Standards Board has not given its approval to UK GAAP
- 6) This assertion is controversial. Prior research has demonstrated the importance of measuring both financial assets and liabilities consistently at fair value (Linsmeier et al., 1998). However it has not conclusively demonstrated whether fair-value disclosures are value relevant for market-to-historical-cost book ratios in the property casualty industry (Petroni and Wallen, 1995).
- 7) The IASB's tentative conclusion for Phase II is that unless there is market evidence to the contrary, fair value would have to be assessed on the basis of current prices of insurance products.
- 8) Doll et al. (1998)
- 9) Much of this discussion is based on that in Klumpes et al. (2009). We restrict the scope of our discussion in this section to measurement principles that are already codified by standards already issued by the IASB in the related topics of financial instruments (IAS 39) and provisions (IAS 37).

- 10) Whether the option has any value at expiration depends on the asset's future value by actuarial profit measures. Pindyck (1988) illustrates the potential importance of valuable investment options for the value of the firm. This analysis presumes imperfections exist in life insurance which are understated by the book value of assets (Penman, 1996; Klumpes and Shackleton, 2000).

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## Appendix 1 Comparison of Various Views on GI Accounting Practices

### (1) Generic Overview

Issue	Definition	IFRS	Shareholder perspective	Solvency II perspective	Managing the business perspective
(A) general principles					
A.1 True and fair	UK GAAP is based upon principles rather than rules and allows for a 'true and fair' override.	Overriding principle	Ignored	Need a straightjacket. Provides a get out clause for shoddy practices? E.g. allow firms to include embedded value?	True or false (Rayman)?
A.2 Entity concept	The owner of the business is regarded as an 'arms-length' entity quite separate from the business itself.	Was proprietary theory but now moving towards entity theory?	Entity theory	Taken to the full level by the FSA – entity theory	Depends on view of ownership: see proprietary theory? E.g. separate the shareowner (Buffett-long term) from the shareholder (short-termist speculator)

<b>Issue</b>	<b>Definition</b>	<b>IFRS</b>	<b>Shareholder perspective</b>	<b>Solvency II perspective</b>	<b>Managing the business perspective</b>
A.3. Prudence		Not applicable?	NA	Core aspect of Solvency II? Subject to negotiation?	Seems a key concept. Relates to trust? E.g. Over-prudence in accounts is relevant to FSA for solvency assessment, but can lead to unrealistic performance reporting?
A.4. Conservatism	This concept safeguards against the natural tendency for 'over optimism' in presenting profit. We must recognise revenues only when they are certain (ie. actual sales, not advance orders or advance receipts).	Relevant for integrity of accounts – but can be ‘corrupted’ by allowing management discretion over setting fair value estimates (level 3)? E.g. Enron, Banks?	Best Estimate	Relevant for assessing solvency – e.g. can be manipulated in FSA returns? Being too conservative can have tax avoidance implications. E.g. separation of financial reporting and for tax purposes is a major issue in Europe	Conservatism is key to integrity and ethics?

<b>Issue</b>	<b>Definition</b>	<b>IFRS</b>	<b>Shareholder perspective</b>	<b>Solvency II perspective</b>	<b>Managing the business perspective</b>
A.5 Going concern	Assets are valued on the basis that the business will continue to operate	Gradually being dissipated by fair value (e.g. discount liabilities for own credit risk) – audit implications for many firms in a recession?	Does not allow for own credit risk (?)	Surely this the major focus and objective of Solvency II??	Important to understand risk capital - is a buffer against insolvency but can lead to firms bearing high frictional costs of capital
A.6. Realisation	When we make a sale on credit, we cannot be sure that the cash value will ever be realised.	A key concept of 'entry value' measurement (e.g. HC) but less relevant to exit price (e.g. FV) where change in fair value and unrealised gains and losses are problematic	Allows for expectations	A difficult issue given the long-term nature of solvency assessments.	Realisation is a key concept in adhering to separating 'stewardship' from 'performance' reporting.

<b>Issue</b>	<b>Definition</b>	<b>IFRS</b>	<b>Shareholder perspective</b>	<b>Solvency II perspective</b>	<b>Managing the business perspective</b>
A.7 Matching	Correct measurement of the NET effect of a sale requires that both the revenue (sale) and its associated expense (e.g.COGS) should be matched.	The concept of matching leads to problems with ‘accruals’ and can lead to ‘earnings management’ thus reducing accounting quality – fair value proposed as an alternative. What happens to DAC?	Demoted to 2 <sup>nd</sup> level	Hard to envisage as an issue, given long-term nature of solvency assessments?	Matching depends on horizon of shareowner. Does it really matter for a long-term investor if everything ‘washes out’ in the long run? Need to clarify views on reserves and provisions.
A.9. Monetary	All records are made in monetary terms.	Assumes nominal equals ‘real’ values. Fair value estimates can confuse the two. E.g. discount pension obligations?	Assumes nominal = real value (deflation?)	Presumably becomes problematic in periods of low inflation or even deflation.	Current cost accounting can resolve these issues but raises issues about opportunity costs and replacement costs?
A10 Time period	Accounting measures activities over a specified period of time eg a year for published accounts	Assume quarterly, yearly at most	Multiperiod best estimate of all scenarios	Minimum one year. Assumes only one year forward.	Need to take longer-term perspective. Implications for validity of fair value estimates e.g. banking industry? Relevant to cost of capital.

<b>Issue</b>	<b>Definition</b>	<b>IFRS</b>	<b>Shareholder perspective</b>	<b>Solvency II perspective</b>	<b>Managing the business perspective</b>
A11	Duality: two sides to each entry-control	Mostly asset side		Mostly liability side	Triple entry bookkeeping system to allow for risk to be separately viewed from values.
<b>B. QUALITATIVE CRITERIA</b>					
B.1. Consistency	Information consistent over time and across companies	Assumes firms use standard assumptions	Flexibility allowed depending on interpretation: can vary depending on directors views?	Standard but flexibility through negotiation?	
B.2. Neutrality	Relatively standard and non-biased	Assumes conservatism	Assumes aggressive accounting?	Presumably standardised?	
B.3. Objectivity	information is reliable and can be trusted.	Auditable	Relatively difficult to derive	Standard?	
B.4. Representational faithfulness (transparency?)	Provides only a view of the past	Includes managerial estimates?	Unable to determine	Presumably standardised	

<b>Issue</b>	<b>Definition</b>	<b>IFRS</b>	<b>Shareholder perspective</b>	<b>Solvency II perspective</b>	<b>Managing the business perspective</b>
B.5. Relevance	requires that the figures are meaningful and useful.	Oriented to performance reporting	Focus on performance managing and creating expectations	Not addressed?	
B.6. Reliability	Use of robust figures – limited by non-discounting	Discounting may be allowed – subjective?	Fully discounted – subjective	Discount only to one year?	
B.7. Feasibility	the information can be collected easily and economically.	Limited to recording of past transactions	Allows for incomplete and future estimates arising from past events	Fully	

C. Financial Statements					
C.1. Balance sheet	Statement showing Assets = Liabilities + Equity or Assets – Liabilities = Equity a simple record of historic transactions and does not anticipate the future creation of value (although see managerial estimates below). There is therefore a difference (called inherent goodwill) between the ‘book value’ of net assets (i.e. shareholders’ equity) and the market value of the company.	STRGL/SORIE captures unexpected variations in assumed v actual	All unexpected to SORIE?	Fully economic balance sheet	
C.2. Profit and loss account		Recognised gains and losses only	Recognised and holding gains?	Not applicable	

C.3. Cash flow statement	Shows the cash flows relating to operations, financing, and investment, and it reconciles to a wide total including cash and cash equivalents.	?	?	Not applicable	
C.4. Statement of Realised Gains and losses		Records variation in expected v planned	All unexpected to performance	NA	
C4. Statement of changes in Shareholders Equity		Footnote	Capital position?	NA	
C5. Statement of Capital	Unique to UK GAAP?		FRS 27?		
D. Elements of Financial Reporting					
D.1. Assets	a resource controlled by an enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise'.	Includes DAC	Exclude DAC	Includes everything	

D.2. Liabilities	Probably future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events	Limited to legal obligations	Includes constructive obligations (deductive approach)	Constructive and legal provisions?	
D.3. Equity		Residual	Residual	Ignored	
D.4. Revenue		Recognise only if earned else liability	Allow for relaxation?	Ignored	
D.5. Expenses		Change in provisions?	Exclude provisions to liabilities	Ignored	
D.6. Profit	is essentially the difference between revenues and expenses. There are various definitions of profit!	Depends on definition	Deduced	Ignored	

D.7. Dirty surplus	Items neither charged to profit but charged to equity, e.g. foreign currency translation reserve, pension cost variations, cash flow hedge	Goes to SORIE	Goes to performance statement	?	
E. Measurement principles					
E.1. Historical cost		Applied	Ignored	Ignored	
E.2. Entity specific (value in use)		Ignored	Applied – embedded value	Applied	
E.3. Fair value			Applied	Ignored?	

**Appendix 2    A Challenge and Appraisal of Solvency 2 and IFRS Phase 2 in  
Terms of Policyholder Protection**

<b>Solvency 2</b>	<b>Effect</b>	<b>IFRS Phase 2</b>	<b>Effect</b>
Policyholder protection a fundamental objective of S2	<b>Positive</b>	Intended for shareholders, not policyholders	<b>Negative</b>
S2 is prudential regulation regime, of which valuation of assets and liabilities and reporting is one part.	<b>Positive</b>		
		Only publicly quoted entities, therefore possible comparability issues	<b>Negative</b>
More strongly capitalised than under previous regime, better able to withstand adverse events.	<b>Positive</b>		
Improvement to risk management	<b>Positive</b>		
Holistic regulatory regime (not look at silos of an insurance companies operation)	<b>Positive</b>		
Consistency, comparability is a general objective of S2, though there is potential for inconsistency in reporting of some financial items.	<b>Positive</b>		
Improved transparency, particularly on risks	<b>Positive</b>		

<b>Solvency 2</b>	<b>Effect</b>	<b>IFRS Phase 2</b>	<b>Effect</b>
SCR is the main indicator of whether an insurer's capital is adequate		Market view is the main indicator of whether an insurer's capital is adequate	
Capital (own funds) split by quality – tiers 1 to 3, basic and ancillary	<b>Positive</b>	a) No split of capital by quality	<b>Negative</b>
Article 74 (fair value), consistent with IAS 39 (not insurance liabilities), marked to market, but valuation of illiquid assets not resolved	<b>Positive</b>	IAS 39 (fair value not, insurance liabilities), consistent with Article 74, mark to market, but valuation illiquid assets not resolved.	<b>Positive</b>
Value of participations (>20% interest): mark to market (+ve), otherwise mark to model (-ve) with every 3-yr independent verification (+ve), otherwise net asset accounting under S2 economic values (+ve).	<b>Positive</b> <b>Negative</b>	Value of participations (>20% interest), IAS 28 for associates, net asset accounting	<b>Positive</b>
Goodwill ignored	<b>Positive</b>	Goodwill recognized under IFRS	<b>Negative</b>
Deferred tax recognised? (UK lobbying against, others for)	<b>Negative</b>	Deferred tax: IAS12 acceptable proxy under S2 except for unused tax losses and unused tax credits to be at 'nil' value.	<b>No effect given</b>

Solvency 2	Effect	IFRS Phase 2	Effect
No account taken of own credit rating [for valuing debt obligations] appropriate for technical provisions but yet to be resolved for non-technical provisions, i.e., whether use risk free rate(decrease in equity) or risk free rate + plus own credit standing at inception (unchanged equity)	Positive	Own credit standing taken into account [for valuing debt obligations]	Negative
Basic principle of three components: undiscounted best estimate (mean) of future cash flows, discounting on risk free rate and risk margin. (+ve, as provision higher than discounted best estimate.) Hedgable risks valued market consistently, while non-hedgable on BE + risk margin	Positive	Basic principle of three components: undiscounted best estimate (mean) of future cash flows, discounting and risk margin. (+ve, as provision higher than discounted best estimate.) <Same issues as listed under S2 ). However, as IFRS is not a regulatory regime, rules may be less prescriptive and thus greater potential for inconsistency between entities (-ve)>	Positive Negative
Risk Margin based on cost of capital model: consistency with IFRS definition of risk margin?			

<b>Solvency 2</b>	<b>Effect</b>	<b>IFRS Phase 2</b>	<b>Effect</b>
Best Estimate: Potential for inconsistencies between entities on undiscounted best estimate (mean) due to differing views of reserving practitioners. (This is the situation currently and is arguably unavoidable, though benchmarks and standard setting might reduce inconsistencies.)			
Discounting: Potential for inconsistencies between entities if level 2 or 3 implementing measures give entities the option to discount at different rates. Risk free rate need to be defined			
Discounting: Potential for inconsistencies between entities due to differing views of reserving practitioners on duration of liabilities. (Though benchmarks and standard setting might reduce inconsistencies.)			
Risk margin: Consistency only all firm's use the same formula.			
Risk margin: Correlations may be inadequate in stressed conditions.			

<b>Solvency 2</b>	<b>Effect</b>	<b>IFRS Phase 2</b>	<b>Effect</b>
Risk margin: Questionable clarity between amount of adverse experience to be absorbed by risk margin and amount to be absorbed by SCR.			
Transparency improved if undiscounted best estimate, discounting reduction and risk margin reported separately. If just overall provision reported, transparency to policyholders reduced.	<b>Positive</b>		
Revenue recognition		Revenue recognition	
		IASB DP on revenue recognition, uniform model (asset liability approach)	
Profit on sale	<b>Negative</b>	Profit on sale	<b>Negative</b>
Reinstatement premiums (CEIOPS CP 30 – only if lead to increase in liability)	<b>Positive</b>	Reinstatement premiums recognized.	
<u>Intangible Assets</u> : via contractual rights and only if can be fair valued, else 'nil'.	<b>Positive</b>	IAS 38: via contractual rights	<b>Positive</b> <b>Negative</b>
<u>Investment Property</u> : after initial cost model, S2 requires fair value only, with 3 yr independent verification	<b>Positive</b>	IAS 40 cost model initially, and cost or fair value later;	

Accounting	Solvency	Other :
Abandonment of the principle of prudence	Acceptance of a non-prudent accounting approach to reserving as a starting point	
Treating profit as the difference between two balance sheets, without very careful thought as to what each is meant to represent	Solvency 2: possible use of 1 year view to egregiously minimise capital requirements	
Marking assets to market in an indiscriminate way: <ul style="list-style-type: none"> <li>Showing unrealised gains on investments as profit (and vice-versa)</li> </ul>	The pro-cyclical nature of market-price driven solvency surplus requirements, leading to enforced selling of assets, crashing prices, etc.... <ul style="list-style-type: none"> <li>An alternative view is needed, and now beginning to be considered. <u>We should look at this carefully</u></li> </ul>	
Failing to recognise a realistic value of assets, simply to avoid accounts looking nasty (European fudge disease)	Permitting a fudge in terms of “market value margins” - eg with the use of a very artificially determined (not subject to real world sense checking) cost of capital approach. Sense checking would examine the situation when things go bad, and when risk appetites generally are low.	
Using stupid philosophy to reduce recognised liabilities to reflect one’s inability to pay them		
In huge and total contrast to the above, to fail to recognise an “expected value” of bad debts until the evidence emerges to an “auditable” standard		