

**AN EXPERIMENT IN ‘FAIR VALUE’ ACCOUNTING?
THE STATE OF THE ART IN RESEARCH AND THOUGHT LEADERSHIP ON
ACCOUNTING FOR LIFE ASSURANCE IN THE UK AND CONTINENTAL
EUROPE**

**A review by Joanne Horton, Richard Macve, and George Serafeim (respectively
Senior Lecturer in Accounting and Professor of Accounting, London School of
Economics, and DBA Student, Harvard Business School)**

prepared for the Centre for Business Performance, ICAEW

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1. Executive Summary

1. 'Fair value' is currently the central topic of debate in the development of accounting standards. While it has now been defined to mean an exit price in US GAAP, the IASB is still considering its own definition, and some commentators are arguing for versions of entry price, or for differing prices in different circumstances or for use with different types of asset and liability. The FASB and IASB are aiming to achieve full fair value accounting for financial instruments, and both have already made this optional in many circumstances. But both theoretical and practical challenges still remain to a mandatory requirement. And whether fair values (exit or entry) should be used in revenue recognition and in presenting performance—and how far changes in fair value should be recognised as gains and losses in income or earnings when markets are not deep and active—remain hotly contested areas of dispute. Such measurement issues are likely to prove the most controversial stage in the current revision and convergence of the FASB's and IASB's conceptual frameworks.
2. One industry where practical experiments in wholesale fair value accounting have been developing in the UK and elsewhere since the 1990s is life insurance. Standard setters have also taken up the challenge of determining the most appropriate accounting. The latest proposals from IASB, under 'Phase II' of its project on insurance contracts, that are currently out for discussion contemplate requiring a form of fair value accounting by insurers. While insurance is often regarded as the technical preserve of industry specialists and the actuarial profession, most of the issues of principle are common to accounting for all kinds of assets and liabilities in all kinds of businesses. The life insurance experiments and related debates can therefore help to illuminate the wider discussion of the future role of fair value accounting. And what is decided as the standard for life insurance may in turn change the way accounting is done more generally—or alternatively fear of such a consequence may end up inhibiting the adoption of the best alternative for insurance. So the arguments about life insurance accounting are too important to be left to those directly involved in it.
3. The purpose of this study is to provide a 'state of the art' review of life insurance accounting practice in the UK and continental Europe and of relevant academic and professional literature as to the options for future development under 'Phase II' of the IASB's project on insurance contracts. It is not itself a report on a research project, although it provides essential background to research currently being undertaken by the authors and others, and should provide relevant background material to assist those commenting on the IASB's recently issued Discussion Paper ('DP') on Phase II (*Preliminary Views on Insurance Contracts*, issued 3 May 2007 for comment by 16 November 2007) as well as on other areas of IASB's programme that relate to measurement issues and the potential role of 'fair values' more generally in performance measurement and reporting—and therefore on the future direction of the current revision and convergence of the FASB's and IASB's conceptual frameworks.
4. In IASB's DP, after some introduction on background and context, the major issues covered that are relevant to life insurance are: measurement of insurance contract liabilities on the proposed 'current exit value' ('CEXitV') measurement approach—based on three 'building blocks' derived as far as possible from current market inputs, namely expected future cash flows, discount rates and margins for risk and 'service'; the relationship of CEXitV to 'fair value' ('FV')

(where IASB has not yet been able to identify any significant differences) and to the industry's own embedded value ('EV') measures; profit at inception of a contract; future premiums; acquisition costs; 'unit of account'; reinsurance; 'unbundling'; allowance for own credit risk; investment contracts; participating business; and unit-linked contracts. Matters which are left to the development of the Exposure Draft ('ED'), beginning in 2008, include presentation in the financial statements (e.g. how to report premiums and changes in the value of insurance liabilities). Issues that are not planned to be addressed until later ('in due course') include policyholder accounting; while discounting of deferred tax and valuation of other assets held by insurers are outside this project. FASB has also issued an Invitation to Comment, containing this DP, on whether it should add a joint project with IASB on insurance contracts to its agenda, and whether the DP forms a suitable starting point.

5. Other ongoing projects (mostly joint between IASB and FASB) with potential implications for the insurance project (and *vice versa*) include: the revised conceptual framework; revenue recognition; FV measurements; revision to IAS37 in respect of the definition of constructive obligations and measurement guidelines for contingent liabilities; 'liabilities and equity'; financial statement presentation; and financial instruments. While life insurance accounting is widely regarded as an area for specialised expertise, nevertheless the basic issues are those of all accounting: how to present the most useful information to relevant users about the performance of a company and of its management to date, and about its current financial position as a basis for estimating future prospects ('future cash flows') and taking appropriate decisions and courses of action. So there must be a presumption that *prima facie* the same conceptual framework should cover both life insurance accounting and that of the generality of companies, whether or not they are financial institutions.
6. In a typical life insurance contract, policyholders pay premiums over a number of years and then receive a payout of their claim on their death or on the maturity of their policy. Meanwhile their money is invested by the life insurer, who also incurs certain administrative and other expenses. Given the long periods of time involved, the main complications in assessing current financial position and performance arise over the 'insurance' uncertainties—especially about mortality estimates (the province of actuaries), as well as in estimating whether the likely investment performance (involving various economic and financial risks) will be sufficient to secure the promised benefits when they are payable—together with the 'business risks' such as likely policyholders' persistence in continuing paying their policy premiums and other 'operational' risks, e.g. management's ability to control costs.
7. Similar to other financial institutions, insurers are subject to prudential regulation. Insurance regulators (in the UK, the FSA) act in principle on behalf of policyholders to achieve as low a risk as is practicable that insurers will fail to meet their obligations, and the regulators are therefore important users of accounting reports, although they have the power to mandate specific reporting requirements for their own use. Traditionally regulatory requirements have dominated, if not dictated, the form and contents of insurers' accounts, but in recent years there has been a series of adjustments towards more conventional accounting practices (or 'generally accepted accounting principles'—'GAAP') for reporting to shareholders (including prospective investors) as well as towards providing supplementary reporting on a more 'realistic' basis of accounting such

- as ‘European Embedded Values’ (‘EEV’). With the forthcoming introduction in Europe of Solvency II regulation² there is again heightened interest in seeing how far the same accounting principles can serve both ‘general purpose’ (i.e. IFRS GAAP) accounting and the accounting needed by regulators.
8. At present life assurance taxation in the UK is based on accounts prepared on the traditional solvency basis (‘SSB’), with various complex adjustments. It is an open question whether HMRC would wish to move to the basis finally adopted for IFRS. (In other European countries, IFRS normally only apply to consolidated accounts, with the traditional national basis still being used for the individual companies on which tax is levied.)
 9. For the UK, in the context of the EU regulation requiring IFRS for the consolidated accounts of listed companies from 2005, and of the development of both the IASB’s and ASB’s insurance accounting projects (reinforced by pressure from the FSA and the Treasury), there has been an explosion of literature in recent years, although there has only been a limited amount so far of accounting oriented academic research.
 10. Most of the analytical literature has come from the actuarial profession, where there has been a continuing emphasis on finding a proper basis for reporting ‘fair values’ (of which definitions still vary), and an accelerating trend towards arguing for revisiting the traditional approach to ‘embedded value’ (‘EV’) estimation, primarily through the adoption of ‘European Embedded Values’ (‘EEV’), including an increasing focus on ‘market consistent embedded values’ (‘MCEV’). This newer literature in turn reflects application of the principles of ‘modern financial economics’ (a discipline which in itself relates to theories of asset valuation and corporate finance quite generally, not just specifically to insurance). This financial economics literature is applicable most readily to listed, proprietary insurance companies—but with much more difficulty to mutual companies and to ‘with-profits policyholder’ participation in proprietary companies.
 11. The IASB and other accounting standard setters have grappled—and continue to grapple—with the issues relating to accounting and disclosure for life insurance, but no clear, comprehensive direction forward has yet emerged and IASB has made no final commitment as yet to ‘full fair value’ accounting either for insurance or for financial instruments generally. Indeed it is currently consulting on whether it should adopt the definition of ‘fair value’ given in FASB’s SFAS157. Subject to the comments received on the insurance DP, IASB is currently planning to proceed to issue an ED (but not before October 2008) and ultimately a standard to supersede the current IFRS4 (but not before late 2009 or 2010). FASB is also consulting on whether to add to its agenda a joint project with IASB for a comprehensive standard on insurance contracts, and whether the DP is a suitable starting point.³ Meanwhile ASB has introduced in FRS27 (2004) a ‘realistic valuation of liabilities’ requirement (based in turn on the FSA’s latest capital adequacy framework) but without any corresponding change to life insurance profit reporting principles; and, although not required to follow this under the EU’s IFRS regime, leading UK insurers have entered into a Memorandum of Understanding with ASB to do so.

² launched 10 July 2007: see e.g.

http://www.iaisweb.org/temp/July_10_2007_IAIS_welcomes_the_launch_of_the_Solvency_II_directive_proposal.pdf (accessed 24.07.07)

³ <http://www.iasb.org/Current+Projects/IASB+Projects/Insurance+Contracts/Insurance+Contracts.htm> (consulted 04.09.07).

12. The UK life insurance industry (through the ABI) has, over the past two decades, itself promoted *supplementary* reporting of ‘achieved profits’. In practice (after some experiments in the 1990s with an ‘accruals’ basis purporting to reflect more conventional accounting approaches to long-term contracts), ‘achieved profits’ have been based on ‘embedded values’ (‘EVs’) and the changes in them over the reporting period. More recently, the major European insurance companies (through the CFO Forum) have collectively agreed ‘European Embedded Value’ (‘EEV’) principles which incorporate reforms to deal with common criticisms of the more traditional EV methods, in particular the need to measure adequately the negative burden of guarantees and policyholder options in policies (i.e. their time value as well as their intrinsic value) and the need to avoid capitalising anticipated positive investment margins without adequately calibrating for risk adjustment to the differential returns. They have also issued additional guidance on minimum required disclosures of sensitivities and other key items.
13. EEV relates only to the ‘inforce’ business and does not include any value for future business (or ‘goodwill’). Valuations incorporating this goodwill are known as ‘appraisal values’.⁴
14. Although bancassurers (and, for a period, some life insurers) have restated their published balance sheets and income statements to incorporate EV/‘achieved profits’, UK life insurance companies now produce EV information only in *supplementary* statements. However, it is these supplementary EV statements that are the ones that analysts generally focus on.
15. ASB, FASB and IASC/IASB have all resisted the endorsement of EVs as an acceptable basis for the main accounts. Their principal objection has remained the consequent recognition of a ‘Day 1’ profit on inception of a life policy contract. But the DP now indicates that the IASB is currently split on this particular issue, given that it could also be a consequence of adopting the ‘current exit value’ (CExitV) approach now proposed in the DP. This profit represents that element of the EV which equals the present value of the expected future profits in excess of those covering the cost of capital⁵ (i.e. is the present value of ‘residual incomes’) after making adequate allowance for risk margins in estimates.
16. While some companies, led by Aviva, produced supplementary disclosures to their 2004 accounts on an EEV basis, the 2006 reporting season (on 2005 accounts) brought the first general adoption of both IFRS4 *Insurance Contracts* and IAS39 *Financial Instruments* for the main accounts and of EEV for the supplementary accounts. Increasingly insurers are reporting their EEVs using the market-consistent MCEV approach. In addition, under the Memorandum of Understanding signed between the leading UK insurers and the ASB, UK life insurers have adopted IFRS27 *Life Assurance* in implementing IFRS4 for 2005 onwards.
17. There has been only a limited amount of specifically insurance focussed accounting research, and additional work, both conceptual and empirical is

⁴ Theoretically this appraisal value should represent the market value of the life business as a whole which, if it were an independent listed company in a ‘strong form’ efficient capital market, would equal its stock market capitalization. Any remaining difference appears to be known in the industry as ‘franchise value’ although this can also describe the whole of the difference between market and book value (e.g. Exley and Smith, 2006).

⁵ ‘Cost of capital’ is also used in EV terminology as a technical term to denote the concept of the burden of having to hold minimum adequate capital for the conduct of life business. We use it here in its normal meaning in finance and accounting theory. For further discussion see Chapter 4.3 below under ‘discounting’.

needed. But an important contribution lies in linking the problems of life insurance accounting to those that are common to all accounting standards, in particular in the context of a general trend towards greater reliance on ‘fair values’. The IASB’s insurance project opens up a fundamental questioning of the conceptual basis of financial accounting and reporting generally, and in particular raises challenging issues surrounding the measurement and meaningful reporting of business performance. Our report relates the issues raised in the DP to recent developments in the literature and also considers some wider issues which question the DP’s own underlying assumptions, including those of the IASB’s *Framework*.

18. This ‘state of the art review’ is designed as a platform both for further investigation of issues through research and for further experimentation in, and development of, practice. It needs to be complemented by a review of the ‘state of the art’ elsewhere, particularly in the USA, the ‘old Commonwealth’, and Japan, in order to explore both the similarities and, more importantly, the remaining significant differences of approach.
19. The major outstanding issues that still need to be resolved before a comprehensive standard on life insurance can be issued are set out in the DP (and also in ASB, 2005; 2007), and we structure our own report on the basis of the DP, while also introducing some further, but often fundamental considerations, that the DP has not addressed and where we consider further analysis and/or research is needed. Although the DP focuses on a particular kind of liability, that related to ‘insurance contracts’, nevertheless given that in most jurisdictions insurance contracts can only be written by ‘authorised insurers’, in large part the DP is necessarily discussing the proper basis on which the industry should account for all its assets and liabilities, and report its performance. This discipline of having to consider the ‘whole picture’, including attempting to find a common basis for both life and non-life insurance, entails wider consideration of the implications for the accounting framework for other industries, both in the financial sector and beyond. The issues and research reported on here, as well as the research we are currently undertaking for the ICAEW’s Centre for Business Performance (‘CBP’),⁶ should therefore be of interest to a much wider readership than just those interested in insurance accounting.
20. In our view, the major concerns brought out by the DP are that the ‘asset/liability’ model leads to questioning, or having to find seemingly forced justifications for, many longstanding life-insurance accounting practices (e.g. recognition of the value of future premiums; appropriate offsetting of reinsurance; treatment of acquisition costs; recognition of relative policyholder and shareholder interests in ‘unallocated divisible surplus’ from with-profits business (including any ‘estate’); and treatment of ‘investment contracts’). Thinking directly about the relevant expected cash flows and their risk seems often to give a clearer answer. Moreover the momentum towards ‘fair value’ (‘FV’) in the DP’s adoption of CExitV has led to ongoing controversy over its relevance and reliability in specialised insurance markets. One cannot write *accounting* rules to determine what would enter the valuation processes that ‘market participants’ use to price insurance contracts. As a result there is controversy over what are appropriate risk (and ‘service’?) margins and over the validity of alternative resulting profit recognition patterns—including the issues of ‘Day 1’ profit; of recognition of changes in own credit risk;

⁶ outlined in Appendix I.e).

and of how results should be analysed and presented in the financial statements. More generally there is concern that where markets are out of equilibrium, or behaving irrationally, reliance wholly on (often simulated) market prices as the arbiter of achieved performance may provide misleading signals.

21. Performance measurement needs addressing directly. The insurance project brings out how the 'asset/liability' approach, while providing some useful benchmarking information, appears insufficient to answer the central questions of performance measurement and profitability analysis.
22. Future research needs to focus both on further analysis of the conceptual issues relating to FV and other current value measures (such as 'deprival value/relief value'), drawing from the economic theory of market prices; and in particular on how far the DP's proposed measurement basis (CExitV) now differs from MCEV. What is to be the role of the main IFRS accounts for life insurance when there are already reports based on measures suitable for solvency regulation requirements ('SSB'), and also supplementary EV reports signalling 'realistic' performance, that are both also available? This analysis needs to be complemented by further empirical work on the practical experience of companies, in Europe and increasingly worldwide, in using and refining EV based methodologies (including related disclosures)—both internally and for external reporting—and on the consequences of this on stock market valuations and for other institutional and professional structures and practices (including the underlying approaches adopted both for international standard setting in reconciling subjective management opinions with objective external evidence, and for other regulatory purposes such as solvency monitoring).
23. The outcome of IASB's proposed 'fair value' experiment in insurance accounting is therefore of central importance for the future development of accounting and financial reporting generally.

2. Introduction: IASB's 2007 Discussion Paper ('DP')

'Fair value' ('FV') is currently the central topic of debate in the development of accounting standards. While it has now been defined to mean an exit price in US GAAP (FASB, 2006), the IASB is still considering its own definition, and some commentators are arguing for versions of entry price, or for differing prices in different circumstances or for use with different types of asset and liability. The FASB and IASB are aiming (albeit they are not yet committed) to achieve full FV accounting for financial instruments, and both have already made this optional in many circumstances. But both theoretical and practical challenges still remain to a mandatory requirement. And whether FVs (exit or entry) should be used in revenue recognition and in presenting performance—and how far changes in FV should be recognised as gains and losses in income or earnings when markets are not deep and active—remain hotly contested areas of dispute. Such measurement issues are likely to prove the most controversial stage in the current revision and convergence of the FASB's and IASB's conceptual frameworks.

Life insurance is one industry where practical experiments in wholesale FV accounting have been developing in the UK and elsewhere since the 1990s. Standard setters have also taken up the challenge of determining the most appropriate accounting. IASB has recently issued its Discussion Paper ('DP') on Phase II of its insurance project, *Preliminary Views on Insurance Contracts* (IASB, 2007), for comment by 16 November 2007. The DP now contemplates requiring a form of FV accounting by insurers, labelled 'current exit value' ('CEXitV'). While insurance is often regarded as the technical preserve of industry specialists and the actuarial profession, most of the issues of principle are common to accounting for all kinds of assets and liabilities in all kinds of businesses. The life insurance experiments and related debates can therefore help to illuminate the wider discussion of the future role of FV accounting. And what is decided as the standard for life insurance may in turn change the way accounting is done more generally—or alternatively fear of such a consequence may end up inhibiting the adoption of the best alternative for insurance (e.g. ASB, 2007). So the arguments about life insurance accounting are too important to be left to those directly involved in it.

Almost without exception (cf. Girard, 2000, cited at para.108(g)), the DP does not refer to background research on the issues it discusses. However, the literature and public discussion relating to life insurance accounting issues have been expanding rapidly in recent years. And many of the proposals in the DP relate to wider issues of valuation and appropriate accounting measurement that are analysed in more general literatures, particularly in financial economics and accounting research, both theoretical and empirical.

Our report is not itself a report on a research project, although it provides essential background to research currently being undertaken by the authors and others, and should provide relevant background material to assist those commenting on the IASB's DP as well as on other areas of IASB's programme that relate to measurement issues and the potential role of FVs more generally in performance measurement and reporting—and therefore on the future direction of the current revision and convergence of the FASB and IASB's conceptual frameworks. Our report relates the issues raised in the DP to recent developments in the literature and also considers some wider issues which question the DP's own underlying assumptions, including those of the IASB's *Framework*.

In this review we draw on some accounting-based academic research into the issues (including Horton & Macve, 1995; 1997; Klumpes, 1999; 2005; as well as current work in progress); look at work done by the actuarial profession (including Forfar & Masters, 1999; Hairs *et al.*, 2002; Sheldon & Smith, 2004; O'Keeffe *et al.*, 2005; Wright, 2005; Exley & Smith, 2006; Asher, 2006; as well as Girard, 2000 and O'Brien, 2007); review related inputs from the industry (including CFO Forum, 2004 and 2006; Geneva Association, 2004; and some recent company disclosures); and discuss material issued by accounting standards setters (IASB, 2004a and ASB, 2004a, 2004b, 2005) and the controversies that have emerged to date in 'Phase II' of the IASB's ongoing project and the related 'financial instruments' issues⁷. We also refer more generally to relevant, related academic and professional literatures, including surveys and reviews by some of the 'Big 4' professional accountancy and audit firms and by leading actuarial consultants.

In IASB's DP, after some introduction on background and context, the major issues covered that are relevant to life insurance are: measurement of insurance

⁷ The detailed exposition of these individual sources is given in the Appendices.

contract liabilities on the proposed CExitV measurement approach—based on three ‘building blocks’ derived as far as possible from current market inputs, namely expected future cash flows, discount rates and margins for risk and ‘service’; the relationship of CExitV to ‘fair value’ (‘FV’) (where IASB has not yet been able to identify any significant differences) and to the industry’s own embedded value (‘EV’) measures; profit at inception of a contract; future premiums; acquisition costs; ‘unit of account’; reinsurance; ‘unbundling’; allowance for own credit risk; investment contracts; participating business; and unit-linked contracts.

Matters which are left to the development of the Exposure Draft (‘ED’), beginning in 2008, include possible reconsideration of the definition of an insurance contract, and presentation in the financial statements (e.g. how to report premiums and changes in the value of insurance liabilities). Issues that are not planned to be addressed until later (‘in due course’) include policyholder accounting,⁸ while discounting of deferred tax and valuation of other assets held by insurers are outside this project. FASB has also issued an Invitation to Comment, containing this DP, on whether it should add a joint project with IASB on insurance contracts to its agenda, and whether the DP forms a suitable starting point.⁹

Other ongoing projects (mostly joint between IASB and FASB) with potential implications for the insurance project (and *vice versa*) include: the revised conceptual framework; revenue recognition; FV measurements; revision to IAS37 in respect of the definition of constructive obligations and measurement guidelines for contingent liabilities; ‘liabilities and equity’; financial statement presentation; and financial instruments. While life insurance accounting is widely regarded as an area for specialised expertise, nevertheless the basic issues are those of all accounting: how to present the most useful information to relevant users about the performance of a company and of its management to date and about its current financial position as a basis for estimating future prospects (‘future cash flows’) and taking appropriate decisions and courses of action. So there must be a presumption that *prima facie* the same conceptual framework should cover both life insurance accounting and that of the generality of companies, whether or not they are financial institutions.

⁸ The DP does cover accounting by insurers ceding to reinsurers or by reinsurers themselves retroceding.

⁹ <http://www.fasb.org/news/nr080207.shtml> (accessed 04.09.07).

In the next chapter we focus on the major issues that we see in life assurance accounting, how they have developed in recent years, and how the institutional, political and market contexts have been changing. In chapter 4, we relate these issues to the questions identified in the DP and comment on how the recent research and other literature sheds light on those issues (and their formulation) as well as on other issues that remain outstanding. Chapter 5 concludes. These chapters of the main report (together with the Executive Summary) comprise the core of the review: while in the Appendices we set out more fully, and primarily for further reference for readers who wish to dig deeper, the positions as developed in the various individual sources. We do not here attempt a full summary, analysis, and critique of the DP itself. The aim is to provide a framework of relevant resources which commentators on that DP, as well as IASB and FASB themselves, may find useful in developing their arguments, while pointing out where further research may be useful. And much of the analysis and research is equally relevant to the parallel issues that arise in the accounting and financial reporting of the generality of businesses.

A further, complementary review is planned which will in due course look at specific contributions from, and issues relating to accounting in, other countries (including the US and debates over ‘US GAAP’; the ‘old Commonwealth’; and Japan) that are not already reflected in the ‘international’ focus necessarily embraced in UK and continental European approaches since the introduction of the IFRS regime for listed EU companies (cf. O’Keeffe & Sharp, 1999).

As these reviews, and our own related research for the ICAEW’s Centre for Business Performance (‘CBP’) develop further, up-to-date copies of the evolving papers—on which comments will be welcomed—will be made available on our websites at: <http://www.lse.ac.uk/collections/accounting/facultyAndStaff/profiles/macve.htm>

3. Background to the issues

Life insurance accounting¹⁰ has been undergoing a revolution during the past two decades, both in the UK and internationally. In a typical life insurance contract, policyholders pay premiums over a number of years and then receive a payout of their claim on their death or on the maturity of their policy. Meanwhile their money is invested by the life insurer, who also incurs certain administrative and other expenses. Given the long periods of time involved, the main complications in assessing current financial position and performance arise over the ‘insurance’ uncertainties—especially about mortality estimates (the province of actuaries), as well as in estimating whether the likely investment performance (involving various economic and financial risks) will be sufficient to secure the promised benefits when they are payable—together with the ‘business risks’ such as likely policyholders’ persistence in continuing to pay their policy premiums and other ‘operational’ risks, e.g. management’s ability to control costs.

Ever since the 1870 Life Assurance Companies Act it has been accepted in the UK, as generally elsewhere, that measurement of the financial position of a life insurer basically requires actuarial assessment of the probable future cash flows (e.g. Horton & Macve, 1994). The most fundamental approach is simply to set out the entire schedule of anticipated future cash flows and to consider whether they are sufficiently positive.¹¹ However, investment and other economic and commercial choices require comparisons with other opportunities, so market values, interest rates etc. are convenient tools for converting an otherwise often intractable set of patterns of complex possible future cash flows into a convenient form for making opportunity cost comparisons—‘current prices’.

How should accounting approach the recognition, measurement and reporting of a life insurer’s business performance? For businesses generally, ‘accrual’ accounting has developed to provide a method for calculating annual profits when cash flow patterns are not steady between periods. In life insurance, typically, for each policy, there is a peak of cumulative cash outflow up to point of sale (and maybe some way

¹⁰ Some life cover is ‘life assurance’ (i.e. there is certain to be a payout at some time to the policyholder, as with ‘whole life’ and ‘endowment’ policies); some is ‘life insurance’ (i.e. it is uncertain whether the death payment will have to be made (e.g. ‘term assurance’ (*sic*)). Lloyd’s writes only short-term (under 10-year) life insurance. We use the alternative expressions interchangeably here.

¹¹ The flows are of course stochastic not deterministic, so there are many potential patterns *ex ante* of which only one will actually be realised *ex post*.

beyond if initial commissions, policy record keeping and administration costs etc. exceed initial premiums), followed by a steady level of cash inflows (premiums less ongoing expenses), growing with reinvestment, followed by a large cash outflow at termination. Clearly there is no ‘inherently’ correct attribution of profits to individual periods (e.g. Macve, 1997).

Can a ‘fair valuation (‘FV’) of financial instruments’ approach resolve the issue by accurately assessing the value of the accrued assets and liabilities at each accounting date, thereby providing a measure of the accumulation (or decrement) in value—i.e. profit (or loss)—attributable to each period? Ignoring for simplicity all interactions with past and future policies and with all other lines of the insurer’s business, and assuming for simplicity that all the investments and any other assets acquired out of premium inflows, less any other liabilities incurred, have a readily available and unambiguous market value at all times,¹² basically all that is needed is the corresponding market value of the remaining policy cash flows at any time. Typically, if one starts before sale one faces, for an overall profitable policy book, an expectation of initially rising values (as the need to pay acquisition costs is removed by paying them and the prospect of premium receipts draws closer), and then an expectation of falling values (as the right to receive premiums is whittled away by receiving them, and the time for the final settlement draws nearer), until in the last stages the policy valuation is increasingly negative. On the other side there is the accumulating value of investments or other assets. If all forecasts were deterministically correct, and the correct total amount of profit were distributed during the policy’s term, there would just be sufficient value retained in investments such that their realisation at the end would exactly meet the policy claim. Taking the values of the (net) policy liability and the investments together the net amount at any time should be zero if all profit to date were distributed (e.g. Forfar & Masters, 1999; c.f. Edwards, 1993; Edwards & Higson, 1994).

Even thinking about such an extremely simplified model is sufficient to bring out a number of issues that are fundamental to life insurance business management and ought therefore to be reflected in any accounting standard that seeks to convey a satisfactory measure of its performance. Even if market prices are regarded as

¹² As the investments are basically no more than the vehicle whereby past cash inflows are stored to earn the returns that are required, and which in turn allow any discounting in valuing the policy liabilities, one must be consistent in approach and either focus on values or continue to work with the underlying cash flow estimates, and in particular be careful to avoid any ‘double counting’.

efficient with respect to all available information,¹³ the primary question is how to deal with the normal real-world situation where unambiguous market prices are not available for the policy cash flows, as policy books are only infrequently traded, and then usually within company takeovers (which are also pricing other synergistic benefits, intangibles, etc.). Alternatively, direct transfer of liabilities to another insurer would require policyholder agreement ('novation of contract') or the approval of the Court, and also be subject to the approval of the insurance regulator (now the FSA in the UK). Prices in the reinsurance market, where insurers can 'lay-off' some of their risk, may give some guide, but reinsurance contracts too are generally individually negotiated and only cover some part of the policy liability.

In large part therefore what is needed is some 'valuation' rather than straightforward use of available market prices. Valuation of future policy cash flows (as of any other future cash flows) requires three basic ingredients (what the DP calls 'building blocks'): estimation of the cash flows, allowance for time ('interest') and allowance for risk, having regard to the returns available from investment of the premium funds, to give a 'discounted present value'. And this is what actuaries have always done ever since William Morgan's first valuation of the Equitable in 1776 (e.g. Horton & Macve 1994).

What has been changing in recent years has been first, the degree of conservatism used in estimating each of these three ingredients as there have been increasing commercial pressures to make the estimates more 'realistic', and secondly the extent to which the deepening of financial markets has created the availability of instruments which replicate many of the cash flows and whose market prices can therefore be utilised to provide 'market consistent' parameters within the policy cash-flow models. While the underlying approach still involves the same three ingredients, the objective has increasingly shifted from 'discounting future cash flows' to 'estimating market consistent values'. In this regard, the DP's focus on 'CExitV' is in line with recent developments in practice—but with some major idiosyncrasies that distinguish it from the mainstream financial economics and actuarial literature that we discuss further below.

The major developments in recent practice are described below, and illustrated in Figures 1 and 2 which show respectively how the different approaches will produce

¹³ We discuss some of the potential implications of 'behavioural finance' below in Chapter 4 re. DP Q2.

different patterns of profit emergence over the life of a policy and different totals for owners' equity.¹⁴

Traditionally in the UK the amounts reported in the Companies Act accounts reflected the 'statutory solvency' basis ('SSB'), which began with the 1870 Life Assurance Companies Act, was until recently laid down in the ICA 1982 and its associated regulations and is now set out in the FSA's Integrated Prudential Sourcebook ('PRU') (FSA, 2001 as amended in 2007). Underlying this regime has been the existence of the 'long-term business fund' (or funds) which has long been protected by law for the security of policyholders by providing that any profits (including bonuses to with-profits policyholders) can only be released following a professional actuarial valuation to certify the adequacy of the fund to meet its liabilities.¹⁵

This valuation, undertaken according to one of the prevailing actuarial methodologies, basically seeks to compare—on what is intended to be a very prudent and conservative basis—the anticipated cash outflows in respect of the policies in force (including death and maturity claims and annuities payable to policyholders, and the related administrative expenses) with the expected cash inflows from the premiums receivable from the policyholders and from the return on the investments in which the premiums are invested pending claims. Given the long time periods involved (e.g. an endowment taken out by someone aged 20 may not mature for 45 years while a pension policy begun at the same age may still be paying benefits 60-70 or possibly even more years later), the professional expertise and judgement of the actuary is needed to make the necessary estimates of these various elements of the valuation.

The SSB basis requires, in the main, very prudent assumptions such that it is normal for the writing of new business to produce an initial deficit (known as 'new business strain') in respect of those policies, with the surplus on profitable business only emerging much later in the policies' life and, in a with-profits policy, much of it

¹⁴ For simplicity the Figures treat embedded value ('EV') as just one of the alternative approaches: as explained further below EV has itself developed different forms, from 'traditional' EV through 'EEV' and 'MCEV'. Patterns under this DP's CExitV will vary between being closer to MSSB (if calibrated to entry value) and closer to EV.

¹⁵ In the event of an insurer's insolvency, UK policyholders are additionally protected by the compensation available since the implementation of the Policyholders Protection Act of 1975 (now consolidated, since 2001, into the FSA Financial Services Compensation Scheme ('FSCS')): http://www.fsa.gov.uk/pubs/cp/cp05_15.pdf (consulted 06.07.07).)

only when the final terminal bonus is declared (see Figure 1). Especially in a growing company, this severely understates owners' equity (see Figure 2), and means that the annual surpluses reported which underlie bonus and dividend declarations bear little if any relation to the actual business performance of a year and indeed are likely to give a misleading message as to how well the business is doing (Whewell, 1990).

In this system the role of accounting was traditionally limited primarily to keeping track of the investments and other assets and their return and of the operating expenses, while relying on the actuarial valuation for the periodic determination of how much 'surplus' in the fund was distributable by way of bonuses to policyholders and dividends to shareholders. Correspondingly auditors traditionally accepted the statutorily required actuarial certificates (which were published in returns made annually to the DTI)¹⁶ as to the solvency of the fund(s) and it was not regarded as part of their duties to verify the adequacy of the funds in relation to their liabilities.

A number of pressures have caused a major re-evaluation of this approach—although as yet there is still no agreement on what can or should replace it. Various piecemeal changes and developments have taken place, until now the IASB is engaged on its project on accounting for insurance contracts which was begun by its predecessor the IASC in 1997, leading to the publication of an 'issues paper' in 1999 (IASC, 1999)) and exposure of a *Draft Statement of Principles (Insurance)* ('DSOP') in 2001 (IASB, 2001).¹⁷ The IASB's own project has had to be split into 'Phase I' and 'Phase II' in order that some (limited) improvements could be completed in Phase I¹⁸ in time for the deadline of the adoption of international accounting standards for listed companies by the European Union with effect from 1st January 2005. The major issues that held up progress and were postponed to Phase II were those relating to life insurance, and in particular the issues relating to the fair value of long-term insurance contracts (including the treatment of the deposit floor and the timing of recognition of profit), the treatment of 'deferred acquisition costs', the 'unbundling' of the insurance and deposit elements of contracts, the role of investment returns, the treatment of future premiums, the acceptability of embedded values ('EV'), the accounting for

¹⁶ Now to the FSA (FSA, 2001). In the case of 'bancassurers' the solvency regime is also changing with the introduction of the EU Capital Requirements Directive and 'Basel 2' (see e.g. <http://www.fsa.gov.uk/pages/Library/Communication/Speeches/2005/sp236.shtml> [accessed 06.07.07])

¹⁷ The DSOP is incomplete and was not endorsed by the Board—it is no longer available on the IASB website.

¹⁸ in IASB (2004a)

participating contracts (e.g. with-profits), the accounting for the 'estate' and the Fund for Future Appropriations ('FFA'),¹⁹ policyholder accounting and accounting for mutual companies.

In short, after some ten years of deliberation, almost all of the key underlying conceptual issues are still to be resolved. The latest step has been the publication of the DP in May 2007, which does contain preliminary conclusions on many issues, but also indicates continuing divisions within the Board over some of the fundamental questions, as well as continuing controversy among the industry and other commentators. The next target, in the light of the comments to be received on the DP by 16th November 2007, will be an Exposure Draft in the second half of 2008, but although it is hoped there may be an IFRS in late 2009/early 2010 no date has yet been set for the completion of Phase II.²⁰ In the UK, the ASB (at the request of the Treasury) has recently undertaken its own project (ASB, 2004a; 2004b: see Appendix IV. b) below) but for the future is simply monitoring the IASB's project (ASB, 2005).

Meanwhile there has been a variety of other developments in various arenas. One significant change has been in the practice of UK auditors, who have increasingly taken on the task of 'double-checking' the actuarial valuation underlying the annual Companies Act accounts and the annual solvency returns under the ICA/FSA regime, even though until recently the formal certificate has remained that of the 'appointed actuary'. Audit firms have increasingly employed their own actuarial staff. The FSA has now formalised this extended audit practice by requiring an audit certificate that provides assurance on the full balance sheet and solvency calculation within the annual return. This would 'widen the scope of the audit to cover the aspects of the regulatory return that are currently the responsibility of the appointed actuary' and would 'require auditors of life firms to obtain a report from an actuary on the valuation of policyholder liabilities as part of their audit work. This advice would be provided by an actuary who is independent of both the regulated firm and its actuarial function. This actuary could be an employee of the audit firm, or any other suitable independent actuary. The actuarial work on the valuation of liabilities would thus be subject to the professional challenge of audit, including review by an independent

¹⁹ Now labelled 'unallocated divisible surplus' (e.g. Aviva plc, *Annual Report and Accounts 2006*, Accounting Policy 'J')

²⁰ <http://www.iasb.org/Current+Projects/IASB+Projects/Insurance+Contracts/Insurance+Contracts.htm> and <http://www.iasb.org/Current+Projects/IASB+Projects/IASB+Work+Plan.htm> (consulted 04.09.07).

actuary' (FSA, 2003a, 7.20).²¹ This increasing focus on the responsibility of the auditor in respect of the actuarial valuation has probably further helped to raise debate among accountants as to what the appropriate basis for life insurance accounting should be, given the objective of extreme conservatism underlying the traditional SSB basis.

A landmark European development was the negotiations (which extended for over 20 years) that finally led to the introduction of the EU Insurance Accounts Directive ('IAD') in 1991 and its implementation with effect from 1.1.1995. Despite the many Member State options that remained, the Directive was of greater significance for other European countries than for the UK because in many cases their 'Companies Act' accounts are also the basis of their solvency returns to insurance regulators and the basis for the calculation of legally permissible dividends, whereas in the UK these matters remain regulated by the ICA/FSA solvency requirements (which also underlie tax assessment (ICAEW, 2007)). Moreover, the changes introduced by the IAD, and in particular the requirement for disclosure of the market value of investments, brought in practices that were not as familiar elsewhere.

In particular, the deferral of acquisition costs under the resulting new 'Modified Statutory Solvency Basis' ('MSSB') of accounting meant that, instead of the initial deficit shown under the SSB, a policy now would generally start with no initial profit or loss, and absent any further deviation from the initially estimated outcome, would now show a smoother profile of emerging profit over its life, more like US GAAP accounting (see Figures 1 & 2).

However, for the UK, although the formats of accounts were transformed by the IAD, MSSB did not for the most part fundamentally change the principles on which the accounts were prepared, and special provisions recognising the unique 'fund' basis of UK life insurance (such as the availability of the FFA for with-profits business) resulted in there being no net effect on overall company bottom line results, at least for traditional with-profits business (Horton & Macve, 1995; Struyven,

²¹ Following consultation, the FSA considered requiring the reviewing actuary (the actuary advising the auditor) to give their own personal, public certificate alongside the audit certificate (FSA, 2003b, 6.4). However, it has now been decided that this would result in confusion over responsibilities and potential liability and that therefore the reviewing actuary will report to the auditor and the audit certificate, which will state that appropriate actuarial advice has been received, will be extended to cover the valuation of the policy liabilities (FSA, 2004). The corresponding guidance for auditors is now set out in APB, 2007.

1996).²² Nevertheless, because under the IAD auditors would now be required to report on whether the accounts give a ‘true and fair view’,²³ there was much debate in the UK over what further changes, if any, might be needed to meet this requirement, which further stimulated discussion of various forms of ‘realistic’ reporting (Horton & Macve, 1995; cf. Yardley, 1995).

There have also been significant pressures from the restructuring of the UK industry through take-overs and demutualisations. There have been take-overs not only by other insurers consolidating their position but also increasingly by banks as part of the wider restructuring of the financial services industry. Managers have wished to be able to report their performance more realistically so as both to demonstrate the return from the take-overs they have made and also to provide a defence against being taken-over or, if taken-over, against being marginalised in the new corporate structure.²⁴

At the beginning of the 1990s, there was a widespread concern that listed life companies were undervalued by the stock-market and in particular that the Pearl had been acquired cheaply by AMP in the hostile 1989 takeover (cf. Salmon & Fine, 1991). In response companies began more systematic disclosure of their ‘embedded values’ (‘EV’), incorporating the value for shareholders expected from the future releases of surplus from the life fund,²⁵ and of results computed on the basis of the change in EV, of which a major proportion was the value added by writing new business. Meanwhile the ABI, beginning in 1990, proposed an alternative

²² The ABI’s SORP (ABI, 2003) gave guidance on how to implement the modifications made by the IAD (and consequently by Schedule 9A, CA1985) to the pre-existing statutory SSB to produce MSSB accounts. SSB itself remains in force under the ICA/FSA solvency regime for the purpose of determining distributable surplus and for regulatory purposes as one of the FSA’s ‘twin peaks’ of ‘regulatory excess capital’ and ‘realistic excess capital’ (further supplemented by ‘Individual Capital Assessments’ (‘ICAs’) under ‘Solvency II’) (FSA, 2001 as amended in 2007—see also http://www.fsa.gov.uk/pubs/other/li_newsletter2.pdf) (accessed 06.07.07) (cf. FRS27 (ASB, 2004), ‘definitions’)—see further Horton & Macve, 1995, Chapters 3 & 4; 1997, Chapters 3 & 5. The ABI SORP has recently been updated, primarily for the benefit of non-listed insurers not subject to IFRS4 (ABI, 2005 [amended 2006]).

²³ This was already required in France and Germany.

²⁴ A related issue has been the changes in the ‘business model’ for life insurers: what was traditionally seen by actuaries as a ‘fund’ for policyholders has become seen by more generalist managers as an investment for shareholders requiring the most efficient use of capital. This in turn has led to increasing pressures to seek regulatory approval for distribution of the inherited ‘estates’ (built up out of undistributed profits on past policies) to current policyholders and shareholders (e.g. Horton & Macve, 1997). Moreover, managing the ‘business risks’ (e.g. the effect of changes in incidence of policy lapses) has become as, if not more, important and significant to overall results and financial strength as managing the more traditional insurance and investment risks.

²⁵ EV only values the existing (‘inforce’) book of policies—addition of the value of expected profits on future business gives ‘appraisal value’ (Horton & Macve, 1995): see Figure 2.

methodology of ‘realistic’ accounting—the ‘accruals method’—which sought to apply the principles of the ASB’s SSAP 9 (ASC, 1975) to the industry’s long-term contracts and which it was thought would prove more acceptable for accounting purposes than the more actuarially driven EV approach.²⁶ But EVs remained popular (as they form the basis for both internal management planning and control of a life company’s business (Goford, 1985) and for valuations in take-over situations)²⁷ and after some experiment the ABI produced guidance on ‘achieved profits’ reporting (which could utilise either the ‘accruals’ or the EV methodology) and this was increasingly adopted as a form of supplementary reporting and incorporated by some companies, in particular the bancassurers, into their main consolidated accounts. However both the ASB and then the IASB had concerns about the compatibility of EV based accounting with their own conceptual frameworks (in particular because a profit is recognised on inception of a life policy contract—see Figure 1) and the ASB has so far banned its use by stand-alone insurers²⁸ while the IASB has generally discouraged its adoption.

Other countries have also been experimenting with new methods of reporting for both financial reporting and regulatory purposes (e.g. Australia, New Zealand, Canada, South Africa)²⁹ while in the USA, where US GAAP accounts were already distinct from the statutory bases used for state regulatory purposes, there were also strong calls from the industry for a new approach to be developed following the accounting mismatches introduced by the implementation of SFAS115 and SFAS133 (FASB, 1993; 1998).

The USA is a particularly interesting case: the adoption of value-based approaches in North America has been much slower than elsewhere (given the SEC’s traditional

²⁶ For an attempt to measure the impact see Horton & Macve, 1998.

²⁷ The London Evening Standard on 12 December 2004 reported the sale of the closed life funds of HHG (including Pearl, London Life and NPI) for around 80% of embedded value. As the funds are closed to new business there can only be ‘embedded value’. More recently, Resolution made a reverse take-over of Britannic and its closed life-fund and has continued to consolidate such funds, including Abbey’s ongoing life business. The disclosures relating to Abbey also illustrate the respects in which an MCEV approach differs from traditional EV:

http://www.resolutionplc.com/pdfs/investor_LSE_AnnouncementFinal.pdf [Appendix 5] (accessed 24.07.07)

²⁸ The ban has not applied to the Republic of Ireland (ASB, 2004b, Appendix IV para. 7.6) and embedded value is still reported in its main financial statements by Irish Life & Permanent: <http://www.irishlifepermanent.ie/ipm/ir/reportsandpresentations/annualandinterim/> (accessed 06.07.07).

²⁹ Some Chinese companies have now begun disclosing EV information: see e.g. Ping An of China’s 2006 Annual (IFRS) Report: http://www.pa18.com/pa18Web/framework/investor_en.jsp?content=/pa18Web/investor/english/companyreport.jsp&advert=/pa18Web/investor/english/adv_investor.jsp (accessed 23.07.07). We are grateful to Sophia Dan Li (Li, 2007) for bringing this to our attention.

insistence on 'historical cost accounting' and aversion to revaluations [Zeff, 2007]). They were initially adopted by some US insurers due to the demands from their foreign parent companies. However recently US firms are more generally using such methodologies internally, although as yet they do not disclose the resulting information. For example a survey conducted by Deloitte (2005) found that over half of the CFOs questioned, from large to mid-size American life companies, stated that they were using value-based measures such as embedded value for their internal performance measurement.

The American Council of Life Insurers (ACLI), in collaboration with Ernst and Young, have researched the use of EVs by American insurance companies. They found that embedded value has grown in popularity in the US for a number of reasons (Ernst & Young, 2004):

- a) the desire for improved management information;
- b) lack of relevant information from US GAAP: for example, analysis of earnings by source based on US GAAP is a complex task whereas EV illustrates the short-term and long-term effects of changes in each key profit driver;
- c) the rating agencies have increased their information requests in an effort to better understand fluctuations and trends in companies' financial results and increase the transparency of companies' financial statements and their comparability between companies and across industries;
- d) Investors are echoing the demands of regulators and rating agencies, calling on companies to disclose more information, both financial and non-financial.

Deloitte (2005) noted that for US firms analysts would begin to ask for their internal EV measures within the next three years, especially given that the trend towards harmonisation of accounting standards means European adoption of supplementary EV reporting is likely to spread around the globe. Thus it will become increasingly difficult for the remaining North American companies to resist providing EV information in their financial statements. This is widely predicted to change the

design of US insurance products as they are currently designed on the basis of how profitable they will appear under current US GAAP.³⁰

The various solutions developed internationally (see e.g. Horton & Macve, 1995, Appendices V-VII; Forfar & Masters, 1999, Appendices B & C; Klumpes, 1999; O’Keeffe & Sharp, 1999) adopt varying approaches to whether or not a profit is recognised on inception of a life policy, how ‘deferred acquisition costs’ are treated, and what is the complementary method for reporting investment gains and losses. These international developments were given additional momentum when, as noted above, the IASC in 1997 added the development of an international standard for insurance companies to its agenda, albeit not to its ‘core standards’ project. Subsequently this insurance project has been taken over by the IASB.

Another major reason for the international interest in new accounting methods (apart from the global pressures for the restructuring of the financial services industry) has been the worldwide developments in accounting for financial instruments. Insurers are, of course, major financial institutions and hold large positions in financial instruments, in particular their investment portfolios and associated derivatives, and many of the problems with the current state of life insurance accounting arise from the mismatch between the ‘fair value’ (FV) basis on which many of these financial instruments are now being measured (e.g. under SFAS115 and SFAS133 (FASB, 1993; 1998), IAS39 (IASB, 2004b, as amended June 2005) and SFAS159 (FASB, 2007)) and the various bases on which the related insurance contracts are measured, and from the resulting volatility in reported earnings and net assets (e.g. Girard, 2000).

Although valuation of investments at market value has long been the practice of insurers in the UK, the treatment of realised and unrealised gains and losses has traditionally been subsumed into the actuarial valuation of the fund: but a new approach to policy liability valuation will require explicit consideration of how such gains and losses are to be reported. The developments in FV reporting of financial instruments (which have also affected the rest of Europe now IASB standards have come into force for the consolidated accounts of listed companies throughout the EU from 1.1.2005) are therefore also driving the concerns to resolve the issues about

³⁰ An extension of this review will include further analysis of relevant US literature and developments, as well as of O’Keeffe & Sharp, 1999, and be reported on <http://www.lse.ac.uk/collections/accounting/facultyAndStaff/profiles/macve.htm>

‘realistic’ reporting of life business profits. Correspondingly, the conceptual difficulties highlighted by the difficulties in getting agreement (including full EU acceptance) on the implementation of IASB’s financial instruments standards—and in particular IAS39—spill across into difficulties about insurance accounting (e.g. Horton & Macve, 2000a; Macve, 2004a).

More generally the need for the IASB to have a comprehensive set of accounting standards in place in time for 2005 was seen as crucial in establishing the credibility of international standards *vis-à-vis* US GAAP: and a standard on insurance activity that is applicable worldwide was needed to complete the set. Hence IFRS4 as the outcome of ‘Phase I’ of the project.

There have been other recent developments in the regulatory regime in the UK which have reinforced the urgency here of finding a more satisfactory basis for life insurance accounting and reporting. While the concept of ‘policyholders reasonable expectations’ (‘PRE’) has been in the legislation for a long time, the understanding of its practical import has been evolving only gradually. One aspect of this has been the development by insurance companies of a measure of with-profits policyholders’ ‘asset shares’. This approach looks at the with-profit policyholders in a manner similar to ‘unit-linked’ policyholders, and ascribes to them their share of investment returns and gains and losses achieved to date, less policy costs and other necessary deductions, in estimating what should be a fair bonus payout.³¹ This has become increasingly important as companies have moved to increase flexibility by substituting terminal for reversionary bonuses, so that an increasing proportion of the overall return to the policyholder depends not on the bonuses declared during the life of the policy (which once added cannot be revoked) but on the amount of terminal bonus allocated only on death or maturity. The equitable approach is that the terminal bonus should be sufficient to match the total return to the policyholders to their asset shares: so that companies have a ‘constructive obligation’ to pay out to policyholders at least their asset shares.

The PRE are also influenced by the policy the company has adopted in respect of bonus payouts on policies that have recently matured and by its marketing illustrations and other literature that inform with-profits policyholders as to how the

³¹ As with other forms of ‘historical cost’ accounting this process leaves considerable discretion to management in deciding on appropriate bases for allocating the constituents of the asset shares. In addition the asset shares are generally ‘smoothed’ (e.g. Forfar & Masters, 1999; O’Brien, 2007).

company approaches the smoothing of returns and the allocation of benefits to different classes and generations of policyholders. The FSA now requires a formal statement of this policy in a statement of the ‘principles and practice of financial management’ (‘PPFM’) which each life fund must make available to its policyholders setting out, *inter alia*, a description of the fund’s investment management and bonus distribution policies. For the purpose of the solvency returns, the FSA also now expects each life fund to calculate its policy liabilities on a ‘realistic’ valuation basis which recognizes the constructive liability for these future bonuses (FSA, 2001 as amended in 2007; ASB, 2004b; O’Brien, 2007).³²

Regulatory concerns were reinforced by the disastrous collapse of the business of the Equitable, the oldest life insurer in the world. Until then the existing UK regulatory framework had generally avoided any major life insurance company failures but the Equitable case revealed three main deficiencies in the current SSB regime for solvency regulation. First, the provisions in respect of options and guarantees embedded in policies (such as the guaranteed annuity rate options offered by many companies which would pay the guaranteed rates even when current interest rates were lower) were being estimated by insurers purely on their ‘intrinsic’ value (i.e. whether they were currently, or perhaps were likely to be, ‘in the money’)³³ without taking account of their ‘time value’ (based on the probability that they could move into the money before they expired) and were therefore out of line with the way market values were determined for similar traded options.³⁴

Secondly, the prevailing actuarial valuation methodology made no explicit provision for terminal bonuses even though it could be argued that a company’s practice, marketing literature and statements to policyholders created a PRE that a certain pattern of bonuses would be paid/maintained thereby creating a ‘constructive obligation’³⁵ to policyholders which, as noted above, should be reflected in the valuation of policy liabilities.³⁶

³² Note that it will still be the FSA’s new solvency requirements, not the ‘true and fair’ GAAP accounts under FRS27 or IFRS4 (or its potential successor), that will determine permissible bonus levels and thereby permissible dividend levels.

³³ and sometimes not even then.

³⁴ This problem was further complicated in the case of the Equitable by the legal uncertainty over whether the company was justified in avoiding this risk by allocating differential levels of terminal bonus according to whether or not policyholders chose to exercise their guaranteed annuity rate option (Penrose, 2004).

³⁵ A ‘constructive obligation’ is defined by IAS37 (equivalent to FRS12 (ASB, 1998)) as arising ‘from the entity’s actions through which it has indicated to others that it will accept certain responsibilities,

Thirdly, the overall valuation of policy liabilities in the accounts and statutory returns (the Technical Provision for Long-Term Liabilities ('TPLB')) is made on an extremely conservative basis but without it being clear just how conservative this is and whether or not it is being strengthened or weakened from year to year. Thus overall it is difficult to gauge just how 'realistic' the TPLB is.

The FSA has therefore now introduced its requirement (effective 31 December 2004) for a new 'realistic valuation' methodology which addresses these three deficiencies of the traditional valuation of liabilities (FSA, 2001 as amended in 2007) and alongside the traditional statutory solvency basis (SSB) now provides a 'twin peaks' test of life insurers' capital adequacy (supplemented by 'Individual Capital Assessments' (ICAs)).³⁷

A notable feature of the rapid, dynamic developments of recent years has been the colonization of an area which traditionally was wholly the province of actuaries by the practices and discourses of the accounting and audit profession. The actuarial profession, in the UK and internationally, has faced the increasing challenge of explaining, almost translating, its own expertise—widely seen as mysterious and arcane—into the conceptual framework of accounting for the generality of businesses so that investors (and policyholders) may more readily compare their own investment in insurance companies and its risks and returns with alternative investment opportunities.³⁸ This applies at the level of both retail and wholesale investors,

and as a result has created an expectation that it will discharge those responsibilities'. FRS12 requires that such obligations should be provided for as liabilities but insurers had so far been exempted from FRS12 until the advent of FRS27 (ASB, 2004a, b). IASB is currently revisiting IAS 37 <http://www.iasb.org/Current+Projects/IASB+Projects/Liabilities/Liabilities.htm> (accessed 22.07.07).

³⁶ In the case of the Equitable this lack of provision was aggravated by the company's policy of full distribution so that it had not built up an 'estate' and did not have the reserve that life insurance companies normally hold in their FFA to cover the ability to maintain bonuses (reversionary and terminal) at current levels, at least for a while (Penrose, 2004).

³⁷ In the longer term, as explained by the Chairman in October 2002, the FSA expects the IASB to move to 'fair value' of insurance liabilities and then itself to follow in this direction: cf. FSA (2004). Convergence with published financial reporting is also foreseen by the EU under 'Solvency II'.

³⁸ The International Actuarial Association ('IAA') is currently developing International Actuarial Standards of Practice (Recommended Practices and Practice Guidelines) regarding IFRS. A number of preliminary Standards and Exposure Drafts for 'Practice Guidelines' have been issued: <http://www.actuaries.org/index.cfm?LANG=EN&DSP=STANDARDS&ACT=INDEX> (accessed 08.07.07). Such Guidelines are intended to be educational and non-binding in nature. They represent a statement of appropriate practices, although not necessarily defining uniquely practices that would be adopted by all actuaries. They are intended to familiarise the actuary with approaches that might appropriately be taken in the area in question. They also serve to demonstrate to clients and other stakeholders and to non-actuaries who carry out similar work how the actuarial profession expects to approach the subject matter. The IAA would expect to 'upgrade' them to 'Recommended Practices' in due course.

heightened by the restructuring of the financial services industry as a whole. The UK actuarial profession has itself noted the impact of the changing ethos in society which now rejects paternalism and opacity in the construction of savings vehicles in favour of greater personal responsibility and transparency in product design—albeit as yet largely ahead of the complementary increase in public education needed to enable consumers to handle the greater information they are given.³⁹ In parallel there has been the extension both of the remit of regulatory supervision and of its delegation to independent audit to take on responsibilities that were traditionally those of the ‘Appointed Actuary’.⁴⁰

In the UK, following the Morris Review (2005), the actuarial profession, and its Board for Actuarial Standards (‘BAS’), has now come under the oversight of the FRC. These changes and the related contests over ‘professional turf’ also reflect wider social changes and the increasingly pervasive nature of the ‘audit society’ (Power, 1997). Nevertheless at the same time the accounting framework is itself thereby faced with new challenges. The audit role in relation to valuation of policy liabilities cannot be fulfilled without employing the expert professional advice of an independent ‘reviewing actuary’ (FSA, 2001 as amended in 2007). And the IASB and other standard setters have begun to find that their own conceptual frameworks seem inadequate to cope with the complexities and uncertainties of a business with such long-term horizons and with the need to reflect the respective rights of shareholders and policyholders, and of different generations of policyholders, in their participation in its results. The conceptual deficiencies of the current accounting model have also been highlighted by the protracted debate over how to account for financial instruments and the difficulties the IASB has been facing in getting full EU endorsement of IAS 39 (IASB, 2004b; cf. Horton & Macve, 2000a).

Life insurance accounting is therefore an arena where both the objectives of the accounting (given in particular the differing rights and interests of shareholders and

However both IFRS4 and FRS27 almost entirely avoid mentioning the need for actuarial input and the ICAEW (in its Technical Release TECH 4/05 (February 2005)) has given only heavily qualified support to the IAA initiative:

http://www.actuaries.org/CTTEES_ACTSTD/Documents/Comments1_2_ICAEW.pdf (accessed 06.07.07). cf. also Wright, 2005.

³⁹ See for example the highlights of the actuarial profession’s response to the initial consultation for the Morris Review of the profession set up following the Penrose report (www.actuaries.org.uk/files/pdf/news/MorrisHighlights20040909.pdf 9th September 2004 (accessed 06.07.07)).

⁴⁰ Within insurance companies the traditional management roles of actuaries have been increasingly supplanted by CFOs (and CEOs) with accounting and/or finance backgrounds.

policyholders, including with-profits policyholders) and the various (shifting) roles of the respective regulatory authorities and self-regulatory bodies (including FSA, the actuarial profession, ABI, ASB, APB, BAS, IASB and the EU) and of other interested parties (HMRC)⁴¹ remain unclear. Thus it is arguable whether in the UK the consequences of not dealing earlier with potential underprovisioning of the TPLB were primarily attributable to a failure on the part of the FSA or of the ASB⁴² (cf. Penrose, 2004), given that it is the FSA's solvency regime that governs distributions and capital adequacy.

The function of the Companies Act 'true and fair' MSSB accounts (those currently issued as IFRS4 accounts) remains unclear. While rejecting (at least for now) embedded values ('EV')—even though they provide the information that is most valued by analysts (Horton & Macve, 1997; PricewaterhouseCoopers, 2005)—FRS 27 comments (Appendix 4 para. 7.4): 'Existing insurance accounting focuses more on the needs of prudential regulation than on the information needs of investors. As a result, the true and fair financial statements are not very good at providing shareholders with useful information about the value of their interests in the business.'⁴³ But in the UK (unlike in continental Europe) the MSSB accounts are not in fact the basis for solvency regulation (the SSB—and now 'twin peaks'—returns to the FSA are) so it is not at all clear what, if any, purpose the MSSB accounts serve other than legal compliance with the EU IAD.

The ASB's introductory statement to the ABI SORP (2003) noted that 'there are aspects of insurance accounting that do not align with other accounting practice' (but without saying whether or not they are acceptable) because of 'the interplay between general accounting practice, the requirements of Schedule 9A of the Companies Act 1985 and detailed regulatory requirements ('the FSA rules')', and gave examples. It concluded 'Except as described above, the SORP does not appear to contain any points of principle that are unacceptable in the context of present accounting practice or to conflict with an accounting standard or the ASB's plans for a future standard',

⁴¹ At present life assurance taxation in the UK is based on accounts prepared on the traditional solvency basis ('SSB'), with various complex adjustments. It is an open question whether HMRC would wish to move to the basis finally adopted for IFRS (cf. ICAEW, 2007). (In other European countries, normally IFRS only apply to consolidated accounts, with the traditional national basis still being used for the individual companies on which tax is levied.)

⁴² or internationally of the EU or the IASB

⁴³ At para. 7.8 it adds that it was decided not to prohibit EV for those entities currently using it in their main financial statements as it would mean forcing them 'back on to a basis of accounting that the Board has acknowledged is very unsatisfactory—the MSSB basis (albeit modified by the FRS)'.

leaving the reader unclear whether or not the ASB did accept the SORP's recommendations which, as noted, largely derived from higher UK legal authority than the ASB itself.⁴⁴ One may contrast the ASB's insistence that the SORP prohibit the continuing incorporation of EVs under the 'achieved profits' method into insurers' main accounts (where there was no overriding legal requirement for such incorporation) with its (qualified?) acceptance of the SORP's basis of liability provisioning and other accounting treatments which were required by CA1985 and FSA rules (cf. FRS27, Appendix IV, paras. 4.5-4.8).

The main issue for IASB, at least in the UK context, is therefore whether its proposals in the DP for recasting the current MSSB accounts onto its favoured CExitV basis will provide accounts that are regarded as more useful than the supplementary EEV statements and their accompanying disclosures that insurers have been issuing and refining over recent years. The most important challenge is therefore to identify what significant differences remain, and ought to remain, between CExitV (or alternatives) to be used in the main financial statements and the MCEV which currently represents the leading methodology in supplementary reports. There is obviously great danger to the IASB's prestige if the most useful and important 'accounts' remain those that are voluntarily presented by management outside the main, statutory financial statements.⁴⁵

⁴⁴ In the ASB's prefatory statement to the December 2005 revision of the SORP (ABI, 2005) a similar statement is made but without the concluding opinion. The revised SORP applies to insurers that are continuing to prepare their financial statements in accordance with UK legal and accounting requirements. Insurance entities that are required or choose to prepare their accounts in accordance with international accounting standards are also encouraged to have regard to the SORP insofar as this is compatible with those standards. [Under the EU Regulation listed insurers only have to comply with IFRS4, but are voluntarily subject to the Memorandum of Understanding reached between the ASB, the ABI and leading life insurers and bancassurers with respect to the implementation of FRS27 (ASB, 2004c).]

⁴⁵ As noted below the CFO Forum (2006) itself argues for retaining different bases for the main financial statements and the supplementary EEV disclosures. However the CFO Forum's preferred basis is not the DP's CExitV as it argues both that the liability should reflect management estimates and that there should be no profit on inception, while acquisition costs should be shown as an asset to measure the intangible benefit of the new customer relationship (see our Appendix III. b)). The CFO Forum's position may be driven by concerns as to the potential spillover from IFRS consolidated accounts into the individual company accounts that are presently prepared on national accounting bases and used as a basis for bonus declaration, tax, solvency monitoring etc.—i.e. contractual and other economic consequences of the kind that are analysed in 'positive accounting theory' as the drivers of managerial accounting choices (Watts & Zimmerman, 1986). Or they may be wary of making EEV itself part of a regime that would then be governed by IASB rules, thereby surrendering some current managerial flexibility.

Summary

There has been heightening interest in life insurance accounting in recent years driven by a combination of various forces. First, market pressures such as takeovers, demutualisations and the overall, international, restructuring of the global financial services industry, have created a particular focus on the efficient management use of capital.

Second, UK regulatory initiatives, driven partly by conspicuous failures such as the Equitable but more generally by attempting to move from a ‘command and control’ approach to ‘enforced self-regulation’, have required the development of stronger internal control systems and external accountability, including increased emphasis on the role of audit (e.g. Power, 2007): a combination which has significantly displaced the traditional reporting and assurance roles of actuaries in favour of accountants and auditors, while also requiring reassessment of the traditional divide between ‘regulatory/solvency’ reporting and performance reporting to the capital markets. At the EU level, the complementary developments in applying risk-based, banking-style capital adequacy regulation to insurance through ‘Solvency II’⁴⁶ are also emphasising the need for realistic and up-to-date liability valuations.

Third, the industry itself has innovated with new bases of (mainly supplementary) EV reporting, initially derived from value-oriented systems for internal management planning, control, and pricing decisions, as well as for evaluating merger and acquisition prices, which analysts have generally come to regard as the most useful form of external reporting, especially as related sensitivity and other disclosures of assumptions underlying the reported numbers have also been improved.

Finally, accounting standard setters have taken insurance onto their agendas, not least because of pressures to deal with the ‘mismatches’ created by the recent developments in FV accounting for the financial instruments in which insurers are among some of the largest investors. But although largely originating from the specialised sphere of insurance, the issues raised and the FV experiments being undertaken pose fundamental questions, and offer useful lessons, for the conceptual framework and future development of financial accounting and reporting generally.

It is against this background of recent, ongoing, rapid, and often confusing major changes that we provide in the next chapter—based on our review of the relevant

⁴⁶ http://ec.europa.eu/internal_market/insurance/solvency_en.htm (accessed 22.07.07).

literature of recent years—a commentary on the main issues on which the DP has now formed preliminary views as well as on those that still need to be resolved by the IASB in the remainder of ‘Phase II’ of its project on accounting for insurance contracts; issues which are also relevant to the wider accounting issues that affect the generality of companies.⁴⁷ While the additional disclosures provided under FRS27, IFRS4 and CFO Forum (2005) have generally been regarded as substantial improvements to reporting (cf. Wright, 2005), the basic accounting issues of net asset and profit measurement still remain highly controversial.

As noted in the Introduction, our analysis here covers some relevant UK academic accounting research; recent contributions from the UK actuarial profession and the European insurance industry; and the recent accounting standards that have been issued (IASB, 2004a and ASB, 2004a, 2004b). We draw on these to show how they may assist in answering the issues raised and questions posed in the DP. Fuller expositions and reviews of the individual contributions are given in the Appendices.

A further stage of this review will analyse distinctive features of other countries’ approaches outside Europe, particularly in the USA, the ‘old Commonwealth’, and Japan. Copies of working versions of that stage, as well as of further versions of the research papers being prepared under the programme we are undertaking for the ICAEW’s CBP⁴⁸ will be available from:

<http://www.lse.ac.uk/collections/accounting/facultyAndStaff/profiles/macve.htm>.

⁴⁷ ASB (2005) also identifies a number of further issues that need resolution but for now recommends monitoring the IASB’s progress on its Phase II (see Appendix IV. b)).

⁴⁸ outlined in Appendix I. e). See also CBP project ref: 5-390

http://www.icaew.co.uk/cbp/index.cfm?AUB=TB2I_36010IMNXI_36010

4. Analysis of issues

4.1 Introduction

To focus our review of recent research, we structure our analysis around the issues raised and questions posed in the DP and relate these to the research and other literature surveyed in the Appendices.⁴⁹ We conclude by raising some wider issues which question the DP's own underlying assumptions, including those of the IASB's *Framework* as well as of the international standards convergence agenda.

We bring together the issues and questions in a different order to the DP itself (in its Appendix A) to reflect what we see as the key priorities and the interrelationships between them. We hope that this approach (which also allows us to structure the presentation of our own opinions on the issues raised) will best assist those commenting on the DP, as well as on other areas of the IASB's agenda, and help in the structuring of future work, including the identification of further research priorities.⁵⁰

As noted above, after some introduction on background and context, the major issues covered in IASB's DP relevant to life insurance are: measurement of insurance contract liabilities on the proposed 'current exit value' ('CExitV') measurement approach—based on three 'building blocks' derived as far as possible from current market inputs, namely expected future cash flows, discount rates and margins for risk and 'service'; the relationship of CExitV to 'fair value' ('FV') (where IASB has not yet been able to identify any significant differences) and to the industry's own embedded value ('EV') measures; profit at inception of a contract; future premiums; acquisition costs; 'unit of account'; reinsurance; 'unbundling'; allowance for own credit risk; investment contracts; participating business; and unit-linked contracts.

Matters which are left to the development of the Exposure Draft ('ED'), beginning in 2008, include any reconsideration of the definition of insurance contracts, and their presentation in the financial statements (e.g. how to report premiums and changes in the value of insurance liabilities). Issues that are not planned to be addressed until later ('in due course') include policyholder accounting (i.e. other than by insurers ceding to reinsurers or reinsurers themselves retroceding which the DP does cover); while discounting of deferred tax and valuation of other assets and liabilities held both by insurers and by businesses generally are outside this project. FASB has also

⁴⁹ We paraphrase the questions rather than using the DP's own words.

⁵⁰ ASB (2007) also provides a hyperlink to a summary of the DP proposals and issues raised.

recently issued an Invitation to Comment, containing this DP, on whether it should add a joint project with IASB on insurance contracts to its agenda, and whether the DP forms a suitable starting point.⁵¹

The most important questions, given the overall thrust of the DP, relate to the proposed ‘current exit value’ (‘CExitV’) basis for valuing the policy contracts and the related issues of asset, equity and profit measurement. The aim is to find a model that covers both life (‘long-term’) and non-life (‘short-term’) insurance.⁵² However, this approach begs the question of whether the traditional accounting focus on individual ‘liabilities’ and ‘assets’ is either necessary or sufficient for the most useful presentation of life insurers’ financial position, performance and prospects.

The approach is of course in line with the underlying conceptual frameworks of both FASB and IASB, but it has serious limitations (e.g. Macve, 1997: Introduction; Bromwich *et al.*, 2005; Rayman, 2006) and, as we shall see, there are several issues in the DP where solutions which have always seemed obvious to insurers and actuaries still leave IASB (or at least some Board members) wriggling on the hook of whether there is really a recognisable ‘asset’ or ‘liability’ to be measured, or how what is proposed may unacceptably alter the accounting for similar assets and liabilities held by the generality of business enterprises—a concern now taken up by ASB (2007).

It may be that life insurance really does need to be treated differently, as 19th century regulators gradually came to accept (Horton & Macve, 1994). For many of the more difficult issues, given that the IASB’s measurement objective is to assist users in their understanding of likely future cash flows, their timing and their risk, it appears that thinking directly about those estimated cash flow patterns, rather than via the ‘proxies’ of assets and liabilities, may help to provide a more understandable solution and avoid much semantic definitional quibbling.

But treating life insurance as ‘different’ would leave open the risk of ‘accounting arbitrage’ and attempts to force contracts artificially to fit into (or outside) the scope of insurance accounting. So the DP’s first question starts with when an insurance liability is to be recognised.

⁵¹ <http://www.fasb.org/news/nr080207.shtml> (accessed 04.09.07). Such a project would not form part of the set on which sufficient progress towards convergence is required before the SEC will abandon the reconciliation requirements for non-US registrants under the 2005 roadmap set out following the 2002 ‘Norwalk Agreement’.

⁵² The corollary is the DP’s proposal that non-life liabilities should be explicitly discounted. The issues are reviewed in Macve & Gwilliam (1993).

Q1 relates to recognition/derecognition where, given the definition of an insurance contract in IFRS4, the DP asks whether the requirements should be consistent with those for financial instruments in IAS39.

None of the literature we survey specifically focuses on this issue, although Horton & Macve (1994) briefly trace the historical evolution from the first recorded UK life policy in 1583, in the process of which ‘insurance’ had to be distinguished from pure gambling. Wright (2005) (see Appendix II. e)) identifies as a continuing critical problem the judgement of when an insurance contract bears ‘significant insurance risk’, arguing that this problem is more significant in long term insurance, where many products contain only minimal risk features, being largely intended as investment contracts. The DP states that the Board will consider whether the IFRS4 definition is still appropriate during the development of the ED.⁵³

In principle consistency is clearly desirable: but it is an open question in which direction convergence should take place given the overriding importance, emphasised by the CFO Forum (2006), that there be consistency between the accounting for all of insurers’ assets and for their insurance and other liabilities, in order to avoid accounting mismatches where there are no real economic mismatches. Intangible assets, occupied real property and liabilities such as deferred tax therefore also need consideration (see further, **Q10** and **Q17** below).

As stated above, the most important questions, given the overall thrust of the DP, relate to the proposed CExitV basis for valuing the policy contracts (**Q5**) and the complementary issues of asset measurement (**Q10**, **Q17**), equity measurement (part of **Q16**) and profit measurement (**Q20**). Presentation issues are raised in **Q13**, **18** and **19**. We look next at **Q5** and the questions related closely to it (**Q15**) and to its three ‘building blocks’—expected future cash flows, discount rates and margins for risk and ‘service’ (**Q2**; **Q3**, **6**, **7**, **8** and **16**; **Q4**, **11** and **14**; **Q12**; **Q9**).

4.2 Current Exit Value (‘CExitV’)

Q5 asks whether ‘current exit value’ (‘CExitV’), as proposed in the DP, is the appropriate measurement attribute (and whether CExitV is the appropriate label).

⁵³ While this report focuses on life insurance, the DP is aiming to establish the same treatment for both life and non-life contracts. We are grateful to a referee for pointing out that breakdown cover such as that offered by the Automobile Association to motorists may also be regarded as falling under the IASB’s definition of insurance contracts for accounting purposes, albeit not for regulatory purposes.

Given that the DP cannot identify at this stage any significant difference between its CExitV and FV, the question essentially becomes ‘is FV the appropriate basis’? Here the issues are largely debated outside the specialist insurance literature covered here (e.g. Horton & Macve, 2000a; Benston *et al.* 2003, 2006; Penman, 2007; Hitz, 2007; Walton, 2007; Rayman, 2007; Weetman, 2007).

However (as discussed further below under **Q4**) the Board remains divided on what CExitV implies, with several (albeit a minority of) Board members still favouring calibration of the risk margin so that no ‘Day 1 profit’ emerges, which is effectively equivalent to initial measurement of the liability at entry value (DP, paras. 86 (d) and 117). Also the DP notes that the joint IASB/FASB project on Revenue Recognition is still considering both entry value (‘customer consideration’) and FV (i.e. exit price) based approaches (DP, para. 113). Use of entry values where appropriate is also argued for in the ICAEW’s critique of FASB’s (and IASB’s proposed) definition of FV as ‘exit price’ (Dealy and Singleton-Green, 2007).

There is little in the insurance-specific literature investigating this issue, but actuarial literature (which also favours EV and increasingly MCEV) [see Appendix II] largely takes FV of insurance liabilities to be an exit rather than an entry value. However, in practice the ‘exit’ that is contemplated is not so much the price payable to another insurer for immediate transfer, but rather how the company will ‘exit’ its contract through settlement over its remaining term, as that is normally seen as the more profitable course of action. And even if one does attempt to answer the question ‘what would one have to pay now?’, the estimate will normally be made of what the hypothetical transferee would itself require to run the policy off to final settlement. Given thin markets and data difficulties, this estimate will in turn largely converge towards the company’s estimate of its own ‘cost to settle’.⁵⁴

Macve and Serafeim (2007)) [see Appendix I. e)] explore entry value further and analyse how far ‘relief value’ (the liability equivalent of ‘deprival value’, which is the valuation measure for assets preferred by the ASB’s *Principles* (1999) under the label ‘value to the business’) could help to solve both the liability valuation and the revenue recognition issues, not only for insurance but for all businesses where revenue is received in advance of performance (e.g. a magazine subscription). The profit recognition problem is seen to result, not so much from the liability valuation

⁵⁴ The DP, at paras. 58, 62 and 103, appears to come to much the same view.

measurement chosen, but from the indeterminacy of the pattern by which the value of any expected ‘pure profit’ (‘residual income’ after allowing for all costs and discounting for time and risk) is to be recognised.

The CFO Forum (2006) [see Appendix III. b)] favours retaining entry value for the ‘main’ accounts, and ASB (2007) expresses concerns about the potential implications both for insurance and for other businesses of the DP’s move towards CExitV. Further analytical research is needed here: but also more empirical investigation of how far in practice there is likely to be an identifiable significant difference between alternative measurement bases, given the lack of available reference points from deep markets for insurance policy liability transfers (e.g. as discussed by Hairs *et al.*, 2002; cf. Sheldon & Smith, 2004 and O’Keefe *et al.*, 2005: see Appendix II. b), c), d)).

If CExitV is adopted, the DP nevertheless acknowledges (paras.119, IN22) that ‘a measurement at [CExitV] is not intended to imply that an insurer can, will or should transfer its insurance liabilities to a third party. Indeed, in most cases, insurers cannot transfer the liabilities to a third party and would not wish to do so. Rather, the purpose of specifying the measurement objective is to provide useful information that will help users make economic decisions.’ But the DP does not explain further what these decisions are or provide any evidence as to how its hypothetical CExitV will help users, other than its belief that it will provide ‘relevant information about the amount, timing and uncertainty of future cash flows arising from existing insurance contracts’ (DP, para. IN20 (a))—as arguably would any clearly specified actuarial valuation basis.

ASB (2007) has expressed concern at the hypothetical nature of CExitV for insurers: but in fact it appears even worse than hypothetical given that the DP acknowledges that it would ‘in most cases’ be impossible.⁵⁵

Potentially a much more important question is: how can CExitV be distinguished from EV (especially in its more recent EEV and MCEV versions)? That is the value measure regarded by the leaders of the European industry, by many actuaries, and by analysts, as providing the most ‘useful information for economic decisions’ (e.g. for M&A; share price evaluation; etc.).

⁵⁵ A ‘deprival value/relief value’ model only considers alternative choices that an entity actually faces (e.g. Macve and Serafeim, 2007).

Towers Perrin Tillinghast ('TPT') have identified the following differences from MCEV that do appear to remain⁵⁶ (although in several cases the DP itself argues that in practice difficulties of making the distinctions (e.g. re. expense levels and credit risk) will mean the amounts involved are unlikely to be material):

- inclusion of 'service margins' in CExitV
- guidance on risk margins for CExitV may allow margins for diversifiable risk within a portfolio, while not explicitly recognising 'frictional costs',⁵⁷
- allowance for own credit risk in CExitV
- market-related rather than entity specific expense estimates in CExitV
- restricted, rather than full allowance, for future premiums in CExitV
- future bonuses limited to those satisfying the IAS37 definition of 'constructive liability' (which IASB may change) for CExitV.
- No allowance for policyholder share of the 'estate'/'orphan assets' in CExitV⁵⁸

In several respects, as TPT have also analysed, the DP's CExitV also differs from the basis specified for the EU's new 'Solvency II' monitoring regime, in particular in relation to 'service margins', credit risk allowance, expense estimates, future premiums and perhaps allowance for future bonuses. In particular, it seems paradoxical that prudential solvency regulators continue to accept (as in the UK they have since the 1870 Act) 'future premiums',⁵⁹ whereas the DP, for supposedly realistic commercial accounting purposes, appears to want to be much more circumspect.

Moreover, when related to the hierarchy in SFAS157 on FV—which requires that 'the level in the fair value hierarchy within which the fair value measurement in its entirety falls shall be determined based on the lowest level input that is significant to the fair value measurement in its entirety' (para. 22.)—the implication of **Q2** and **Q3** (discussed further below) would appear to be that the CExitV measure of insurance

⁵⁶ Presentation on 'International Accounting Developments', London, 26th June 2007.

⁵⁷ Analysed further in Horton *et al.* (2006b).

⁵⁸ Prudential's estate has recently been estimated as amounting to some £9bn and Aviva's at £4bn. Their negotiation with the FSA over potential distribution between policyholders and shareholders may now be facilitated by a recently announced tax change ('Tax change may clear way for Aviva and Pru with profits reattributions', *Citywire*, 24th July 2007 www.citywire.co.uk/news). Horton & Macve, 1998, found a significant positive share price reaction to Legal & General's announcement in 1991 of its increased attribution of elements of its estate to shareholders (see discussion in Appendix I. b)).

⁵⁹ Just as banking solvency regulators have accepted embedded values of bancassurers (Horton & Macve, 1995; 1997). But ASB (2007, sec.5) is also concerned about the principle being extended to other kinds of businesses.

contracts is at best often likely to be at Level 3 (unobservable inputs),⁶⁰ which may raise further severe concerns about measuring income and performance on the basis of changes in such values from year to year—at least for the generality of businesses. (This issue is explored further in Horton *et al.*, 2006b [Appendix I. e] (iv)).⁶¹

In summary, the DP's proposed CExitV appears to be unlikely to be directly comparable to any actual market price for the trade of an insurance liability. It will have to be constructed from 'building blocks', as a 'synthetic current exit value' ('SCExitV') and the real world constraints on estimating the building blocks (as discussed further below) seem likely to result in it being the insurer's own estimate of what price it would itself require to take on—and then run-off to settlement in the ordinary course of business as a 'going concern'—its own current book of policies. In other words, it will estimate the liability measurement as the present value of its own likely future cash flows, making due allowance for risk. And the question is, as insurers have become ever more disciplined in making these estimates, with increasing triangulation to whatever market inputs are available, how will these estimates of SCExitV in practice differ from the MCEVs increasingly being reported in supplementary disclosures?

The DP, in para.110 (our emphasis added), summarises the Board's preliminary view as being 'that [CExitV] is a more relevant measurement attribute than [EV], *especially versions of [EV] that are not market consistent.*' So the gap with MCEV appears to be narrowing and the DP itself identifies the lack of 'service margin' in EV as being probably the most significant difference between CExitV and MCEV, and as

⁶⁰ Para 30 of SFAS157 (FASB, 2006) explains (our emphasis added): 'Level 3 inputs are unobservable inputs for the asset or liability. Unobservable inputs shall be used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. However, the fair value measurement objective remains the same, that is, an exit price from the perspective of a market participant that holds the asset or owes the liability. Therefore, unobservable inputs shall reflect *the reporting entity's own assumptions about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk)*. Unobservable inputs shall be developed based on the best information available in the circumstances, which might include the reporting entity's own data. In developing unobservable inputs, the reporting entity need not undertake all possible efforts to obtain information about market participant assumptions. However, the reporting entity shall not ignore information about market participant assumptions that is reasonably available without undue cost and effort. Therefore, the reporting entity's own data used to develop unobservable inputs shall be adjusted if information is reasonably available without undue cost and effort that indicates that market participants would use different assumptions.'

⁶¹ Para 32 of SFAS157 (no doubt mindful of Enron) requires extensive disclosures in relation to FVs based on Level 3 inputs and the changes in them over the financial reporting period. Cf. Ball (2006) and Benston *et al.* (2003; 2006) who argue that such unrealised gains should not be recognised at all.

potentially explaining the significant ‘Day 1’ profits on new business under MCEV.⁶² However the DP’s own inclusion of ‘service margin’ is contestable (see below). And it does not identify how, or to whom, CExitV is more relevant than MCEV (cf. Horton *et al.*, 2006b).⁶³

As we discuss next, the DP attempts to constrain these estimates by reference to normal accounting criteria and ‘GAAP’ for asset and liability recognition and measurement. But this produces an irreconcilable paradox. Market consistent CExitVs must reflect what market participants would value. And their expectations are not constrained by GAAP accounting rules. So for example, it may be argued that GAAP does not allow inclusion of ‘estimated’ future premiums receivable to which policyholders are not contractually committed. But if market participants taking over a block of policies would factor in these expectations, then they must enter into the CExitV measurement. To attempt to exclude them makes CExitV even more of a synthetic ‘SCExitV’ designed to be squeezed into a tidy accounting framework, rather than to reflect (often untidy) market reality. The DP cannot have it both ways—and nor can FV accounting generally. So perhaps ‘SCExitV’ and ‘SFV’ would be more appropriate labels.⁶⁴ And recognising that CExitV excludes related transaction costs, perhaps ‘current exit *price*’ would be a more appropriate label (as discussed further under **Q3** below).

This intuition should help us to deal fairly swiftly with many of the other questions raised in the DP— but equally also serves to heighten concerns (such as those expressed by ASB, 2007) as to what the ‘contagion’ from the insurance accounting proposals might be for accounting more generally, given it does not seem feasible that accounting more generally is ready yet for full FV accounting. This is why the current life insurance ‘experiment’ into a form of FV accounting is potentially so significant.

⁶² An alternative explanation might be that insurers who can charge premium prices have spent large amounts (in some cases over nearly 200 years) in building up brand reputation, etc. but these costs have been expensed as incurred, and so cannot now be matched against the new business profits (e.g. Macve & Serafeim, 2007).

⁶³ In FRS27 (ASB, 2004a) Appendix IV para. 7.13 also indicates areas where there may be differences between the approach it adopts and EVs, although some of these appear to reflect possible misunderstandings in their current implementation. No quantification of the estimated magnitude of the possible differences is provided.

⁶⁴ One has to recognise that, given the constraints of thin markets, even MCEV will to some extent be ‘synthetic’ (‘SMCEV’)—for further discussion see Horton *et al.* 2006b. Moreover, as Power (e.g. 1997) has argued, what is ‘objective’ and ‘verifiable/auditable’ is generally as much a matter of social construction as of scientific external validity.

Q15 asks about whether and how to eliminate differences between IAS39's existing treatment of financial liabilities and the proposed CExitV measurement of insurance contracts. As already observed under **Q1**, 'symmetry' of treatment with insurer's other assets and liabilities is of overriding importance to avoid accounting arbitrage/mismatch; but it is an open question in which direction convergence should take place if accounting more generally is not yet ready for full FV accounting.

4.3 Building Blocks

Q2 asks whether insurance liabilities should be measured using the three 'building blocks' derived as far as possible from current market inputs, namely expected future cash flows, discount rates and margins for risk and 'service'. It is clear from the wider accounting and finance literature that while this is an acceptable approach it is not the only one. The basic aim (where current market prices are not directly available) is to estimate what the present price of an obligation to be settled in the future would now be (just as with assets it is to find the present price of a right to receive settlement in the future—or of a reasonable anticipation of such a settlement). In principle one can employ both 'top-down approaches', e.g. utilising 'risk adjusted discount rates' derived for the enterprise as a whole (e.g. WACC) or for individual divisions (e.g. Mehta, 1992), or 'bottom up' rates applicable to individual classes of assets and liabilities and even products etc.. Here the second and third building blocks are commonly merged. Alternatively, the approach of 'certainty equivalents' of expected future cash flows can be discounted at a risk-free rate. Here the first and third building blocks are combined before the discounting takes place at a risk free rate. The IASB's approach is therefore somewhat idiosyncratic in treating the 'risk margins' as a third and final adjustment, but in principle any approach that combines these three building blocks (expected cash flow, time discount (or 'interest') and risk adjustment) can be made to be equivalent.⁶⁵ In practice, as the experiments with MCEV have shown, the emerging view is that building 'bottom up' estimates of elements of value is the more disciplined approach⁶⁶ (see the papers reviewed in

⁶⁵ The alternatives are acknowledged in the DP at the footnotes to paras.43 and 108 (g) and in Appendix E26 and F9 (h).

⁶⁶ Towers Perrin Tillinghast's survey, *2006 EEV Reporting: Progress Towards Consistency* (UPDATE, May 2007), reports on the adjustments made by Allianz in moving 'from a top-down approach for 2005 reporting to a direct MCEV approach for 2006 reporting'; and Resolution has disclosed a reconciliation

Appendix II). Thus MCEV constructs an ‘economic balance sheet’ (Figure 3) to focus on the crucial elements that need to be taken into account. However issues about interdependencies between the elements remain and one has to ensure that their sum equals the value of the whole, and in particular that there is no ‘double counting’.⁶⁷

However the DP’s concept of ‘service margins’ in addition to risk margins is not one to be found in the existing literature (e.g. Hairs *et al.*, 2002; Macve & Serafeim, 2007) although Forfar & Masters (1999) do discuss alternative views of life insurance contracts as ‘financial instruments’ and service contracts’. ASB (2005) also favours the latter approach [see our Appendix IV. b)]. If this concept (which we discuss further under **Q4**) is rejected, and proves to be the only major significant difference between CExitV and MCEV, then it is difficult to explain why MCEV cannot be the basis for the primary financial statements rather than merely for supplementary statements (cf. CFO Forum, 2004, 2005, 2006—which argues for entry value for the primary statements and EEV for the supplementary statements; Horton & Macve, 1995—which argues for EV in the primary statements; Macve & Serafeim, 2007—which argues for ‘deprivation/relief’ value rather than an exit value, whether for primary statements or supplementary EV statements; and Horton *et al.*, 2006b—which explores the reality and consistency of the assumptions underlying current versions of MCEV.) And if investment contracts are accounted for the same way there would then be no need for the current supplementary disclosures.

Whatever the ‘correct’ current value measurement basis, more fundamentally there is increasing questioning in the wider finance literature (e.g. Shleifer, 2000; Barberis & Thaler, 2002; Shiller, 2003; Shin, 2004) as to whether market prices, even when readily available in deep financial markets, can always be relied on to give rational estimates of future benefits. ‘Behavioural finance’ research increasingly focuses on pricing anomalies, such as stock-market ‘bubbles’ and the adverse consequences (especially for long term investment institutions) if management performance is unquestioningly measured by reference to the changes in such prices.

On the other hand it is also important to recognise that markets may often know more than managers, especially about factors outside their own business. And at any given time it is hard to know whether or not market prices really are out of line with

of Abbey’s acquired EV from a traditional basis to an MCEV basis:
http://www.resolutionplc.com/pdfs/investor_LSE_AnnouncementFinal.pdf [Appendix 5] (accessed 24.07.07).

⁶⁷ These issues are currently being explored further in Horton *et al.* 2006b—see Appendix I. e).

‘fundamentals’. So at the very least market prices (or market consistent valuations as proxies for prices) provide a ‘triangulation’ which imposes the discipline of requiring managements to explain why they think their view of their businesses’ performance and prospects is better than the market’s current view. Nevertheless, given that an important managerial function is to recognise the entrepreneurial opportunities offered by ‘gaps in markets’, or to draw on comparative advantage to turn inputs into more valuable outputs or services, in that respect performance measures based on more traditional accounting approaches to ‘matching’ costs and revenues are likely to provide greater insight into the value drivers of a business than simply tracking changes in market prices of assets (and liabilities) held (e.g. Penman, 2007).

This is a critical, central area that requires further research and analysis as the IASB’s own proposals are not clearly based on any rigorous analysis of the economics of markets. A preliminary exploration in relation to life insurance and the use of MCEV is being undertaken in Horton *et al.* (2006b), and in relation to FV generally by Bromwich (2007) and Hitz (2007), which should also be relevant to CExitV.

We next look further and in turn at the DP’s three individual ‘building blocks’ relating to cash flows; discounting; and risk.

Cash Flows (Q3, 6, 7, 8 and 16)

Q3 asks whether the guidance on cash flows (in the DP’s Appendix E) is at the right level of detail, or requires modification, deletion or extension.

The basic issues here are: what is special about insurance (e.g. ASB, 2007)?—both CExitV and FV are based on estimating current exit price; and why is any detailed specification needed in an accounting standard? The objective of the CExitV / FV exercise is to estimate what price a transferee would expect to be paid to take over the obligation. In some deep, competitive, markets (such as those for listed securities, traded futures and options, and commodities) the typical ‘market participants’ who would be transferees may be regarded as fairly homogeneous. But in other, much thinner markets, with identifiable players (such as the business-to-business insurance market) different transferees’ views of what the cash flows would be that would result to them from acquiring the contracts might be highly varied—and so would the price they would accept. Presumably the insurer should try and estimate where it would get

the best transfer terms (or more likely in practice what it would accept itself): but what future cash flows will be seen as relevant to the negotiation must depend on the circumstances of the (hypothetical) case and cannot be mandated by an accounting standard, unless the objective is only a ‘synthetic’ SCExitV (or SFV).

In this regard the DP appears consistent in saying that ‘entity specific’ estimates are not relevant: only those that ‘market participants’ would estimate. But this leads to counter-intuitive results, e.g. that a relatively efficient insurer would have to raise the estimate of CExitV while a relatively inefficient one would have to lower it to reflect the ‘typical’ expense levels of potential transferees. In the latter case this could lead to showing a ‘Day 1’ profit (if the insurer has in fact been able to charge a premium high enough to cover its own expected expense level) followed by subsequent lower profits as the adverse expense variations are revealed. This does not seem to provide relevant and timely information to users trying to assess likely future cash flows.⁶⁸ Clearly the degree of competition in the market will affect the likelihood of these results; and the DP (para. 62) says that ‘in practice, the Board expects that an insurer would use estimates of its own servicing costs, unless there is clear evidence that the insurer is significantly more or less efficient than other market participants.’ It is not clear why the Board has not specified that the hypothetical transfer must be to a transferee with the same efficiency level, as it does for credit risk (para. 232).

One particular anomaly relates to transaction costs. The DP argues at E25 (g) that cash flows that are not relevant include ‘transaction costs that the insurer would incur in negotiating and implementing a transfer of its contractual rights and obligations to a third party. These costs are not relevant until the insurer is obliged to incur them’. This is consistent with SFAS157 on FV measurements.⁶⁹ However such costs clearly are relevant when deciding whether or not to transact (where this is possible). So excluding them as hypothetical until the transfer takes place does not sit easily with the acknowledgement that CExitV is itself normally only hypothetical (if not impossible). In a recent paper, van Zijl & Whittington (2006) have argued that FV

⁶⁸ Nor does it seem consistent with ordinary accounting where e.g. the carrying cost of inventory for two manufacturers, otherwise identical except for their production cost level, will differ to this extent (provided the cost can be recovered from NRV). Clearly given competition, standard micro-economic analysis would predict that the less efficient firm faces being driven out: but this may only be ‘in the long run’ (cf. Macve & Serafeim, 2007).

⁶⁹ Which is why SFAS157 defines FV as an exit *price* (not an exit *value* like NRV)—so it ought really to be ‘FP’. By contrast, the DP’s definition of CExitV is ‘the *amount* the insurer would expect to pay’ IN21. So either this ought to be redefined as ‘the *price* the insurer would expect to pay’ (‘CExitP’) or expected transaction costs should be included.

should include transaction costs, and more traditional arguments for relevant current exit values have always treated ‘net realizable value’ (‘NRV’) as net of costs to sell etc. (as in conventional inventory accounting ‘at the lower of cost and NRV’).

Q6 asks whether the expected future cash flows resulting from beneficial policyholder behaviour should be recognised; and if so whether they should be valued (at current exit value) as a separate intangible asset representing the ‘customer relationship’ or as a reduction in the insurance liabilities. While Q7 asks which out of a number of criteria should determine the recognition of beneficial policyholder behaviour.

The issue here is how far to recognise traditional actuarial practice in determining the net liability under existing insurance contracts, for example in the UK in determining the financial health of a life company and any distributable surplus by way of bonus to policyholders and dividend to shareholders. The IASB’s concern is how far such ‘future’ benefits can qualify as an asset (or an offset to a liability) given concerns over how far the company ‘controls’ policyholder behaviour such as the incentive (e.g. in a traditional level premium policy) to go on paying premiums to guarantee continued insurability at the same rate, and/or to recover the ‘higher than risk’ premiums paid when young by paying ‘lower than risk’ premiums when older. The company has written a non-cancellable option, and written options are normally regarded as ‘liabilities’ not ‘assets’. The Board members are still split over what can be recognised, and how it should be presented, with the DP proposing recognition but netting off within the policy liability measurement (IN24)—a proposal which is out of line with the rest of accounting standards.

This is a clear case where the contortions considered necessary to fit into the straightjacket of conceptual framework definitions of accounting assets and liabilities have not been helpful (which may suggest those kinds of definitions should be abandoned, e.g. Macve, 1997; see also Sunder in Weetman, 2007). Once again the only relevant question for CExitV should be whether (and how far) a hypothetical transferee would take them into account in assessing the price to be required for taking over the contracts. The probability of whether these future premiums will be received is indeed highly relevant: but their contractual form is not (except insofar as it may affect that probability—e.g. Wright, 2005 raises the issue of stakeholder pensions [Appendix II. e])). Given that the feasible set of transferees is limited to

authorised insurers, and insurers are used to taking such future premiums into account (as indeed now are solvency regulators), then it would seem clear that they need to be included in CExitV (as they are in MCEV).⁷⁰

Q8 asks whether acquisition costs should be recognised as an expense.

This question is meaningless on its own as the treatment of ‘deferred acquisition costs’ (‘DAC’) depends primarily on the approach adopted in measuring the insurance liability, and actuaries have generally remained indifferent as to whether or not the DAC item is presented as a separate asset or netted off in the liability estimate (e.g. Horton & Macve, 1995; Asher, 2006). With respect to the CExitV of the insurance contracts, clearly a rational transferee, *ceteris paribus*, would regard an existing book of contracts, where acquisition costs no longer need to be expended, as more valuable than an identical book that it might develop itself, but would have to spend the acquisition costs to do so.

It is paradoxical that it appears that it was primarily accounting concerns about ‘not netting off assets and liabilities’ that led to the EU Insurance Accounts Directive requiring the change in the UK Companies Act that has required separate display of DAC (Horton & Macve, 1995; Struyven, 1996), whereas it is now apparently even more sensitive accounting concerns over asset and liability ‘definitions’ (e.g. is there a ‘customer relationship intangible’ that can be separately identified?) that have led the DP to recommend its elimination as a separate item. What should drive the presentation is what would be most helpful in aiding user understanding of likely future cash flows: so for example should presentation of any ‘Day 1’ new business profit be shown both gross and net of the acquisition costs incurred (consistent with the last sentences of DP para. 165)?

⁷⁰ As Horton & Macve (1994) describe, it took a long while for 19th century regulators, in a context where major life assurance company frauds were widespread, to accept that for life insurance regulation they would have to rely on actuarial valuations (which ever since William Morgan’s first valuation of the Equitable in 1776 had included future premiums, there shown as the major asset). One witness to the Commons Select Committee on Assurance Associations of 1853 stated in relation to the accounts that ‘if you allow the company furnishing the account to append a valuation, the Government will become the publisher of puffs’ (Minute 2521). By the time of the 1870 Life Assurance Companies Act, however, reliance on an actuarial valuation was finally accepted as being the only feasible, relevant and reliable approach.

Q16 asks how the ‘legal or constructive liability’ for ‘policyholder dividends’ (i.e. bonuses) should be measured and whether the proposed revisions to IAS37 adequately define such liability.

Once again, any attempt to circumscribe CExitV by reference to accounting rules for recognising assets and liabilities is conceptually strictly irrelevant to CExitV (as it is to MCEV), and results in ‘SCExitV’. Any rational transferee would assess the price it needed to take over the policy book by the impact it would have on any future bonuses that it would be required to declare to meet the new ‘policyholders’ reasonable expectations’ (‘PRE’), which might indeed also include a perceived need to match the bonus levels being declared on its other products. It may be argued (as the DP does in relation to credit risk—see below) that the hypothetical transfer for CExitV should be to an insurer with the same level of ‘bonus propensity’. But the transferor’s own bonus propensity may also to some extent exceed what it may strictly be held to as required to meet PRE (e.g. from existing ‘(smoothed) asset shares’—see Forfar & Masters (1999) and O’Brien (2007), in Appendix II. a) and i)—especially insofar as there is residual discretion in bonus allocations, albeit at the risk of thereby raising PRE levels for the future.⁷¹

Consequently, while IAS37 may be revised for traditional accounting, this should not have any impact for FV accounting, where it is similarly irrelevant.

We have two final comments on ‘expected cash flows’. First, we note that a change in ‘credit risk’, which appears to be regarded by the DP as implying a change in risk characteristics of the liability (its Appendix H), may more appropriately be regarded as a change in the probability of meeting payment obligations, and therefore in expected cash flows. This approach helps to emphasise the need to consider why it has become less (or more) likely that these obligations will be met. Normally this must be due to a lowered expectation of cash inflows, whether from existing assets or from future operations, so that if any change is recognised in respect of the liability, it is clearly essential that the matching change in asset values or profitability of future activities (‘goodwill’) is recognised too, which existing standards may not or cannot require (e.g. because the relevant goodwill is unrecognised). In such a ‘second best’

⁷¹ Issues relating to ‘orphan assets’ or the ‘estate’ are discussed further below at 4.5 under ‘Equity’.

situation,⁷² it cannot be shown that simply recognising the change in the value of the liability alone would be an accounting and reporting improvement (e.g. Horton & Macve, 2000a).

Again the DP regards ‘unit of account’ issues as relevant to risk margins rather than to expected cash flows. However, once one is dealing with market prices, basic economics makes clear that average costs (which may be simply added) generally diverge from marginal costs. The greater the proportion of the transferor’s or transferee’s business represented by the policy book being considered, the greater the proportion of relevant expenses (including ‘overhead’ costs) that are likely to be affected, whether through the additional administrative infrastructure needed (which may be included in any transfer) or through potential savings from rationalisation; and the greater the likely synergistic effects with other products or lines of business. A parallel issue for FV of assets is for example what SFAS157 calls ‘blockage factors’ (e.g. that large holdings of listed securities may only be realisable at a lower price than small holdings, while published quoted prices are only for marginal purchases and sales). SFAS157 prohibits recognition of blockage factors in arriving at FV—and actuaries also generally seem to accept that convention for valuing insurers’ listed securities (e.g. Hairs *et al.*, 2002). But it is not clear how far such considerations affect MCEV given its attempt to provide ‘bottom up’ valuations that do nevertheless add up to an ‘economic balance sheet’ (see Figure 3). All asset and liability based measurement systems (whether historical cost or current value) face a similar ‘aggregation problem’ and any decision on what are the boundaries of the relevant portfolios of policies to be valued must, to some extent, be arbitrary, and at least in this respect CExitV is unavoidably ‘SCExitV’ just as FV is thereby ‘SFV’.⁷³

⁷² ‘The “Theory of Second Best”, which dates back to the 1956 work of two economists Kelvin Lancaster and Richard Lipsey, provides a useful framework for thinking about all this. Essentially, this theory looks at what happens when, in certain circumstances, one of the optimal conditions of a model is not fully met. Intuitively, when this happens, it might be supposed that the second-best solution involves continuing to meet the other optimal conditions of the model. The Theory of Second Best cautions against this. Instead, it suggests that a better outcome may involve deviating from these conditions.’ [‘How investors should respond to the boom in M&A activity’ by Mohamed El-Erian, *Financial Times*, May 30 2007 <http://www.ft.com/cms/s/ed25b75a-0e49-11dc-8219-000b5df10621.html> (accessed 31.07.07).]

⁷³ See again fn.64

Discounting

No direct questions are asked here in the DP. However the actuarial literature reviewed here in Appendix II makes clear, generally in the context of MCEV calculations, that even if it is accepted that discounting should be purely for time (i.e. at a risk-free rate) there is still debate over how best to measure that rate (e.g. gilt yields vs. swap rates), partly influenced by the sheer scale of insurers' liabilities even in relation to outstanding government debt, while in some countries (e.g. Japan or China [Li, 2007]) the available gilt maturities are not as long as those of the insurance contracts. There is also the question of whether any 'liquidity premium' should be allowed for. (These issues are being explored further in Horton *et al.*, 2006b.)

Moreover, many insurers, like companies generally, are more familiar with the use of a RAD such as WACC, as internal profit targets are frequently expressed in the form of target rates of return.

One further source of confusion may arise from the use by insurers of the term 'cost of capital' (which in general usage is simply an alternative expression for the discount rate), to mean 'the cost of carrying the necessary capital to meet solvency requirements'. These requirements generally include not only those mandated by regulators but any additional levels regarded as necessary to meet the company's own risk assessments.⁷⁴ As can be seen from the actuarial literature reviewed in Appendix II, there are changing views of what this 'cost' is measuring, particularly under an MCEV approach, where it is now more frequently related to the 'frictions' supposedly resulting from the agency costs of shareholders having to delegate control of their funds to managers. But the issue is controversial, especially with regard to how far this 'cost' may already 'priced in' to market prices (e.g. of listed investments that are predominantly held by institutions) and therefore not need further explicit adjustment. (These issues are also being explored further in Horton *et al.*, 2006b: see also our discussion of O'Keeffe *et al.* 2005, at Appendix II. d) below.)

Risk (Q4, 11 and 14)

Q4 asks how far margins should be calibrated to the actual premium charged by the insurer. This is another issue on which the Board remains split. As already discussed under **Q5**, full calibration implies that, at least on inception, the CExitV is set equal to

⁷⁴ FRS27 (ASB, 2004b) includes requirements for important disclosures about the capital positions of with-profit funds

the entry value and ‘an insurer should not recognise a profit at inception’ (DP, paras. 86 (d) and 117). If the risk margin in CExitV is calibrated to the initial premium at inception (plus a liability adequacy test) in order to eliminate any Day 1 profit (as favoured by several—albeit not a majority—of Board members) then, as the examples in the DP’s Appendix G show, this means that measurements at subsequent dates, which are otherwise updated for changes in financial and economic assumptions, including price changes, will also have to retain the original estimates of the price of risk in order to maintain consistency.

As argued by Macve & Serafeim, 2007 (see Appendix I. e) (iii) below), it is not clear what, if any, economic meaning is to be attached to these subsequent measures or to reporting changes in them as income during the life of the policy. We know of no discussion of such an approach in any relevant academic literature other than as a way of attempting to report profit in line with the ‘internal rate of return’ (‘IRR’). Although Forfar and Masters (1999) include an illustration of such an approach, and defer to accountants to decide on the appropriate pattern of profit emergence, they themselves support the recognition of values which produce substantial Day 1 profit (see Appendix II. a) below). The calibration could be viewed as simply an ‘accounting fix’ to the ‘synthetic’ CExitV liability valuation (or ‘SCExitV’) to avoid up-front profit recognition. Analysis from an accounting perspective, such as that in Macve & Serafeim (2007), therefore now needs to be extended to deal with the effect of various changes on updating both the ‘relief values’ and the related measurement of profit discussed there.

As well as risk margins the DP also introduces the concept of ‘service margins’ that ‘market participants’ may require in setting CExitV. As noted above under **Q2**, this concept has no theoretical foundation in the existing literature. It is reminiscent of the original ‘accruals basis’ developed for supplementary achieved profits reporting, which, like conventional accounting for long-term contracts, aimed to measure profit over the term of a life contract in accordance with both release from risk and ‘work done’ (Horton & Macve, 1995). However it was fairly short-lived and companies ultimately all took up the alternative EV approach (which reflects only release from risk as this is achieved, *inter alia*, through work successfully done). However, ASB (2005) still supports the conceptual approach of ‘work done’.

What is not made clear in the DP is what the ‘service margin’ is supposed to represent. If it is some cost of ‘providing service’ then it ought to be included in the

expenses in the estimated cash flows. If it represents some ‘opportunity cost’, e.g. the fact that insurance business is so profitable, perhaps because the market is generally uncompetitive, that no transferee would take on a block of policies without ensuring it could make at least as much profit as it could by selling its own policies, then this represents a form of ‘pure profit’ or ‘internal goodwill’. But no analysis is offered in the DP of what issues might relate to the timing of recognition of that goodwill and the related profit—an issue which is being explored further in Macve & Serafeim (2007).

At present the DP’s position on ‘service margins’ has the appearance of another accounting ‘fix’ to SCExitV both to prevent contagion from any Day 1 profit recognition spreading to other forms of investment management contract, whether in insurance companies or in other businesses, and/or simply to restrict recognition of Day 1 profit and/or to provide some justification for not adopting MCEV. Nor is it clear on what basis the earning of such margins over the policy life is rationally to be recognised on a CExitV basis.

Q11 asks how risk margins for insurance contracts should be defined in relation to actual (or potential) portfolio management and diversification.

This is another aspect of the ‘unit of account’ problem. The only relevant question for CExitV is ‘what would market participants do?’ Given the restricted markets available for insurance transfers, clearly the answer to this can normally only be situation specific, and any rule (e.g. using portfolios that are managed together, but not taking into account wider company diversification) must be arbitrary. In practice MCEV calculations appear to follow the level of portfolio analysis that is most meaningful to the company’s management, in some cases with additional recognition of the benefits of wider diversification as an element of ‘corporate’ value, as they clearly lie behind many M&A and overseas investment strategies. (These issues are also being explored further in Horton *et al.*, 2006b.)

As to allowance in margins for diversifiable (‘non-systematic’) risk (in addition to non-diversifiable (‘systematic’) risk), the actuarial literature and MCEV practice increasingly follows the text-book financial economics arguments that in an efficient, competitive and complete capital market only non-diversifiable risk will be priced as all participants can hold fully diversified portfolios. The DP (para. 79 and the guidelines in Appendix F) does not state a clear position on this issue.

As IASB plan to issue no detailed guidance on risk margins, in our opinion this brings out the inevitable danger of the ‘inherent failure’ of accounting standards to achieve any more than the surface appearance of ‘comparability’ of reporting both across countries and, within countries, across companies (as argued e.g. in Macve 1997).

Q14 asks how far credit risk, and changes in it, should affect the measurement of the CExitV of an insurance liability.

The proposed recognition of credit risk in CExitV, and consequently of changes in it in insurers’ profits, is one of the most controversial aspects of the DP proposals, as it is of FV more widely for all businesses (Horton & Macve, 2000a). The actuarial literature reviewed here in Appendix II (see also Figure 3) generally considers any effect to be minimal (at least for European insurers) and anyway that it should be excluded, not least because solvency regulators steadfastly refuse to recognise it. The CFO Forum (2006) shares this view (see Appendix III. b) below) and the DP itself hopes the effect will normally be small (para. 232 (b) and Appendix H), at least for insurers if not for FV more generally. As argued above under ‘Cash flows’, thinking of credit risk changes as changes in the probabilities of cash flows brings out the need to recognise that a ‘first best’ conceptual solution may not be appropriate here, give the inadequacies of the present (and probably any potential) accounting system to capture the complementary effects on the assets side of the balance sheet, with resulting distortion in any profit measurement consequences.

Reinsurance (Q12)

Q12 asks how far cedants’ (and by implication retrocedants’) measurement of ‘reinsurance’ (‘retrocession’) assets should mirror that of the direct insurance contract (reinsurance contract) liabilities.

All actuarial and industrial literature and practice treats reinsurance (retrocession) as the mirror of the related direct insurance (primary reinsurance). There may however be credit risk to be allowed for in estimating reinsurance (retrocession) recoveries. So the question barely merits discussion.

However the DP wants to continue show potential reinsurance recoveries (not just the amounts due in respect of claims made or covered losses already incurred) as an asset, and therefore has to comment on the apparent anomaly that a complementary

risk adjustment needs to raise (rather than reduce) the value of a reinsurance asset in order to be able to match the increased insurance liability (para.206: cf. Falahati, 1995).

Here again thinking in terms of ‘assets’ is unhelpful. Traditionally (before the influence of accounting conceptual frameworks and the EU IAD) reinsurance was always given a linked presentation (in both balance sheet and income statement) which clearly brought out that the amount of any reinsurance recovery is wholly determined by whether any relevant policy cash flows arise. It is at most a ‘contingent asset’ until any claim is actually able to be made—and not just contingent on some independent external events but only on those events which also trigger the crystallization of the insurance liability.

The IASB’s postponement of ‘policyholder accounting’ has not helped it here. One might argue that what is traditionally shown as ‘prepaid insurance’ is in fact not some kind of ‘deposit’ but rather an enhancement of the value of the insured assets (as it removes from their expected cash inflows the damaging scenario of the impact of uninsured loss). Similarly, with a direct third-party liability insurance policy, the effect is to remove from the policyholder’s potential cash outflows the scenario of the impact of uninsured liability damages. (Such a valuation framework of course also implies there may be justification for measuring the effect of ‘self insurance’, if it were practicable—e.g. Macve, 1997.)

While the DP finally reaches the normal answer for the measurement of reinsurance (if not for its presentation), albeit by the circuitous ‘asset/liability’ route, it fails to carry the logic through to deferred tax (which is also wholly contingent on what cash flows will arise and thereby produce taxable profits) and does not address the anomaly under current IAS that deferred tax may not be discounted (Wright, 2005).

Portfolio transfers / M&A (Q9)

Q9 asks about the accounting treatment of insurance contracts acquired in a business combination or portfolio transfer.

These are relatively technical accounting questions about a) what to do if CExitV proves not to be FV (given that in business combinations acquirers are required under current accounting standards to measure assets and liabilities of the acquiree at FV in the consolidated accounts, and b) what to do if a transferor acquires a ‘book’ of

policies but the consideration is deemed not to equal their CExitV. It is acknowledged that this latter situation may be rare (para. 172) but the Board considers that, if it does arise, a corresponding profit or loss should be recognised.

The literature we review in the Appendices does not directly discuss such issues. But it may be noted first, that insurers generally currently use EV as the measure of the FV of their acquired in force business ('PVIF') (e.g. Wright, 2005); and that second, in its MCEV disclosures, Resolution has shown a profit on its recent acquisition of Abbey's life funds.⁷⁵

'Unit of account' issues also seem relevant here: the greater the proportion of the transferees' business represented by the acquired policy book, the greater the proportion of relevant expenses (including 'overhead' costs) that are likely to be affected, whether through the additional administrative infrastructure needed (which may be included in the transfer) or through potential savings from rationalisation; and the greater the likely synergistic effects with other products or lines of business.

4.4 Asset measurement (Q10, Q17)

Q10 asks about the measurement of assets held to back insurance liabilities.

Here the insurance accounting debate comes full circle given that much of its original impetus came from the mismatches caused by FASB (1993; 1998) and then IASB (2004b) requirements to value a large proportion, if not all, of an insurer's financial instruments at FV, while the insurance contracts were still measured on alternative GAAP or traditional solvency bases (e.g. Vanderhoof & Altman, 1998). If policy liabilities are now to be at CExitV—regarded as equivalent to FV, an option itself already now available under SFAS159 (FASB, 2007) and (amended) IAS39 (IASB, 2004b)—all other assets and liabilities need to be valued consistently, as under MCEV (see Figure 3) and as is already done for FV hedges.⁷⁶ IFRS4 is very flexible in this regard, although there are still IASB standards that do not allow this (e.g. for owner-occupied property and deferred tax) and these anomalies need to be rectified (Wright 2005).

⁷⁵ http://www.resolutionplc.com/pdfs/investor_LSE_AnnouncementFinal.pdf [Appendix 5] (accessed 24.07.07).

⁷⁶ IASB has recently exposed a proposed amendment to IAS39 in respect of hedges: <http://www.iasb.org/News/Press+Releases/The+IASB+proposes+additional+guidance+on+hedge+accounting.htm> (accessed 16.09.07).

Q17 asks about elimination of a variety of accounting mismatches for unit-linked contracts that can arise under current IASB standards and or the Framework.

All the literature (e.g. as reviewed here in Appendix II and as in IFRS4), as well as common sense, recognises that, insofar as the contract truly is wholly unit-linked, then the basis on which the relevant assets are to be measured as specified in the contract must likewise be the basis for the liability measurement, except insofar as specific recognition is required for unmatched insurance (e.g. mortality) risk.

4.5 Equity measurement (part of Q16)

As previously discussed ***Q16 asks how the ‘legal or constructive liability’ for ‘policyholder dividends’ (i.e. bonuses) should be measured and whether the proposed revisions to IAS37 adequately define such liability.***

Under the IASB’s framework what is not a liability must be equity. At present there is a confusing range of treatments allowed and followed for presentation of the ‘estate’ which, in a UK with-profits fund, includes the legally defined ‘Fund for Future Appropriations’ (‘FFA’), which has been utilised, for example, largely to neutralise the potential profit implications of the change to MSSB under the EU IAD (Horton & Macve, 1995) and also of FRS27 (ASB, 2004b).

From the perspective of the shareholders, all payments that ‘automatically’ take priority over, or restrict, payments to them rank as ‘liabilities’ (as Minority Interests were traditionally presented before IFRS3 (IASB, 2004c) and as deferred taxation still is). But the FFA is further complicated by the element of discretion that remains with management (which is why proposals to distribute estates need the approval of the FSA and can only be developed through complex and expensive negotiation and arbitration). Debate here seems to have reached an impasse as the FASB and IASB cannot contemplate any intermediate category whereby the estate could continue to be presented *sui generis* as neither liability nor equity. However, insofar as it is classified as equity but directors later exercise their discretion to give a higher than currently anticipated bonus participation to policyholders there will be a subsequent reduction in reported profits.⁷⁷

⁷⁷ As pointed out by Towers Perrin Tillinghast, UPDATE June 2007: *IASB Publishes its Discussion Paper on Insurance Contracts*. Aviva, for example, classifies its FFA, now labelled ‘unallocated divisible surplus’ wholly within liabilities (Aviva plc, *Annual Report and Accounts 2006*, Accounting Policy ‘J’)

One way forward could be to consider more systematically the issues that arise in accounting for a discretionary trust where legally none of the beneficiaries is entitled to an identifiable share of the total. But one can imagine that in a deep enough market beneficiaries would be able to sell their rights on the basis of expected likely payouts. There is already a market for second hand life policies based on such expectations. However the question of the estate is more complex because some of the estate may be used to benefit future policyholders who are not yet on the books, even though, to get a 'solution', MCEV approaches assume full distribution over the remaining life of existing policies (see the papers reviewed here in Appendix II).

The issue is particularly problematic for mutual companies (although fewer of these now remain in the UK).

4.6 Profit measurement (Q20)

Q20 asks whether the income statement should include all income and expense arising from changes in insurance liabilities.

Here we reach the heart of the matter although it is discussed only in para. 329 of the DP, where the Board, wedded like the FASB to the 'asset/liability' framework of accounting, reaffirms its own 'comprehensive income' view that all changes in the CExitV of insurance liabilities should be reflected in profit and loss, claiming that it has identified no conceptual or practical reasons for exclusion. The remainder of Chapter 7 of the DP focuses on presentation and disclosure issues.

However, although MCEV statements likewise reflect all changes in arriving at 'achieved profits', companies do present 'operating earnings' as a subset of the total movement and both the wider accounting and the actuarial literature raise questions about the appropriate pattern of profit recognition (e.g. Forfar & Masters, 1999). The CFO Forum (2006) rejects change in CExitV as the basis for profit measurement, while outside insurance itself there is increasing general concern, conceptual and practical, at the prospect of FV (or more normally 'SFV') as the primary accounting basis for profit recognition (e.g. Horton & Macve, 2000; Benston *et al.* 2003; 2006; Shin, 2004; Ball, 2006; Penman, 2007; ASB, 2007; Walton, 2007; Hitz, 2007; Rayman, 2007).

The price paid by standard setters for suppressing direct discussion of what is 'performance', earnings, or profit is of course that it leads to attempts to 'fix' the asset and liability measurements to achieve what the various parties view as their desired

pattern for profit recognition. Hence the splits in the Board over the DP's proposals for CExitV rather than entry value, and over calibration of CExitV risk margins (para. 86 (d)), reflecting dispute over recognition of 'Day 1' profit. Again there are the concerns discussed above over 'entity specific' estimates, DAC and credit risk changes. And yet, as Macve & Serafeim (2007) explore, profit measurement questions are in fact independent of the measurement basis adopted for conventionally recognised assets and liabilities, and strict articulation of 'balance sheet changes' and 'income' needs to be revisited if progress is to be made.

There are conceptual and practical issues that do need to be directly discussed. Even if the CExitV or FV approaches are accepted for asset and liability valuation, longstanding questions remain about how much of the change should be recognised as 'income' or 'profit/loss'. The effects of changes in interest rate can be paradoxical given that a rise in market interest rates, which depresses net asset values, heralds higher future cash flows, and *vice versa* (Horton & Macve, 1996, 2000a). Should the effects of inflation be excluded? (e.g. Weetman, 2007). Such issues lie at the heart of fundamental objections to the IASB's and FASB's current conceptual frameworks and the current proposals for their reform and convergence—proposals that reveal several serious misunderstandings of the economic concepts of income on which they purport to be based (e.g. Bromwich *et al.*, 2005; Jameson, 2005; Rayman, 2006).

4.7 Presentation (Q13, 18, 19)

Q13 asks whether deposit or service components within an insurance contract should be unbundled, while Q18 asks whether premiums should be presented as revenue or deposits, and Q19 asks which items of income and expense should be presented on the face of an insurer's income statement.

At this stage the DP has not come to preliminary views, although some examples of alternative presentations are given in its Appendices. IASB intends to develop its proposals during the Exposure Draft stage, while taking account of the development of its projects on 'revenue recognition' and 'financial statement presentation'. The DP's discussion does emphasise the importance of identifying the relevant sub-elements that determine key ratios and statistics, and of identifying the key drivers of profitability.

Analysis of variances from expectations is a key feature of actuarial approaches (e.g. Goford, 1985; Asher, 2006), as in the presentation of MCEVs. A clear

explanation of variances, pointing out how value has been created or destroyed, is vital. How one describes what has contributed to that performance, and how that is analysed, is of course crucial in making the reported change in MCEV (or CExitV) comparable to the kind of profit and loss accounts that people are familiar with from other businesses. Indeed, when people first became interested in alternative supplementary reporting at the beginning of the 1990s, a lot of the ‘accruals’ versus EV debate was about which method would bring out more clearly from both management and investor perspectives the factors that are driving performance (Horton & Macve, 1995; 1997).

Clearly, as emphasised in our own comments on Hairs *et al.*, 2002 and O’Keeffe *et al.*, 2005 (see Appendix II. b) and d) below), the key question is how well different approaches to accounting can provide information (e.g. analysis of product costs and profitability) that can assist managers and others in understanding and controlling the factors that drive the creation of the profitable business operations and related investment management. It is vital that the analyst community is fully involved in this regard, as they are prime users of the output. Sensitivity disclosures are a key feature of the CFO Forum’s (2005) guidance which companies are now following. IFRS4 includes extensive disclosures which the DP is not proposing to change (although Wright, 2005, is sceptical of the value of many of these disclosures other than those relating to future cash flow estimates and their risk).

Unbundling should be addressed from a similar perspective: and Macve & Serafeim 2007 show how the current valuation of contract liabilities with a deposit element in any business (such as magazine subscriptions in advance) does not need to alter fundamentally the traditional presentation of revenues and matching costs—a concern raised by ASB, 2007.

4.8 Other matters

Q21 asks for any other comments.

Here we would draw attention to some of the wider issues that the DP does not address but that we have referred to above, including the overall conceptual and practical issues of relying on (synthetic) current values such as (S)CExitV and (S)FV, particularly in the light of emerging concerns emanating from the ‘behavioural finance’ literature (e.g. Barberis & Thaler, 2002) which are discussed further in Horton *et al.* (2006b).

ASB (2007) draws attention to the related issues surrounding pensions accounting on which it is undertaking a major project of its own. ICAEW's CBP is planning the publication of a 'state of the art' survey on pensions (Blake *et al.*, 2007) to complement this one and is organising a conference on this topic in its 'Information for Better Markets' series in December 2008.

Finally we would draw attention to more general issues about the framing of standards, e.g. instead of prescribing one universal treatment, should they follow a 'comply or explain' or 'two-tier' approach which would allow departure from the default requirement where companies give sufficient additional information and justification? This might allow the use of MCEV in the main accounts (e.g. Horton & Macve, 1995), although there may also be benefits from triangulating between different approaches, rather as the FSA does with its 'twin peaks' regulatory regime for insurers (Asher, 2006). But what information would the (S)CEXitV based accounts convey?

Equally there is increasing concern over whether convergence between IASB and FASB is necessarily desirable, rather than retaining an element of competition between standard setting regimes (e.g. see Sunder in Weetman, 2007). The debate over both the meaning and the potential extent of application of FV is at the heart of this issue.

4.9 Conclusions and future research

As has been discussed, many of the problems in the DP reflect attempts to force what must, in concept, be whatever market participants would value back into the constraints of accounting recognition rules for assets and liabilities, rather than focussing directly on likely changes in future cash flows. Moreover, given the availability in current practice of both the SSB basis (for solvency regulation, permissible dividends etc.) and the EV—and increasingly MCEV—basis (for 'realistic' performance reporting and for analysts' investment decision recommendations), it is not clear what third purpose the proposed CEXitV-based main IFRS accounts would serve. Like the current MSSB accounts, their purpose and usefulness remains to be justified. So, as ASB 2007 argues, the IASB's experiment with FV in the form of CEXitV, and the industry's complementary experiment with FV in the form of MCEV, are crucial to illuminating the wider issues underlying FV accounting generally.

Future research therefore needs to focus both on further analysis of the general conceptual issues relating to FV and other current value measures; and in particular on how far the DP's measure (CExitV) now differs from MCEV. This analysis needs to be complemented by further empirical work on the practical experience of companies, in Europe and increasingly worldwide, in using and refining EV based methodologies (including related disclosures), both internally and for external reporting, and on the consequences of this on stock market valuations and for other institutional and professional structures and practices (including the underlying approaches to be adopted both for international standard setting in reconciling subjective management opinions with objective external evidence, and for other regulatory purposes such as solvency monitoring—cf. Horton & Macve, 2005; 2007).

5. Conclusions

Our analysis of the issues raised in the DP has indicated that in several cases (e.g. the ‘three building blocks’; DAC; reinsurance; presentation), the answer could well be that what the DP proposes is satisfactory, but also that there are alternative formulations of the approach to be taken which in principle should produce the same outcome and are at least as well known, if not better known, in the literature and/or in practice. Only through practical experiment in implementation will it become clear which approach is the most cost effective, which suggests that at this stage IASB should not be over-prescriptive.

However, in other cases (e.g. in relation to service margins; credit risk; future premiums), IASB is proposing approaches which appear to have no prior recognition in the literatures or in insurance company practice. Here any adoption needs to be preceded by further analysis and experiment, or else any resolution will simply be a matter (and a test) of the IASB’s own authority.

We have indicated important areas where further analysis and research are being undertaken or are still needed. However on some issues no amount of research will resolve the controversial (but often largely definitional) issues. We have also indicated where we believe IASB are asking the wrong questions—although in most cases these reflect more serious concerns about IASB’s overall approach to standard setting for the generality of companies.

One noticeable feature of the DP is how little reference there is to the *Framework* in deriving the appropriate treatments: and where there is concern that existing *Framework* constraints might be breached (e.g. in the definition of ‘asset’ in relation to future premiums) ingenious modes of compliance have been found (e.g. designation of a ‘customer relationship intangible’ coupled with an offsetting presentation within the insurance contract liability). These solutions suggest that the insurance project may need to have a strong influence on the reconsideration of the *Framework* in the course of that current convergence project—or alternatively that time spent on that project could be better spent elsewhere on focussing more directly on how different measurement approaches can be shown to be most useful, both for internal management purposes and for external accountability and to assist user decisions by helping them to understand the sources and drivers of likely future cash flows.

There must always be concern particularly for standard setters, that the information asymmetry—that is an inevitable consequence of the separation of ownership and control in the modern corporation—may permit inconsistent reporting and undue manipulation of financial position and performance: which standards, auditors and regulators try to prevent, and information intermediaries (analysts, the financial press, competitors) try to uncover. External benchmarking, where feasible, to objective evidence from current market prices such as FV imposes a valuable discipline of triangulation on management claims. But markets can be wrong too; and ‘current exit’ may not represent the best management strategy for maximising shareholder value.

Any tendency towards paranoia by standard setters with regard to reliance on management’s own ‘entity specific’ estimates needs to be countered by recognition that there is also an even greater danger—especially if the FVs are only ‘synthetic’ because market evidence is thin and have to be constructed only to meet the requirements of external reporting standards. As is well known to any auditor, information that is routinely prepared for and used by managers for internal decision making and control is far more likely reliably to meet the primary user-oriented criteria of faithful representation and relevance than numbers prepared wholly for external purposes and simply to satisfy externally mandated rules. In the context of life insurance, EV fulfils this necessary dual role (Goford, 1985), and the vitality with which the relevant measurement techniques are continually being refined and updated in practice—through EEV and now MCEV—indicate both its importance for management and its perceived ‘value relevance’ for investors (Horton, 2007). Every measurement basis has its theoretical and practical limitations, and so does MCEV (e.g. Horton *et al.*, 2006b). But the current challenge for IASB is to demonstrate how its CExitV (or is it SCExitV?) is superior, both in theory and practice. This is where research now needs primarily to focus.

On the theory side, as would be expected given the experience of the IASB’s insurance working party members, the DP contains many important intuitions about how the necessary estimates of discounted cash flow, and allowances for risk, should be approached if there is to be both internal consistency and, where feasible, external market consistency, while reflecting the long experience of life insurance practice of over 200 years. But there is no clear theoretical development in the DP of what is the nature of the market in which the ‘market participants’ are assumed to operate in

forming their measures of CExitV (e.g. How competitive is it? Can only authorized insurance companies operate in it? Is it assumed to be national or international? What other structural features does it have and what institutional, professional and regulatory constraints does it face in and across different jurisdictions? How does it behave in and out of equilibrium and what are the dynamics by which it tends to equilibrium? What ‘behavioural’ factors may interfere with its rational economic efficiency?). Such analysis is often complex and requires a strong economics—and financial economics—foundation, as is demonstrated by the arguments over how MCEV should develop and be best applied.

This lack of theoretical market analysis applies more generally to the overall FASB/IASB approach to FV (e.g. Bromwich, 2007; Hitz, 2007), which is why the FV experiment taking place in the life insurance field, both in practice through MCEV and in the accounting standard setting realm through the DP’s exploration of CExitV, is of such significance for accounting practice and accounting standards as a whole. Without it both CExitV and FV seem likely to remain largely ‘synthetic’ accounting artefacts whose usefulness, and superiority over more traditional accounting measures, remains unclear—merely ‘SCexitV’ and correspondingly ‘SFV’.

Blending the economic theory of market prices with practical application, as EV (and FV more generally) attempt to do, has never been straightforward. As Nathan Appleton argued in remarks before the US House of Representatives nearly 200 years ago, in 1832 (when economics was still known as ‘political economy’):⁷⁸

The natural price of every commodity is the cost of the labor, and the value of the use of the capital employed in its production. The disturbing causes are the relative proportion of supply and demand. Now the practical man watches the disturbing causes which are in constant action, with great indifference for the natural price. The student of political economy knows and cares nothing for the active disturbing causes, but supposes the actual price to be always in conformity with the remote tendency.

In this regard, the DP’s exhaustive coverage of insurance accounting issues is potentially more valuable for the added discipline it brings to both the standard setting

⁷⁸ cited in Hoskin & Macve, 1996. Nathan Appleton was ‘one of the most active and influential directors in the Lowell [mills] system [in Massachusetts]. [He] had an accounting background and was regarded as the first man in Boston to use double-entry bookkeeping in a commercial house’.

process and business practice through more explicit consideration of what the underlying factors affecting the ‘building blocks’ of valuation might be. But the DP remains, even at this stage and after some 10 years of discussion, much more a conceptual paper than a practical one. Like the standard setters’ ‘conceptual framework’ itself, it may be more usefully seen as providing an arena in which the interested parties can debate their views, and seek publicly to justify their positions and their emerging practices, through being educated in using a more shared common technical language, rather than being taken as a package of solutions (e.g. Macve, 1997). It raises many relevant questions, not just for insurance accounting but for business accounting generally, that still need addressing, and in many aspects still need researching both through theory development and through empirical investigation of business reporting practices and their effects.

There is some way to go before the three most relevant literatures, of financial economics, actuarial science, and accounting theory and practice can be fully integrated, and the extent and pace of this integration will both be influenced by the historical factors that have shaped current insurance—and wider business—institutions, practices, and reporting conventions (e.g. Horton & Macve, 1994; Hoskin & Macve, 2000). There is a ‘constellation’ of ideas and of institutional histories and priorities. While rational debate remains important, there have also been recent shifts in power and knowledge interrelationships (e.g. between the actuarial and accounting professions and among regulators, as well as changing structures in the insurance industry itself) which will also shape the outcome of the debates. These outcomes may in turn lead to, perhaps as yet unforeseen, consequential changes and reconfigurations of this constellation of ideas, institutions and interests, both nationally and increasingly internationally, as new accountings change the shape of what is seen to be able to be measured, managed, reported, regulated, taxed, standardised and audited (Power, 1997; 2007).

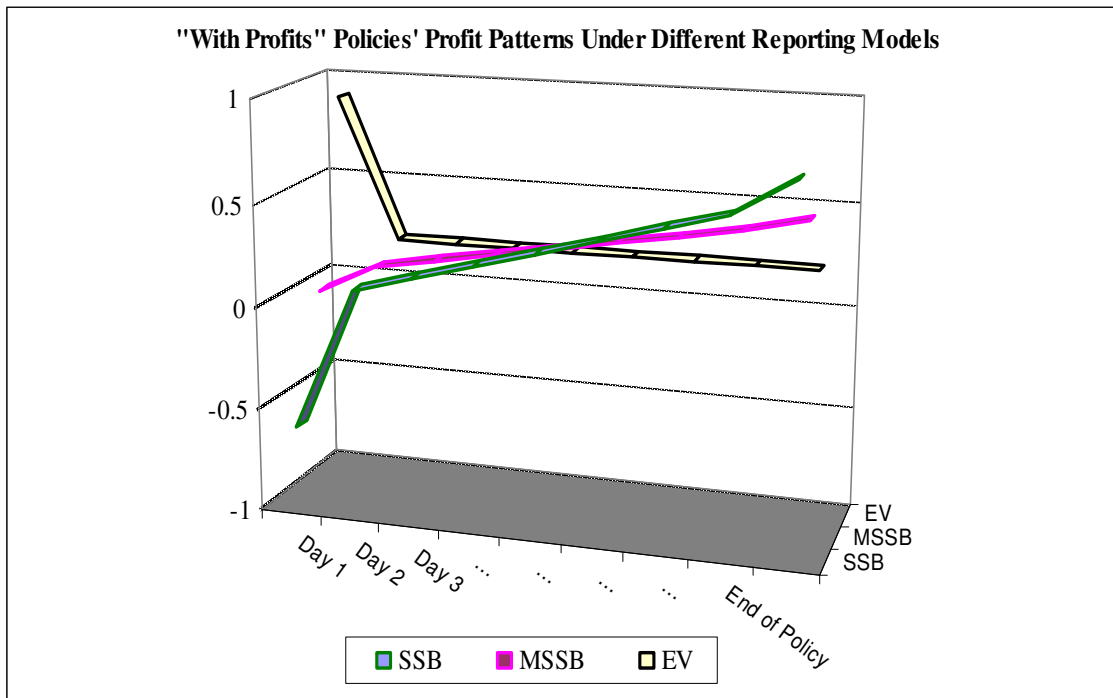
Figures

Figure 1: 'With-profits' profit patterns

Figure 2: Building blocks of value

Figure 3: Economic balance sheet

FIGURE 1



Note: not to scale as 'end of policy' is many years after Day 1, Day 2, Day 3.

FIGURE 2

Accounting Building Blocks of Market Value of a Life Insurance Company (with no other business) ('MVLB')
(adapted from O'Brien (1994), Fig.2)

Statutory Solvency Method	Modified Statutory Solvency Basis ('MSSB')*	Embedded Value ('EV')	Appraisal Value ('AV')	Market Value ('MVLB')
Deferred Acquisition Costs				
Present Value of in force business ('PVIF')				
Value of future new business ('VFNB')				
Additional Franchise Value elements???				

**PVIF acquired in mergers/acquisitions is included in MSSB assets.*

FIGURE 3

An economic balance sheet

Economic Balance Sheet of a Life Insurance Company (with no other business)

(based on O’Keeffe et al. 2005, Appendix B)

Assets (A)

Market value of tangible assets	x
Franchise value	y
Tax shields	z
Limited liability put option	ω
Total assets	$A = (x + y + z + \omega)$

Liabilities (L)

Market consistent value of policyholder liabilities (100% credit risk free)	ξ
Pension scheme deficit	p
Debt and current liabilities	l
Frictional costs, including:	f
<ul style="list-style-type: none"> • <i>cost of double taxation</i> • <i>cost of double investment expenses</i> • <i>tax asymmetries</i> • <i>regulatory capital costs</i> • <i>agency costs</i> • <i>cost of raising capital in the market</i> 	
Costs of financial distress (including ‘burn through’ cost)	b
Total liabilities	$L = (\xi + p + l + f + b)$

Economic value $A - L$

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