



BERMUDA MONETARY AUTHORITY

DISCUSSION PAPER

ECONOMIC BALANCE SHEET
AND
PROPOSED CHANGES TO REGULATORY REPORTING

AUGUST 2010

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0. INTRODUCTION

This discussion paper outlines changes proposed by the Bermuda Monetary Authority (the Authority) to its regulatory framework and statutory reporting requirements. In this paper, the Authority is considering the introduction, for solvency purposes, of an economic balance sheet framework for the Bermuda market. The proposed framework embraces an economic valuation of all assets and liabilities that reduces or eliminates (where possible) accounting mismatches where there are no underlying economic mismatches. The Authority defines an economic valuation for assets and liabilities as one that reflects, in all material respects, the expected value of cash flows (factoring in the time value of money) associated with amounts exchanged, transferred or settled between knowledgeable willing parties in an arm's length transaction.

As an initial step, the Authority proposes to replace the current statutory financial statements with general purpose financial statements, subject to specified prudential filters and/or fair value disclosures or adjustments. In this paper, "general purpose financial statements" refers to financial statements prepared in accordance with generally accepted accounting principles as promulgated by the International Accounting Standards Board (IASB), Financial Accounting Standards Board ("FASB") and such other accounting bodies as approved by the Authority.

The Authority proposes applying the reporting framework initially to the Bermuda commercial insurers¹ (Class 4, Class 3B, Class 3A insurers and insurance groups for which the Authority would be the Group-wide Supervisor). In addition, the concepts in this paper would also be considered for the Long-term commercial classes.

The views of the insurance industry and other interested persons on the proposals set out in this paper are invited. Comments should be sent to the Authority addressed to policy@bma.bm no later than 15th October 2010.

While the Authority welcomes comments on any issue in this paper, the Authority would especially appreciate comments, including recommendations where possible, on the following:

1. Procyclicality

- Under an economic balance sheet framework, in relation to the valuation of assets and liabilities in inactive and/or illiquid markets, would the principles outlined in the three-

¹ In this paper, the term "insurers" includes reinsurers as well as insurance and reinsurance groups.

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level fair value hierarchy (where Levels 1 and 2 are by-passed in favour of Level 3) eliminate or reduce pricing distortions and subsequently address procyclicality effects on Bermuda solvency balance sheets?

- How else could procyclical effects be addressed?

2. Economic valuation

- Would fair value, as commonly computed under general purpose financial statements, serve as an appropriate proxy for an economic valuation (including application of Level 3 in the fair value hierarchy, where necessary)?

3. Insurance liability valuation

- In relation to this proposal, should valuation of liabilities for long-term business be treated differently from general business? Explain your rationale.
- What are the practical challenges of an approach for valuing insurance liabilities that reflects the estimated probability-weighted discounted cash flows plus a risk margin?
- What are the practical challenges of the replicating portfolio approach for valuing insurance liabilities? Which other approaches would you consider appropriate and why?
- What are the practical challenges (besides those highlighted) of valuing assets and liabilities on a consistent economic basis, to reduce or eliminate (where possible) accounting mismatches where economic mismatches do not exist?
- What would be an appropriate discount rate for calculating economic values for insurance liabilities?
 - Should the discount rates be different for life and non-life business; long-tail and short-tail business? If so, how and why?
 - Should the discount rates be based on the riskiness of the assets backing the liabilities, the projected earned rate or some type of risk-free rate?
 - Should the discount rates reflect the insurer's own credit risk?
- How should the risk margin and its respective components be calculated – which approach would you consider most appropriate and under what circumstances: cost of capital approach, percentile, or others, and why?

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- Should the valuation be based upon fulfilment or exit value, and why?
 - For percentile approach, when would you consider the confidence level approach (Value at Risk) or the conditional tail expectation approach (Tail Value at Risk), and why?
 - Should future premiums be included in the cash flows to the extent that they are contractual obligations of the policyholders or are otherwise expected to be paid into the policies? Why?
 - Should day one gains (expected future profits) be treated as part of the liability and amortised over the coverage period or as capital? Explain your rationale.
4. Replacement of the current statutory financial statements with general purpose financial statements
- What are the practical challenges of replacing the current statutory financial statements with general purpose financial statements?
5. Economic Balance Sheet
- Do you think the proposed amendments achieve the Authority's objective to ensure that assets and liabilities are valued on a consistent economic basis that reduces or eliminates, where possible, accounting mismatches where there are no underlying economic mismatches? Explain your rationale.
6. Scope of application
- Should the proposal to implement the economic balance sheet framework be applied to the commercials classes only, or extended to the captive classes and Special Purpose Insurers (SPIs)?
 - Should the proposal to replace the current statutory financial statements with general purpose financial statements be extended to include captive classes?
7. Exemptions and modifications
- What circumstances, other than those highlighted, would you want the Authority to consider when making a decision on whether to grant an exemption or application for a modification?

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1. EXECUTIVE SUMMARY

1. An effective financial reporting framework provides consistent, unbiased, transparent and relevant information about the economic performance and condition of businesses and should be an important goal of a framework. Developments in the global financial market, including the impact of the financial crisis, procyclicality in the financial system and issues surrounding fair value accounting, have led to significant changes in international accounting standards and regulatory frameworks worldwide.

2. The mission and vision of the Authority is to protect and enhance Bermuda's reputation and position as a leading international financial centre, to promote financial stability and provide effective and efficient supervision and regulation². Accordingly, the Authority is committed to providing open, transparent regulatory frameworks and requirements, which are consistent with international best practice, and applying and enforcing these requirements sensibly and consistently in a firm but fair manner³ to protect both existing and prospective policyholders.

3. Aligned with the objective to protect policyholders, the Authority believes that, in principle, assets and liabilities should be valued on a consistent economic basis to reduce or eliminate (where possible) accounting mismatches where there are no underlying economic mismatches thus providing a more faithful representation of the solvency position of an entity.

4. To accomplish the aforementioned objectives and in line with international developments, the Authority finds it necessary to reassess its existing financial reporting framework to ensure its regime continues to meet international accounting and regulatory standards and remains appropriate for the Bermuda market. Consequently, the Authority is considering the introduction of an economic balance sheet framework for the Bermuda market which embraces the concept of economic valuation of all assets and liabilities. As an initial step, the Authority proposes to replace the current statutory financial statements with general purpose financial statements, subject to specified prudential filters and/or fair value disclosures or adjustments.

5. Further, in line with the International Association of Insurance Supervisors (IAIS) principles, the Authority also believes that it is desirable that the methodologies for calculating

² <http://www.bma.bm/about-us/mission-vision.html>

³ <http://www.bma.bm/about-us/standards-regulations.html>

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items in general purpose financial reports should be used for, or be substantially consistent with the methodologies used for, regulatory reporting purposes, with as few changes as possible.

6. Section 2 in this paper provides information on recent developments in the global financial markets which the Authority views as key drivers for the proposed changes in the current financial reporting framework. It also summarises developments in international regulatory and accounting standard setting bodies which the Authority believes to provide valuable input for the proposed economic balance sheet framework for the Bermuda market. This section further highlights work conducted by other key jurisdictions and their responses to global developments.

7. Section 3 describes the Authority's proposed economic balance sheet framework: it provides the Authority's view on valuation of assets and liabilities which the Authority believes should be carried out on a consistent economic basis. This section further provides the various approaches under consideration for the valuation of insurance liabilities and highlights some of the key challenges envisioned in the implementation of an economic balance sheet framework.

8. Section 4 describes the current Bermuda reporting requirements and the Authority's proposal to replace the current statutory financial statements with general purpose financial statements, subject to specified prudential filters and/or fair value disclosures or adjustments. The Authority proposes to apply the proposed reporting framework initially to the Bermuda commercial insurers (Class 4, Class 3B, Class 3A insurers and insurance groups for which the Authority would be the Group-wide Supervisor). In addition, the concepts in this paper would also be considered for the Long-Term commercial classes, when such Classes are determined⁴. This section further describes the specific phases under consideration for transitioning from the current reporting framework. The Authority further acknowledges that the proposals would necessitate changes to existing legislation. It should be noted that the Authority has not currently proposed to apply the principles in this paper to captive classes and SPIs; however, the Authority welcomes stakeholders' views as to whether captives and SPIs should be in scope.

9. This paper culminates with section 5, which presents the Authority's proposed implementation timetable of an economic balance sheet framework.

⁴ The Authority plans to publish a consultation paper on its proposed solvency regime for Long-Term insurers in August 2010. That paper is expected to contain a proposal for classifying Long-Term insurers into commercial and captive classes to facilitate implementation of an enhanced risk-based supervisory regime for these insurers.

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2. BACKGROUND

10. In its publication, “Bermuda’s Insurance Solvency Framework - The Roadmap to Mutual Recognition” (March 2009), the Authority proposed introducing an economic balance sheet for determining solvency for statutory purposes, with its implementation planned for the 2011 year-end.

11. The Authority’s mission and vision embraces protecting and enhancing “Bermuda’s reputation and position as a leading international financial centre”. Towards this end, the Authority is committed to meeting international regulatory standards and ensuring that regulation appropriately addresses the characteristics of the Bermuda market. Further and more importantly, the Authority views the protection of both existing and prospective policyholders, through appropriate insurance regulation, as a key objective contributing to its overall mission and vision.

12. Accordingly, the Authority is seeking to enhance its assessment of solvency and capital adequacy of insurers by basing its supervisory framework on the view that assets and liabilities are valued on economic fundamentals and, where appropriate, are linked to prices observed in the capital markets.

13. The Authority notes that developments in the global financial market, including the impact of the financial crisis, procyclicality in the financial system and issues surrounding fair value accounting, have led to significant developments in international accounting standards and regulatory frameworks worldwide.

14. While these international debates continue and accounting standards evolve, on its part, the Authority is committed to providing an open and transparent regulatory framework which is consistent with international best practice, and to apply and enforce regulatory requirements sensibly and consistently in a firm but fair manner⁵.

15. The IASB for example, has published an accounting standard on financial instruments, the International Financial Reporting Standard (IFRS) 9 *Financial Instruments*, which allows an entity, at initial recognition, to designate a financial asset as measured at fair value through profit and loss if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise from measuring assets and liabilities on different basis. FASB is considering the

⁵ <http://www.bma.bm/about-us/standards-regulations.html>

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extent of harmonisation of its United States Generally Accepted Accounting Principles (US GAAP) with those of the IASB⁶.

16. The IAIS has developed a number of papers setting out standards that regulators, world-wide, are expected to meet. In its draft Insurance Core Principle 14 “Valuation for Solvency Purposes” (February 2010), an IAIS drafting group asserted that a sound solvency regime is essential to the effective prudential supervision of insurers and that the appropriate valuation of assets and liabilities for solvency purposes is a fundamental part of a solvency regime and contributes to the consistent assessment of insurer strength. The IAIS recommended that, for solvency purposes, the valuation of assets and of liabilities should be an economic valuation and undertaken on a consistent basis. It further indicates that assets and liabilities should be valued in a reliable and transparent manner. It should be noted that this draft remains under consideration within the IAIS.

17. In line with these wider international developments, the European Union, through the Solvency II Directive, considers the concept of the economic balance sheet as integral to the proposed risk-based capital regime⁷. This approach requires both assets and liabilities to be valued on a fair value, market consistent basis.

18. Moreover, the Swiss Solvency Test (SST), a principles and risk-based calculation of the required and available capital for Swiss insurance companies, is also based on an economic balance sheet approach. Specifically, under the SST, an insurance company must determine and value all assets and liabilities in accordance with economic principles and in a market-consistent manner.

19. Whereas the Authority recognises that “fair value” may not necessarily be synonymous with “economic value”, the Authority views fair value as a reasonable proxy and believe that allowing a balance sheet to be prepared on a fair value basis would reduce administrative costs of insurers who may already prepare such statements. The Authority defines an economic valuation for assets and liabilities as one that reflects, in all material respects, the expected value of cash

⁶ The Financial Instruments project is a joint project of both the FASB and IASB. While the IASB has been conducting its work in separate phases, the FASB has elected to address the project comprehensively and has published a single exposure draft that reflects all aspects of financial instrument accounting.

⁷ CEIOPS’ Advice for Level 2 Implementation Measures on Solvency II: Valuation of Assets and “Other Liabilities”

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flows (factoring in the time value of money) associated with amounts exchanged, transferred or settled between knowledgeable willing parties in an arm's length transaction.

20. This is a complex and widely debated area and the Authority recognises the need to engage with the market early in the policy development process to discuss the implications of an economic balance sheet upon the market. In particular, the Authority has explored how economic balance sheet reporting could align with and/or leverage from existing financial reporting standards (such as US GAAP or IFRS) and how proportionality principles will be applied.

21. In July 2009, the Authority established a working group (the "Roundtable") comprising of up to twelve (12) representatives from various segments of the Bermuda market including the Authority itself, Ministry of Finance, Bermuda Insurance Management Association, Association of Bermuda Insurers and Reinsurers, Institute of Chartered Accountants of Bermuda, Casualty Actuaries of Bermuda, certain Class 4, Class 3B and Long-Term insurers, and the Acts and Regulation Subcommittee⁸.

22. The mandate of the Roundtable was to identify, discuss, debate and (where possible) make recommendations to the Authority regarding key issues arising from the economic balance sheet (economic valuation of both assets and liabilities) with the view to assisting the Authority to develop an accounting and valuation basis for measuring Bermuda commercial⁹ insurer solvency that:

- (i) Meets international regulatory standards, allowing the Authority to be viewed by key jurisdictions as having a broadly equivalent solvency regime; and
- (ii) Is appropriate for the characteristics of the Bermuda market.

23. The Authority also recognises that any significant change in this area will require careful planning and potential changes to reporting systems by firms, so while the Authority opened discussions with the market on the topic of economic balance sheet in 2009, it proposes to adopt proposals at a measured pace to ensure smooth implementation.

⁸ A subcommittee of the Insurance Advisory Committee

⁹ Bermuda commercial (re)insurers include Class 4, Class 3B, Class 3A, certain Long-Term insurers and insurance groups for which the Authority would be the Group-wide Supervisor

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2.2 Developments in the Global Financial Markets

24. In line with its mission and vision, the Authority's objective is to ensure that its financial reporting framework continues to meet international regulatory standards and remains appropriate for the Bermuda market. Consequently, the Authority views recent global developments as among the main drivers for change in its current financial reporting framework. Specifically, this paper highlights discussions surrounding the financial crisis, procyclicality in the financial system and fair value accounting.

2.2.1 Global Financial Crisis

25. As part of the long-standing commitment of both the IASB and FASB (the Boards) to work together on improving financial reporting standards, accounting issues emerging from the global crisis were considered by the Boards. In October 2008, the Boards established the Financial Crisis Advisory Group (FCAG) whose primary function was to advise the Boards about standard-setting implications of:

- (i) The global financial crisis; and
- (ii) Potential changes to the global regulatory environment.

26. In July 2009, the FCAG published a report¹⁰ which addressed effective financial reporting, among other issues. The report noted that financial reporting plays an integral role in the financial system and should strive to provide unbiased, transparent and relevant information about the economic performance and conditions of businesses; a notion that seems to in part support the concept of an economic balance sheet. Refer to *Appendix A* for specific recommendations of the FCAG report.

2.2.2 Procyclicality¹¹ in the Financial System

27. There is evidence that losses in value of assets and liabilities will generally be revealed more readily under a framework comprised of economic values than one based on cost and amortised cost. This is a compelling argument for the Authority to consider an economic balance

¹⁰ Report of The Financial Crisis Advisory Group (28 July 2009)

¹¹ Procyclicality refers to the dynamic interactions (positive feedback mechanisms) between the financial and the real sectors of the economy. These mutually reinforcing interactions tend to amplify business cycle fluctuations and cause or exacerbate financial instability – Financial Stability Forum (FSF)

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sheet for solvency purposes. However, the same may have procyclical effects during market dislocations if the framework has gaps in its design. This was evidenced in the recent financial crisis.

28. According to a report¹² published in April 2009 by the Financial Stability Forum (FSF) (later renamed Financial Stability Board (FSB)), the current financial crisis is a systemic event of large proportions that illustrates the disruptive effects of procyclicality. Institutions that experienced extensive losses faced growing difficulties in replenishing capital which in turn induced them to cut credit extension and dispose of their assets. In addition, their retrenchment precipitated a weakening of economic activity, thereby raising the risk of a further deterioration in their financial strength. The costs to the broader economy have been large and are mounting.

29. As detailed in *Appendix B*, according to the same FSF report, alongside limitations in risk measurement and distortions in incentives, elements of the policy framework may act as contributing factors to procyclicality. For example, compared with historical-cost based accounting, fair value accounting may add to procyclicality by making valuations more sensitive to the economic cycle, which may in turn have a procyclical impact on risk-taking decisions based on these valuations.

30. In particular, during the financial crisis, fair value accounting was claimed to have widened losses and capital gaps, driving financial institutions into panic sales; hence, the self-reinforcing process of lower prices, greater write-downs, thinner capital, and even lower prices (procyclicality). Assets were valued, in many cases, using Level 1 and Level 2 approaches (see paragraph 52 for a description), at prices that were below their respective expected value of underlying cash flows when factoring in the time value of money, resulting in distorted balance sheets. These levels require an asset to be valued at the price at which the same or similar asset was sold in the market. Although perhaps more appropriate, entities found accounting standards very restrictive, and in many cases were unable to value the assets at Level 3 which could have reflected an entity's knowledge of the cash flows.

31. While the description of procyclicality presupposes the existence and interaction of the two sectors (i.e. real and financial sectors), economic and financial decisions underlying the two cycles are inherently linked by the risk-taking behaviour of economic agents (which is prone to

¹² "Report of the Financial Stability Forum on Addressing Procyclicality in the Financial System"

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change in response to incentive, perception of risk, regulation or new information). This change in risk-taking behaviour explains the large swings in investor sentiments from a period of optimism (when risk is disregarded) to a period of pessimism (when there is no willingness to take risk).

32. While enhancing its regulatory framework, the Authority endeavours to consider the potential impact of its decisions on the stability of the financial systems. Where market conditions are considered overly pessimistic (such as those experienced during the financial crisis) or overly optimistic, the Authority would consider the potential procyclical effects of its actions including, as recommended by the FSF (see *appendix B*), considering adjustments for prudential evaluation purposes. Specifically, the Authority could use a combination of macroeconomic policy, financial regulations and other education and disclosure measures to address procyclicality. For instance, the Authority believes that an economic balance sheet framework must provide for the decoupling of the valuation of assets and liabilities from prices observed in the market (Level 3 valuation based upon reasonable company-specific inputs where necessary) to address procyclicality in illiquid and inactive markets.

Discussion Question:

Procyclicality

Under an economic balance sheet framework, in relation to the valuation of assets and liabilities in inactive and/or illiquid markets, would the principles outlined in the three-level fair value hierarchy (where Levels 1 and 2 are by-passed in favour of Level 3) eliminate or reduce pricing distortions and subsequently address procyclicality effects on Bermuda solvency balance sheets? How else could procyclical effects be addressed?

2.2.3 Fair Value Accounting

33. In the wake of the financial crisis, the Securities Exchange Commission (SEC) released a staff position on 30th September 2008 that clarified fair value accounting in an inactive and irrational market. The SEC, in conjunction with the FASB, issued guidelines under “fair value” accounting rules for financial firms trying to peg the value of hard-to-trade assets on their balance sheets.

34. Specifically, the SEC clarified that, in an inactive or illiquid market, companies could not solely rely on market feeds to measure the fair value of financial assets. The SEC noted other important inputs that should be considered, including the duration and percentage of price

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declines, liquidity, outcome of internal models, and reasonable assumptions. Refer to *Appendix C* for further details on fair value accounting.

35. The debate on Fair Value Accounting continues at the accounting standard setting bodies with the current Fair Value Measurement project being carried on by both the IASB and FASB as discussed later in this paper.

36. The Authority regards the debate on, and developments in, fair value accounting as integral to the establishment of an economic balance sheet framework. Although the Authority recognises that “fair value” may not be synonymous with “economic value”, it is the Authority’s view that fair value is generally an appropriate proxy for an economic value, and would be efficient and reduce administrative costs since fair values are already prepared for general purpose financial reporting purposes.

2.3 Developments in Regulatory Frameworks and Accounting Standards

2.3.1 IAIS Standards

37. The International Association of Insurance Supervisors (IAIS) has developed a number of papers setting out standards that regulators world-wide are expected to meet. Accordingly, the Authority considers the IAIS standards and emerging regulatory views in the development of its reporting and disclosure regime and has taken them into account in its proposed economic balance sheet framework.

38. In its draft Insurance Core Principle 14 “Valuation for Solvency Purposes” (February 2010), an IAIS drafting group asserted that:

- (i) A sound solvency regime is essential to the effective prudential supervision of insurers and that the appropriate valuation of assets and liabilities for solvency purposes is a fundamental part of a solvency regime and contributes to the consistent assessment of insurers’ financial strength; and
- (ii) It is most desirable that the methodologies for calculating items in general purpose financial reports are used for, or are substantially consistent with the methodologies used for, regulatory reporting purposes, with as few changes as possible to satisfy regulatory requirements.

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39. In addition, the drafting group provided the following general valuation principles for solvency purposes which speaks to the concept of an economic balance sheet:

- (i) The valuation should address recognition and measurement of assets and liabilities;
- (ii) The valuation of assets and liabilities should be undertaken on consistent bases;
- (iii) Assets and liabilities should be valued in a reliable and transparent manner;
- (iv) The valuation of assets and liabilities should be an economic valuation;
- (v) An economic valuation of assets and liabilities should reflect the risk-adjusted present values of their cash flows;
- (vi) The value of technical provisions and other liabilities should not reflect the insurer's own credit standing;
- (vii) The solvency regime should require the valuation of technical provisions [insurance reserves] to exceed the current estimate of the cost of meeting the insurance obligations (Current Estimate) by a margin to reflect the inherent uncertainty of those obligations (Margin Over the Current Estimate or MOCE);
- (viii) The Current Estimate should reflect the expected present value of all relevant future cash flows that arise in fulfilling insurance contract obligations, using unbiased, current assumptions;
- (ix) The MOCE should reflect the inherent uncertainty related to all relevant future cash flows that arise in fulfilling insurance obligations over the full time horizon thereof;
- (x) The valuation of technical provisions should allow for the time value of money. The solvency regime should establish criteria for the determination of appropriate interest rates to be used in the discounting of technical provisions; and
- (xi) The solvency regime should require the valuation of technical provisions to make appropriate allowance for embedded options and guarantees.

40. While the Authority holds these to be sound principles, it should be noted that these requirements are still under consideration by the IAIS.

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2.3.2 IASB and FASB Projects

41. The IASB and the FASB are currently undertaking the following projects that are relevant to the discussion on an economic balance sheet: Financial Instruments, Fair Value measurement and Insurance Contracts.

a) Financial Instruments

42. This project seeks to replace the current IAS 39 *Financial Instruments: Recognition and Measurement* which establishes the principles for recognising and measuring financial assets and financial liabilities. The IASB plans to complete the project in three phases: Phase 1 - Classification and Measurement, Phase 2 - Impairment Methodology and Phase 3 - Hedge Accounting.

43. On 12th November 2009, the IASB published IFRS 9 *Financial Instruments* on the classification and measurement of financial assets within the scope of IAS 39 (while financial liabilities are not within the scope of IFRS 9 as issued in November 2009, the IASB is currently addressing the issue). Under IFRS 9, an entity may, at initial recognition, designate a financial asset as measured at fair value through profit or loss if doing so eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as an ‘accounting mismatch’) that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different basis. The standard also allows a financial asset to be measured at amortised cost if certain conditions are met. Refer to *Appendix D* for further details on the Financial Instruments project.

44. Similarly, the FASB on its part published an exposure draft (ED) on 26th May 2010 on “Accounting for Financial Instruments and Revisions to the Accounting for Derivative Instruments and Hedging Activities” (Refer to *Appendix E* for further details). Under this ED, most financial instruments would be measured at fair value in the statement of financial position.

45. Specifically, the ED proposes that:

- (i) For financial instruments held for trading, fair value would continue to be required, with all changes in fair value recognised in net income each reporting period. The FASB believes that this better reflects the risks presented by volatility associated with those financial instruments; and

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- (ii) For financial instruments held for collection or payment(s) of contractual cash flows, the ED requires reconciliation from amortised cost to fair value on the face of the statement of position. Net income would remain relatively unchanged because only changes arising from interest accruals, credit impairments and realized gains and losses would be recognised in net income each reporting period. With the exception of certain liabilities that qualify for the amortised cost option, all other changes in fair value from these instruments would be recognised in other comprehensive income each reporting period.

46. According to the FASB, a consistent measurement model for all financial instruments should improve comparability across entities and consistency in how an entity accounts for different financial instruments. Changes in market variables affect valuations of both financial assets and liabilities. Accordingly, as is the case for financial assets in the proposed model, many financial liabilities would be measured at fair value (with amortised cost also being presented for certain financial liabilities). In addition, core deposit liabilities would be re-measured each period using a current value method that reflects the economic benefit that an entity receives from this lower cost, stable funding source.

47. In contrast to IFRS 9 *Financial Instruments*, under the FASB's ED, the measurement attribute for most financial assets would be fair value. When specific eligibility criteria are met, primarily relating to whether the financial asset is being held for collection of contractual cash flows, amortised cost also would be presented with qualifying changes in fair value recognised in other comprehensive income rather than net income. Under IFRS 9, however, when similar eligibility criteria are met, financial assets are measured at amortised cost and fair value information is disclosed in the notes to the financial statements.

48. Further, IFRS currently measures most financial liabilities (including core deposit liabilities) at amortised cost if they are not held for trading and provides a fair value option for qualifying financial liabilities. On the other hand, under the FASB proposed guidance, financial liabilities would be measured at fair value, amortised cost (based on eligibility criteria) or a re-measurement amount specifically applicable to core deposit liabilities and provides an amortised cost option for qualifying financial liabilities.

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b) Fair Value Measurement

49. This project seeks to simplify IFRS and improve the quality of fair value information included in financial reports. Refer to *Appendix F* for further details on the Fair Value Measurement project.

50. In May 2009, the IASB published an ED on Fair Value Measurement which defined fair value as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date” (an exit price), a definition consistent with that under US GAAP’s Financial Accounting Standard 157 (FAS 157). It also establishes a framework for measuring fair value and requires disclosures about fair value measurements.

51. If adopted, the proposals in the ED would replace fair value measurement guidance contained within individual IFRSs with a single, unified definition of fair value, as well as further authoritative guidance on the application of fair value measurement in inactive or illiquid markets. The proposals address how fair value should be measured when it is already required by existing standards and do not extend its use in any way.

52. The ED proposes a fair value hierarchy that prioritises the inputs used to measure fair value into three levels as summarised below. This same hierarchy is used when approaching both the measurement of and disclosure of fair values.

- (i) Level 1 inputs: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- (ii) Level 2 inputs: Inputs other than quoted prices included in Level 1 that are directly or indirectly observable; and
- (iii) Level 3 inputs: Inputs that are not based on observable market data (illiquid market conditions). The assumptions used must reflect those that market participants would use, including risk.

53. The Boards have completed their discussions about the fundamental principles of fair value measurement. Accordingly, the FASB plans to publish an ED of amendments to Topic 820 (Fair Value Measurements and Disclosures) in 2010. The IASB on the other hand will consider the need to re-expose any of the proposals in its exposure draft Fair Value Measurement at a future meeting.

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Discussion Question:

Economic valuation

Would fair value, as commonly computed under general purpose financial statements, serve as an appropriate proxy for an economic valuation (including application of Level 3 in the fair value hierarchy, where necessary)?

c) Insurance Contracts

54. This project seeks to develop a standard on accounting for insurance contracts that is consistent with the conceptual framework definitions of assets and liabilities. Refer to *Appendix G* for further details on the Insurance Contracts project.

55. At its May 2002 meeting, the IASB agreed to split the Insurance Contracts project into two phases:

- (i) Phase 1 – This phase was completed in March 2004 and addressed the application of existing IFRS to companies that issue insurance contracts. This process led to an interim standard on insurance contracts; IFRS 4 *Insurance Contracts*.
- (ii) Phase 2 – This phase seeks to develop a standard on accounting for insurance contracts that will replace the interim standard.

56. The Insurance Contracts project has been a joint project of both the IASB and the FASB since October 2008 and the Boards in conjunction with the Insurance Working Group have since had numerous meetings and discussions on the subject.

57. On 30th July 2010, the IASB published the Insurance Contracts ED on Phase 2, which is open for comments until 30th November 2010. The ED is intended to result in a single consistent recognition and measurement standard for insurance contracts and, if adopted, the ED will replace IFRS 4. The FASB aims to issue a discussion paper in the third quarter of 2010 which will consider the IASB's proposed model and include preliminary views on possible improvements to the current guidance.

58. The Insurance Contracts ED proposes a comprehensive measurement approach for all types of insurance contracts issued by entities with a modified approach for some short-duration contracts. The approach is based on the principle that insurance contracts create a bundle of rights and obligations that work together to generate cash inflows (premiums) and cash outflows (benefits and claims).

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59. The ED proposes a measurement model for all types of insurance and reinsurance contracts that, except for modification for short-duration contracts, uses the following building blocks:

- (i) A current estimate of the future cash flows;
- (ii) A discount rate that adjusts those cash flows for the time value of money;
- (iii) An explicit risk adjustment; and
- (iv) A residual margin.

60. Accordingly, the ED proposes that an insurer shall measure an insurance contract initially at the sum of:

- (i) The expected present value of the future cash outflows less future cash inflows that will arise as the insurer fulfils the insurance contract, adjusted for the effects of uncertainty about the amount and timing of those cash flows; and
- (ii) A residual margin that eliminates any gain at inception of the contract. A residual margin arises when the amount in (i) above is less than zero. If the results of (i) above is greater than zero (i.e. a loss position), the insurer shall immediately recognise that amount in profit or loss as an expense.

61. For most short-duration contracts, the ED proposes to apply a modified version of the measurement approach:

- (i) During the coverage period, the insurer would measure the contract using an allocation of the premium received, on a basis largely similar to much existing practice; and
- (ii) The insurer would use the building block approach to measure claims liabilities for insured events that have already occurred.

62. The Authority is cognisant of the complexity of issues under discussion and the conclusion and eventual publication of accounting standards on insurance contracts will provide valuable input in developing its policies surrounding economic valuation of insurance liabilities.

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2.3.3 Other Jurisdictions

63. Jurisdictions have taken varied approaches to the valuation of assets and liabilities from market consistent approaches, e.g. the European Union and Switzerland, to mixed attribute valuation, e.g. as Canada. Australia has a hybrid approach incorporating fair values only in the case of general insurers, for those assets that are integral to the insurance business (i.e. backing insurance operations).

a) European Union (EU)

64. Solvency II is a fundamental review of the capital adequacy regime for the European insurance industry, planned to take effect from January 2013. It aims to establish a revised set of EU-wide capital requirements and risk management standards that will replace the current Solvency I requirements.

65. According to the “CEIOPS¹³ advice for Level 2 Implementing Measures on Solvency II: Valuation of Assets and Other Liabilities” (October 2009), Solvency II advocates for an economic balance sheet (Refer to *Appendix H* for further details on the EU regulatory regime).

66. Under Solvency II, when valuing balance sheet items on an economic basis, insurers should consider the risks that arise from holding a balance sheet item, using assumptions that market participants would use in valuing the asset or the liability.

67. IFRS has been adopted as the reference accounting framework with a view to building a coherent balance sheet to the extent it reflects the economic valuation principles of Solvency II. As a consequence, the definition of assets and liabilities and the recognition criteria under IFRS are, unless stated otherwise, applied to the Solvency II balance sheet. However, the adoption of IFRS as a reference framework does not in any way interfere with the accounting principles, standards and procedures that insurers are allowed to use when preparing their general purpose financial statements (local GAAP).

b) Switzerland

68. The SST is a principles and risk-based calculation of the required and available capital for insurance companies, based on an economic balance sheet approach. The requirements under the SST are relatively consistent with those under Solvency II.

¹³ Committee of European Insurance and Occupational Pension Supervisors

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69. According to Circular 2008/44 SST (November 2008), an insurance company must determine and value all assets and liabilities in accordance with economic principles and in a market-consistent manner, unless specified otherwise in the Insurance Supervision Ordinance (ISO). The insurance company is to then prepare a market-consistent balance sheet using these values (Refer to *Appendix I* for further details on the Switzerland regulatory regime).

c) Australia

70. The Australian Prudential Regulation Authority (APRA) requires the assets backing liabilities an insurer's (i.e. those considered integral to insurance operations) to be fair valued. The same applies to insurance groups, provided these assets comprise all assets controlled and managed by the group to support insurance liabilities.

71. On 3rd December 2009, APRA published a discussion paper "Proposed changes to general insurance prudential reporting" which sought to:

- (i) Align its current reporting requirements with those of the AIFRS (Australian equivalent of the International Financial Reporting Standards) while retaining certain prudential elements for capital adequacy purposes; and
- (ii) Obtain information which is more effective for assessing the financial performance of general insurers.

72. The discussion paper proposed various changes to the current Australian reporting framework, details of which are provided under *Appendix J*. Following the consultation on the discussion paper and corresponding response from APRA¹⁴, the final prudential and reporting standards became effective on 1st July 2010, with the first reporting quarter being 30th September 2010.

73. According to the discussion paper, the capital base under this proposal will continue to be derived from share capital, reserves and retained earnings. However, these items will now be sourced from the AIFRS balance sheet. Prudential adjustments will then be made to the AIFRS capital base including, among others, any difference in technical provisions between AIFRS and APRA (tax effected), goodwill and other intangibles and deferred tax assets.

¹⁴ APRA issued a response to submissions on proposed changes to general insurance prudential reporting on 23rd June 2010.

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d) Canada

74. All federally-regulated entities (FREs) in Canada are required to adopt IFRS for fiscal years beginning on or after 1st January 2011. In March 2010, the Office of the Superintendent of Financial Institutions (OSFI) released an Advisory on the “Conversion to International Financial Reporting Standards by Federally Regulated Entities” covering their expectations and requirements for the implementation of IFRS as well as regulatory capital requirements.

75. In developing accounting and regulatory capital policy requirements in this Advisory, OSFI considered three broad principles:

- (i) Where possible, preference should be given to maintaining one set of financial statements for both public and regulatory reporting.
- (ii) To facilitate regulatory monitoring and supervision, where possible, it is preferable that financial statements of different FREs be materially comparable.
- (iii) The specification of accounting options or the requirement of additional disclosures for financial reporting purposes should be kept to a minimum. Only changes that are required for prudential monitoring or for assessing regulatory capital should be made.

76. These broad principles are considered to be in support of OSFI’s prudential regulatory system (Refer to *Appendix K* for further details on the Canadian regulatory regime).

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3. PROPOSED ECONOMIC BALANCE SHEET FRAMEWORK

77. The Authority's proposals in this paper pertain to the commercial classes (Class 3A, Class 3B and Class 4, Long-Term commercial classes and insurance groups for which the Authority would be the Group-wide Supervisor). The Authority has not currently proposed the application of these principles to the captive classes and SPIs, but welcomes stakeholder comments in relation to the exclusion of captives and SPIs.

78. As discussed at the introduction of section 2 above, the Authority's mission and vision seeks to protect and enhance Bermuda's reputation and position as a leading international financial centre. Accordingly, the Authority is committed to meeting international regulatory standards and ensuring that regulation is appropriate for the Bermuda market. Most importantly, in common with international regulatory standards, the Authority's key objective in relation to insurance is protecting policyholders. To achieve this, the Authority must be able to properly assess the solvency position of insurers.

79. Aligned with policyholder protection, the Authority believes that, in principle, assets and liabilities should be valued on a consistent economic basis to reduce or eliminate, where possible, accounting mismatches where there are no underlying economic mismatches, thus providing a more faithful representation of the solvency position of an entity.

80. Consequently, the Authority considers the introduction of an economic balance sheet framework for the Bermuda market which embraces the concept of an economic valuation of both assets and liabilities. The Authority defines an economic valuation for assets and liabilities as one that reflects, in all material respects, the expected value of cash flows (factoring in the time value of money) associated with amounts exchanged, transferred or settled between knowledgeable willing parties in an arm's length transaction.

81. The Authority views fair value of assets and liabilities as an acceptable proxy for economic valuation, for solvency purposes, taking into account the varied market conditions¹⁵ that are, in principle, consistent with the fair value hierarchy (Levels 1, 2 and 3) under both IFRS and US GAAP. Specifically, an economic balance sheet should use market inputs to value both assets and liabilities. Consequently:

¹⁵ Market conditions range from those in an orderly market to those in an inefficient/inactive market

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- (i) For deep, liquid and transparent markets, observable market prices should be used (Level 1);
- (ii) For certain less liquid assets such as certain mortgage backed securities, valuation should be on a mark-to-model basis, which entails discounting future cash flows and using observable market data and extrapolations (Level 2); and
- (iii) For illiquid markets, inputs are not based on observable market data but assumptions that reflect those that market participants would use (Level 3).

82. While fair value accounting has generally been applied for the valuation of assets, insurance liabilities have generally been valued based on best estimate cash flows mainly due to limited or no market components or inputs. The Authority further recognises that the valuation of insurance liabilities for long-term business could often be much more complicated due to their long-tail nature.

83. In developing its principles for the valuation of insurance liabilities, the Authority is considering the proposals under the Insurance Contracts ED. The highlights of the Insurance Contracts project are summarised under section 2 of this paper with further details under *Appendix G*.

84. The Authority favours an approach that reflects the estimated probability weighted cash flows plus a risk margin. However, this may actually create accounting mismatches, particularly for Long-Term insurers, where the liabilities are decoupled from the assets for discounting purposes. The IASB has sought to address this in its Insurance Contracts ED through the introduction of the illiquidity premium.

85. In addition, the Authority is also considering some of the following approaches with the aim of adopting a methodology that most readily reduces accounting mismatches where inappropriate.

- (i) Replicating portfolio approach:

A replicating portfolio refers to a portfolio of financial instruments chosen or designed to match/replicate the behaviour of a portfolio of insurance liabilities in different economic

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scenarios¹⁶ as closely as possible. This approach is based on the premise that insurance products share many characteristics with standard financial products. According to this method, if close replication can be achieved, then the liabilities can be (a) re-valued and projected more quickly and easily by using the replicating portfolio as a proxy; and (b) expressed as a portfolio of assets.

The anticipated basis of the economic value of liability cash flows is the sum of the probability-weighted discounted value of those cash flows and a risk margin. Certain liabilities exhibit strong links to traded financial instruments; therefore it is possible that a portfolio of standard financial assets (a “replicating portfolio”) could match a set of liability cash flows precisely. In this case, the Authority considers that the total economic value of the cash flows, excluding the risk margin, could be taken to equal the market price of the replicating portfolio. The credit risk and liquidity premium embedded in the assets used to construct the replicating portfolio should be consistent with the assumptions generally used to value the liability cash flows through discounting.

According to the Insurance Contracts ED, “if a replicating portfolio of assets exists for some or all the cash flows arising from an insurance contract liability, the insurer can for those contractual cash flows simply include the fair value of those assets in the present value of the fulfilment cash flows, instead of explicitly estimating the expected present value of those particular cash flows and the associated risk adjustment.” It further clarifies that “for cash flows not measured by a replicating portfolio of assets, an insurer estimates explicitly the expected present value of those particular cash flows and the associated risk adjustment.”

While discussing risk adjustment under the IASB/FASB Insurance Contracts joint project, the staff noted that a replicating portfolio is conceptually the best way to measure the risk adjustment. However, their view was that to apply this approach, a complete market¹⁷ is required. In a complete market, every instrument can be priced

¹⁶ Economic scenarios could include risk-neutral or real world scenarios. Valuation using a set of stochastic scenarios (usually on a risk-neutral basis) is referred to as valuation using Monte Carlo simulation. In general, analytical valuation or other more efficient valuation techniques can be preferable to Monte Carlo simulation when available.

¹⁷ A complete market is one in which a replicating portfolio can be found for the instruments being valued.

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unambiguously using the replicating portfolio. In an incomplete market (such as in less developed markets), a replicating portfolio may not exist for every instrument.

From the foregoing therefore, not all cash flows can be perfectly replicated under all conditions mainly due to risks that are considered non-hedgeable, such as operational risks. A risk margin is generally incorporated to account for these non-hedgeable risks.

Under a framework considered by the Authority, the remaining financial risks, along with non-hedgeable non-financial risks, would attract a risk margin.

(ii) The Canadian Asset Liability Method (CALM)¹⁸ approach under OSFI:

According to CALM, insurance liabilities are determined based on the balance sheet value of assets that support them, taking into consideration the relevant asset and liability future cash flows and assumptions; a concept that is largely consistent with a replicating portfolio approach as discussed above. The CALM model largely performs the role of the replicating portfolio approach as best as possible and then adds a margin.

(iii) The SST approach under the Swiss Financial Market Supervisory Authority (“FINMA”):

The SST is applied in the valuation of insurance liabilities for both life and non-life insurers. For non-life (general) business, the value of insurance liabilities is the composition of the best estimate of cash outflows arising out of claims, provisions for incurred but not reported claims, provisions for future costs relating to claims, unearned premium reserves and discounted best estimate of additional provisions and liabilities that are not risk-bearing. On the other hand, for life business, the value of the technical liabilities is defined as the expected value (under risk-neutral probability measures) of the future contractually agreed payment flows discounted with the risk-free interest-rate curve. The cost of capital method is used to calculate statutory technical reserves in the SST.

(iv) Solvency II approach under EU:

¹⁸ The CALM valuation methodology is the Canadian Institute of Actuaries standard for the valuation of life insurance policy liabilities and requires the use of asset and liability cash flows. The Canadian Institute of Chartered Accountants also adopted this method in its accounting standards. Under CALM, actuarial liabilities are determined based on the book value of assets that support them.

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Solvency II considers the value of technical provisions to be equal to the sum of a best estimate and a risk margin. Accordingly, the best estimate corresponds to the probability-weighted average of future cash flows taking account of time value of money using the relevant risk-free interest rate term structure (currently envisaged to include an illiquidity premium). The risk margin considers that amount that an acquiring insurer would be expected to require, in order to take over and meet their obligations.

The Solvency II Directive also gives the option to value technical provisions via the replicating portfolio. Article 76 of Solvency II directive states that “Insurance and reinsurance undertakings shall value the best estimate and risk margin separately. However, where future cash flows associated with insurance or reinsurance obligations can be replicated reliably using financial instruments for which a reliable market value is observable, the value of technical provisions associated with those future cash flows shall be determined on the basis of the market value of those financial instruments. In this case, separate calculation of the best estimate and the risk margin shall not be required.”

The Solvency II Directive further states that “where insurance and reinsurance undertakings value the best estimate and the risk margin separately, the risk margin shall be calculated by determining the cost of providing an amount of eligible own funds equal to the Solvency Capital Requirement necessary to support the insurance and reinsurance obligations over the lifetime thereof. The rate used in the determination of the cost of providing that amount of eligible own funds (Cost-of-Capital rate) shall be the same for all insurance and reinsurance undertakings and shall be reviewed periodically.”

86. In establishing an economic balance sheet framework that values assets and liabilities on a consistent economic basis and reduces or eliminates (where possible) accounting mismatches, the Authority considers the following as among the key challenges, some of which have also been highlighted under the IASB/FASB Insurance Contracts joint project:

- (i) The choice of the economic valuation models and the underlying actuarial assumptions – Insurers generally use different models and apply company-specific assumptions in deriving their economic values;
- (ii) The choice between a composite risk margin and an approach that has an explicit risk adjustment plus a residual margin – in its Insurance Contracts ED, the IASB proposes an approach that has an explicit risk adjustment for the effects of uncertainty about the

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amount and timing of future cash flows and a residual margin which is an amount that eliminates any gain at inception of the contract. The FASB on the other hand favours a composite margin approach which is a single margin that eliminates any gain at inception of the contract with no explicit risk adjustment;

- (iii) Treatment of day one gain (expected future profits) – As discussed previously, under the IASB Insurance Contracts ED, a residual margin is that amount that eliminates any gain at inception of the contract. Similarly, the FASB’s composite margin approach to risk adjustment includes a single margin that eliminates any gain at inception of the contract. In effect, the elimination of day one gains under both IASB and FASB approaches serves to increase the liability by the residual margin (or composite margin under FASB’s approach). The IASB then proposes to amortise the margin over the coverage period. Solvency II on the other hand discusses the concept of ‘expected future profits’ which has been defined as the actual value of any type of profit included, either explicit or implicit, in the future inflows considered in the calculation of the best estimate¹⁹. The CEIOPS’ advice for Level 2 further indicates that the expected future profits contribute to the excess of assets over liabilities and therefore they are an element of the basic own funds [capital] (i.e. recognition of day one gains). Consequently, the Authority must conclude which approach to take;
- (iv) Participating investment contracts – According to the Insurance Contracts ED, some insurance contracts provide policyholders with a right to participate in the favourable performance of a specified class of contracts, related assets or both (i.e. a participating feature). The IASB proposes that payments arising from the participating feature should be included in the measurement of insurance contracts in the same way as any other contractual cash flows. The FASB on the other hand has tentatively decided to include these contracts within the scope of its financial instruments standard; and
- (v) The choice of discount rate for calculating economic values of assets and liabilities, while reducing or eliminating (where possible) accounting mismatches. This is especially a challenge in illiquid markets and for long-term insurance liabilities.

87. Some of the Authority’s preliminary views include:

¹⁹ CEIOPS’ Advice for Level 2 Implementing Measures on Solvency II: Own funds - Articles 97 and 99 – Classification and eligibility

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- (i) An appropriate discount rate is critical to the calculation of the expected present value of the cash flows for a liability. Consistent with the aforementioned IAIS draft principles, the Authority believes that such rate should reflect the obligation of the insurer to pay and therefore should not reflect the insurer's own credit risk. Likewise, the value of the liability should be comparable across insurers; therefore, the discount rate should not be based on the riskiness of the assets backing the liability. Proposals for discount rates have ranged from the rates associated with risk-free/low-risk sovereign bonds, approximation of swaps or published interbank rates such as LIBOR, and modifications of these rates to include an illiquidity premium. The Authority acknowledges that the global debate on these matters is on going and welcomes feedback;
- (ii) A risk margin/adjustment to account for the uncertainty about the amount and timing of future cash flows should be determined. The risk margin is added to the best estimate liability for the purposes of determining the technical provisions²⁰ or insurance reserves. Under Solvency II, the risk margin is taken as the present value of the future cost of capital, where the cost of capital is defined as a percentage of projected future capital requirements (the cost of capital methodology); however, there are other methods, such as the percentile approach used by APRA.

It should be noted that, as proponents of an explicit risk adjustment approach, the IASB, under the Insurance Contracts ED, limits the choice of techniques for estimating risk adjustments to the following three techniques: confidence level (Value at Risk), the conditional tail expectation (Tail Value at Risk), or the cost of capital (using economic capital);

- (iii) Embedded options – certain liabilities, including particular structures embedded in some life insurance and investment products, place a floor or other guarantee on the value of a policy linked to one or more assets or indices, or otherwise allow the policyholder to change the terms of its policy. This constitutes an “embedded option”. The value of such options may not be adequately captured through traditional actuarial practices such as limited scenario projections. For such products, the Authority believes it is critical that the economic valuation of the liability proceed on a market-consistent

²⁰ Solvency II Consultation Paper 42 (CP42) “Calculation of Risk Margin”

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basis i.e. that applying the same or similar valuation techniques to options that are traded in liquid markets would yield prices that generally correspond to those in such markets at the valuation date. Assumptions around exercise of options by policyholders should be realistic and consistent with the insurer's experience;

- (iv) Many insurers have the ability to affect the terms of certain types of liabilities through management actions. Examples include the use of "bonus" crediting rates, asset allocation rebalancing in the account backing an annuity, or the expenses allocated to with-profits (or "participating") products. Projected management actions should be realistic, consistent with current management policy, and observe the legal requirements of the liability; and
- (v) The Authority believes that, consistent with the overall valuation of liabilities, future premiums should be included in cash flows to the extent that they are contractual obligations of the policyholder or are otherwise expected to be paid into the policies; future expenses that may depend on these premiums, such as acquisition costs, should also be included. Policies originating more than one year after the valuation date should not be included. Volatility stemming from risks impacting the availability of such cash flows (such as lapse rates, conversion or take-up rates) should be included in the calculation of the risk margin and required capital. However, this issue remains unresolved internationally.

Discussion Questions:

Scope of application

1. Should the proposal to implement the economic balance sheet framework be applied to the commercial classes only or extended to the captive classes and SPIs?

Valuation of insurance liabilities

1. In relation to this proposal, should valuation of liabilities for long-term business be treated differently from general business? Explain your rationale.
2. What are the practical challenges of an approach for valuing insurance liabilities that reflects the estimated probability-weighted discounted cash flows plus a risk margin?
3. What are the practical challenges of the replicating portfolio approach for valuing insurance liabilities? Which other approaches would you consider appropriate and why?
4. What are the practical challenges (besides those highlighted) of valuing assets and liabilities on a consistent economic basis to reduce or eliminate (where possible) accounting mismatches where economic mismatches do not exist?

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- a. What would be an appropriate discount rate for calculating economic values for insurance liabilities?
 - Should the discount rates be different for life and non-life business; long-tail and short-tail business? If so, how and why?
 - Should the discount rates be based on the riskiness of the assets backing the liabilities, earned rate or some type of risk free rate?
 - Should the discount rates reflect the insurer's own credit risk?
 - b. How should the risk margin and its respective components be calculated – which approach would you consider most appropriate and under what circumstances: cost of capital approach, percentile or others, and why?
 - c. Should valuation be based on fulfilment or exit value, and why?
 - d. For the percentile approaches, when would you consider the confidence level approach (Value at Risk) or the conditional tail expectation approach (Tail Value at Risk), and why?
 - e. Should future premiums be included in the cash flows to the extent that they are contractual obligations of the policyholders or are otherwise expected to be paid into the policies? Why?
5. Should day one gains (expected future profits) be treated as part of the liability and amortised over the coverage period or as capital? Explain your rationale.

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4. PROPOSED CHANGES TO REGULATORY REPORTING

4.1 Background

88. The Authority proposes to replace its current statutory financial statements (statutory balance sheet, statutory statement of income and statutory statement of capital and surplus) with general purpose financial statements, subject to specified prudential filters and/or fair value disclosure or adjustments. These statements would serve as the foundation for an economic balance sheet. The Authority believes this approach will enhance consistency between the methodologies used for general purpose reporting and those used for regulatory reporting purposes.

89. The Authority proposes to initially apply the revised reporting framework to the Bermuda commercial insurers, specifically, the Class 4, Class 3B and Class 3A insurers. The Authority expressed in its consultation paper on The Bermuda Monetary Authority's Proposed Insurance Groups Regulatory Framework that it would do the same for insurance groups for which the Authority would be the Group-wide Supervisor. In addition, the concepts in this paper would be considered for the Long-Term commercial Classes. In this regard, the Authority plans to segment Long-Term insurers into captive and commercial classes resembling the general business classifications. Long-term classifications will be outlined in the long-term consultation paper to be published in August 2010.

Discussion Question:

Scope of application

Should the proposal to replace the current statutory financial statements with general purpose financial statements be extended to include captive classes?

4.2 Current Bermuda Reporting Requirements

90. Section 15 of the Act requires an insurer to prepare accounts (the "statutory financial statements") in respect to its insurance business for each financial year. The classification and measurement methodologies of assets and liabilities applied to the statutory financial statements for Class 4 insurers for instance are detailed under Part IV of Schedule III of the Insurance Accounts Regulations 1980.

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91. Section 17A (1) of the Act further requires that every Class 4 insurer, in addition to preparing statutory financial statements under Section 15, prepare “additional GAAP financial statements” in respect to its insurance business for each financial year. Section 17A (2) requires that such financial statements be prepared in accordance with any one of the following standards or principles:

- a) International Financial Reporting Standards (IFRS);
- b) Generally Accepted Accounting Principles (GAAP) that apply in Bermuda, Canada, the United Kingdom or the United States; or
- c) Such other GAAP as the Authority may recognise.

92. The above provisions are to be applied to the other commercial Classes in the future, beginning with Class 3B for the 2010 financial year-end.

93. From the foregoing, the current reporting requirements prescribed above demand that a Class 4 insurer prepare two separate sets of financial statements: statutory financial statements and “additional GAAP financial statements”. Consequently, general purpose financial statements are to be prepared in any case. The current reporting requirements under the Insurance Accounts Regulations 1980 have not kept pace with developments in international accounting standards and therefore cannot be viewed as a comprehensive basis of accounting for commercial writers. Hence, conceptually, to produce a full set of statutory financials, insurers must make necessary adjustments to their GAAP financial statements in preparing the statutory financial statements. These adjustments are attributed to:

- (i) The basis for valuation of certain assets and liabilities between the statutory financial statements and the general purpose financial statements in certain cases being inconsistent (*Appendix L* compares the current statutory financial statements requirements to both IFRS and US GAAP); and
- (ii) The statutory financial statements take a conservative approach by eliminating non-admitted assets²¹ from the balance sheet and including certain assets and liabilities that would otherwise be off-balance sheet under general purpose reporting.

²¹ A non-admitted asset refers to an asset or a portion of an asset that is not allowed by the Insurance Accounts Regulations 1980 to be taken into account in preparing the statutory balance sheet.

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94. In this respect, the current proposal bears similarities with processes already in place. However, certain of these adjustments, particularly under (i) above, may be eliminated to the extent that assets are already measured at fair value (with a few exceptions) in general purpose financial statements. Furthermore, general purpose financial statements, for the most part, have more robust standards for recognition, measurement and disclosures than are required under the current Bermuda statutory reporting.

4.3 Proposed Transition to an Economic Balance Sheet Framework

95. As noted in the previous section, the Authority is of the view that assets and liabilities should be valued on a consistent economic basis to reduce or eliminate (where possible) accounting mismatches where there are no underlying economic mismatches thus providing a more faithful representation of the solvency position of an entity.

96. To achieve this goal, the Authority proposes to replace the current statutory financial statements with general purpose financial statements, subject to specified prudential filters and/or fair value disclosures or adjustments.

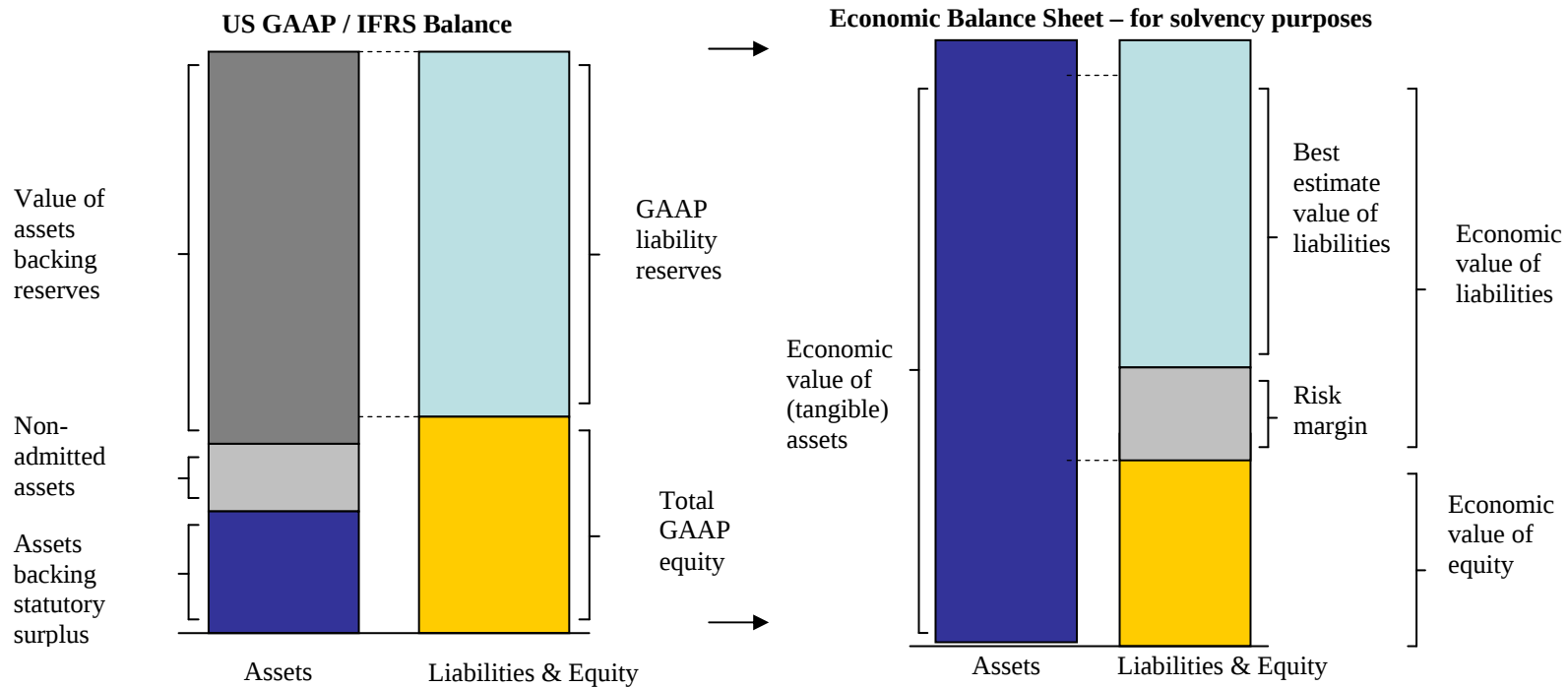
97. For the purposes of this discussion, prudential filters refers to:

- (i) Adjustments to eliminate non-admitted assets including goodwill and other similar intangible assets, deferred acquisition costs, prepaid and deferred expenses and other assets not considered admissible for solvency purposes; and
- (ii) Adjustments to include certain assets and liabilities that are generally off-balance sheet under general purpose reporting. These include items such as guarantees and other instruments that do not relate to the insurance operations. Additionally, adjustments may be made where own credit quality or other elements not deemed suitable for prudential purposes are allowed in general purpose financial statements.

98. Further, for the purpose of this discussion, general purpose reporting refers to financial statements prepared in accordance with any one of the standards or principles described under Section 17A (2) of the Act. It is expected that such reporting will almost solely comprise US GAAP and IFRS.

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99. The transition from a general purpose to an economic balance sheet could be represented as follows:



100. The key features under the economic balance sheet include:

- (i) Assets and liabilities are on fair value basis consistent with the fair value hierarchy under both IFRS and US GAAP;

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- (ii) Risk margins are applied to account for the difference between the best estimate value of the liabilities and the economic value (transfer or fulfilment value) of those liabilities where such an adjustment is necessary²²; and
- (iii) Non-admitted assets such as goodwill, deferred acquisition costs and other intangible assets are eliminated. These will form part of the prudential filters.

²² For certain liabilities, the Authority may permit the calculation of the best estimate value of the liabilities and the risk margin at the same time through the use of a replicating portfolio or other appropriate technique.

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101. In view of the anticipated convergence of global accounting standards particularly in light of the on going IASB/FASB projects which ultimately aim to have a single set of global accounting rules, the Authority intends to keep abreast with international developments in accounting standards and, where necessary, make appropriate changes to the legislation. The SEC for its part targets 2011 for its decision of whether to require filing under IFRS instead of US GAAP. The FASB and IASB have targeted June 2011 for convergence of critical standards including: Financial Instruments (Q2 2011); Revenue Recognition (Q2 2011); Fair Value Measurement (Q1 2011) and Insurance Contracts (ED published in third quarter of 2010). The Authority expects IFRS to be the prevailing basis, and that eventually the Authority would accept only one set of general purpose financial statements, IFRS.

102. Accordingly, the Authority proposes to transition from the current statutory reporting to general purpose financial reporting (with ultimate goal of having a balance sheet prepared under fair value basis for solvency purposes) in two phases, details of which are provided below:

- (i) Phase 1 - General purpose reporting with prudential filters and fair value disclosures (the “fair value disclosures regime”); and
- (ii) Phase 2 - General purpose reporting with prudential filters and fair value adjustments (the “fair value adjustments regime” or the “economic balance sheet framework”).

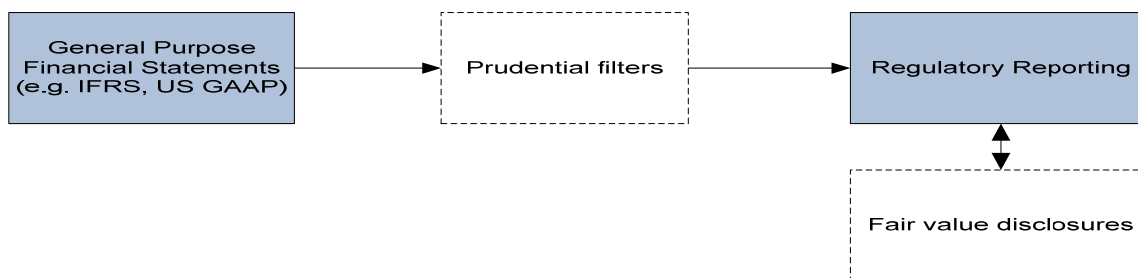
103. In light of the Authority’s view that fair value is generally an appropriate proxy for an economic value, the fair value disclosures or adjustments are deemed necessary for an economic balance sheet framework. In addition, the fair value adjustments are perceived to enhance consistency in reporting given that general purpose financial statements permit other valuation approaches such as amortised cost. This is also largely consistent with the FASB’s exposure draft on *Financial Instruments (Topic 825)* and IASB’s IFRS 9 *Financial Instruments*.

104. Overall, the Authority recognises that any significant change in statutory filing will require careful planning and may have a significant impact on reporting systems by insurers in Bermuda. Further, the Authority recognises that its proposals would necessitate changes to existing legislation.

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4.3.1 Phase 1 - General purpose reporting with prudential filters and fair value disclosures

105. Under this phase, the Authority proposes that, for solvency purposes, insurers be required to file general purpose financial statements that incorporate specified prudential filters but which also include fair value disclosures of balance sheet items that are measured at cost or amortised cost under general purpose reporting.



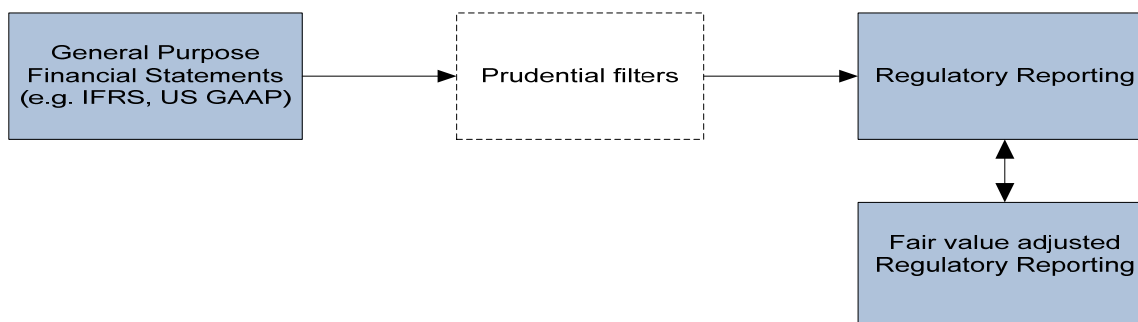
106. The benefits envisaged from this phase include:

- (i) Reducing complexity of preparing two different sets of financial statements which may have a different valuation basis, as is the case with the current reporting framework;
- (ii) Enhancing consistency between the general purpose reporting and regulatory reporting in line with IAIS principles on convergence of general purpose financial statements and regulatory reporting where possible;
- (iii) Provision of additional relevant information about the fair value of balance sheet items that are measured at cost or amortised cost under general purpose reporting; and
- (iv) Allowing a transition period; basing solvency on a familiar basis while gaining comfort and proficiency on fair value of items not normally measured in this manner.

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4.3.2 Phase 2 - General purpose reporting with prudential filters and fair value adjustments

107. Under this phase, the Authority proposes that, for solvency purposes, insurers be required to file general purpose financial statements that incorporate specified prudential filters but which also include fair value adjustments to balance sheet items that are measured at cost or amortised cost under general purpose reporting.



108. The benefits envisaged from this phase include:

- (i) Allowing the Authority to assess the insurer's financial position based on fair value measurement – allowing assets and liabilities to be valued on a consistent economic basis to reduce or eliminate, where possible, accounting mismatches where there are no economic mismatches; and
- (ii) Providing an economic valuation approach to the assessment of an insurers' financial position for solvency purposes that is largely in line with proposals advocated or implemented by other major Bermuda market trading partners.

Exemptions and Modifications

109. The Authority intends to maintain pragmatism, and appreciates that there may be exceptional circumstances where the proposals in this paper may be inappropriate. In this regard, the Authority proposes a mechanism that makes provision, where necessary, to either exempt from or modify the proposals in the paper through Section 56 of the Insurance Act 1978 (the "Act"). The Authority may grant an exemption or modification for a given year (upon receiving an application request) under the following circumstances:

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- (i) De minimis/immaterial balances;
- (ii) Absence of business written; and/or
- (iii) No risk retention.

Discussion Questions:

Replacement of the current statutory financial statements with general purpose financial statements

1. What are the practical challenges of replacing the current statutory financial statements with general purpose financial reporting under the two phases?
2. Do you think the proposed amendments achieve the Authority's objective to ensure that assets and liabilities are valued on a consistent economic basis that reduces or eliminates, where possible, accounting mismatches where there are no underlying economic mismatches? Explain your rationale.

Exemptions and Modifications

1. What circumstances, other than those highlighted, would you want the Authority to consider when making a decision of whether to grant an exemption or application for a modification?

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5. PROPOSED TIMETABLE

110. The Authority proposes to implement phase 1 of the economic balance sheet framework by the fourth quarter of 2011. The expected timeline is as follows:

	2010	2011	2012
The Authority to issue a discussion paper for comments or feedback from stakeholders	Q3		
The Authority to receive stakeholders' feedback or comments on the discussion paper	Q4		
The Authority to issue a consultation paper for comments or feedback from stakeholders		Q1	
The Authority to receive stakeholders' feedback or comments on the consultation paper		Q2	
Proposed enactment of legislation or regulations to effect economic balance sheet		Q4	
Implementation of disclosures of economic values (Phase 1)		Q4	
Implementation of economic balance sheet framework (Phase 2)			Q4

111. As noted in the preceding section, it is envisioned that proposals for the transition from the current statutory reporting to general purpose financial reporting will be adopted over two phases. The proposed timelines for the phases are as follows:

- (i) Phase 1 will cover reporting period ending 2011; and
- (ii) Phase 2 will cover reporting period ending 2012 and beyond.

112. To achieve its goal of aligning with international regulatory standards in an appropriate manner that suits the characteristics of the Bermuda market, and Bermuda's

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reputation and position as a leading international centre, the Authority intends to monitor developments and the market's preparedness which may accelerate or delay these timelines.

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APPENDICES

A. Global Financial Crisis

A.1 “Starting in the summer of 2007, accumulating losses on US subprime mortgages triggered widespread disruption to the global financial system. Large losses were sustained on complex structured securities. Institutions reduced leverage and increased demand for liquid assets. Many credit markets became illiquid, hindering credit extension and in less than a year, the balance sheets of financial institutions became burdened by assets that have suffered major declines in value and vanishing market liquidity. Participants became reluctant to transact in these instruments, adding to increased financial and macroeconomic uncertainty”²³.

A.2 As part of the long-standing commitment of both the IASB and FASB to work together on improving financial reporting standards, accounting issues emerging from the global crisis was considered by both Boards. In October 2008, the Boards established the FCAG comprising senior leaders with broad international experience of financial markets to assist in that important process. The primary function of the advisory group was to advise the Boards about standard-setting implications of:

- (i) The global financial crisis; and
- (ii) Potential changes to the global regulatory environment.

A.3 The FCAG considers how improvements in financial reporting could help enhance investor confidence in financial markets. The advisory group also helps identify significant accounting issues that require the urgent and immediate attention of the boards, as well as issues for long-term consideration.

A.4 In its July 2009 report²⁴, the FCAG published recommendations relating to accounting standard-setting activities and other changes to the international regulatory environment, following the global financial crisis. The report articulated four main principles and contained a series of recommendations to improve the functioning and effectiveness of global standard-setting.

²³ Source: <http://www.iasplus.com/crunch/creditcrunch.htm>

²⁴ Report of The Financial Crisis Advisory Group (28 July 2009)

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A.5 The FCAG report addressed among others the issue on effective financial reporting. The report noted that financial reporting plays an integral role in the financial system by striving to provide unbiased, transparent and relevant information about the economic performance and conditions of businesses; a notion that seems to support in part the concept of an economic balance sheet. The FCAG report further highlighted the following:

- (i) That confidence on the part of financial statement users in the transparency and integrity of the reporting framework is of critical importance to global financial stability and sound economic growth;
- (ii) That where regulatory standards differ from accounting standards in ways that could have significant effects on financial reporting, the effects of those differences should be disclosed in a manner that would not compromise the transparency and integrity of financial reporting; and
- (iii) That financial reporting is also dependent on the generation of reliable data by well-functioning markets that have proper infrastructure, and the use by financial institutions and other business entities of proper processes for price verification and other aspects of the valuation of assets and liabilities.

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B. Procyclicality in the Financial System

B.1 The FSF (now FSB) has defined the term “procyclicality” as the dynamic interactions (positive feedback mechanisms) between the financial and the real sectors of the economy. These mutually reinforcing interactions tend to amplify business cycle fluctuations and cause or exacerbate financial instability.

B.2 According to the “Report of the Financial Stability Forum on Addressing Procyclicality in the Financial System” (April 2009) (the “FSF report”), the current financial crisis is a systemic event of large proportions that illustrates the disruptive effects of procyclicality. Institutions that experienced extensive losses faced growing difficulties in replenishing capital. This, in turn, induced them to cut credit extension and dispose of assets. Their retrenchment precipitated a weakening of economic activity, thereby raising the risk of a further deterioration in their financial strength. The costs to the broader economy have been large and are mounting.

B.3 According to the FSF report, alongside limitations in risk measurement and distortions in incentives, elements of the policy framework may act as contributing factors to procyclicality. For example, other things being equal, the more procyclical the measures of risk embedded in prudential arrangements (such as minimum requirements for capital or liquidity) the more likely it is that they would strengthen the positive feedback mechanisms between credit and the business cycle. Similarly, compared with historical-cost based accounting, fair value accounting may add to procyclicality by making valuations more sensitive to the economic cycle, which may in turn have a procyclical impact on risk-taking decisions based on these valuations.

B.4 According to the FSF report, recent events have shown that some accounting practices can have a first-order effect on procyclicality; hence appropriate adjustments could be effective in reducing procyclicality. At the same time, market confidence is enhanced when the integrity of accounting standards and their usefulness to investors and other users are preserved.

B.5 The financial crisis led to a vigorous debate about the pros and cons of fair-value accounting. Investors, financial professionals and legislators questioned the fair value accounting standards and in particular blamed FAS 157 Fair Value Measurements

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(Accounting Standards Codification Topic 820 - *Fair Value Measurements and Disclosures*) for excessive write-downs of assets when the market took a dive and indicated that the pricing mechanism did not work. Fair value accounting was claimed to have widened losses and capital gaps, driving financial institutions into panic sales; hence, the self-reinforcing process of lower prices, greater write-downs, thinner capital, and even lower prices (procyclicality).

B.6 In reviewing certain accounting issues, the FSF report recommended that accounting standards setters should consider approaches that could enhance both transparency and financial reporting. In addition, the FSF report recommended that, when necessary, the prudential supervisors may need to consider adjustments to accounting figures before using them in the calibration of prudential tools.

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C. Debate on Fair Value Accounting

C.1 The term fair-value accounting generally refers to the practice of using available market information to estimate what the price of an asset would be if sold, or the cost to settle a liability. The basic principle of using market information to value certain assets dates over several decades during which time the FASB has adopted standards that have expanded and refined the application of fair-value accounting. These standards have been widely viewed as important drivers of increased transparency in the valuation of assets and liabilities.

C.2 Investor demand for more transparency has increased over the years. The savings and loan failures of the 1980s, for example, spurred the wider application of fair value rules. With the passage of the Sarbanes-Oxley Act of 2002, the audit committees of corporate boards were given a more prominent role in the hiring of external auditors and greater oversight of the audit process, including the application of fair value accounting. As fair value was increasingly viewed as an important tool for improving investor access to valuable information, there was a perceived lack of a single, consistent definition for the term, or clear guidance for its application.

C.3 In order to address those concerns, in 2006 FASB promulgated FAS 157 Fair Value Measurements. This action by FASB did not create fair value accounting or somehow tighten standards; rather, FAS 157 simply established a uniform definition of what “fair value” means and provided a consistent framework for its continued application.

C.4 In the US, in reaction to the impact of the financial crisis, a majority of congressmen endorsed a letter to the SEC, asking it to give up the fair value standard. They claimed that the market was too “messy” for financial institutions, especially banks, to mark their holdings to market and suggested that the crisis could be defused if the mark-to-market standard was abolished.

C.5 In response to the growing scepticism, the bailout plan adopted at the Capitol authorized the SEC to suspend FAS 157 at its discretion. It also requested the SEC to submit a comprehensive review within 90 days on the impact of fair-value accounting on the financial industry. Under the pressure from legislators and the corporate sector, the SEC released a staff position on 30th September 2008 that clarified fair value accounting in an inactive and irrational market. The SEC, in conjunction with the FASB, issued guidelines

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under “fair value” accounting rules for financial firms trying to peg the value of hard-to-trade assets on their balance sheets.

C.6 The SEC staff position reiterated the principle of FAS 157 and defended mark-to-market practice. The staff position made three key clarifications:

- (iv) That companies are allowed to rely on in-house models or assumptions to measure fair value when market quotes are not available;
- (v) That figuring out whether an asset is subject to a permanent write-down requires its holder to make reasonable judgment; and
- (vi) That in an inactive or disorderly market, where brokers’ quotes do not represent the market situation, companies can rely less on market prices to identify the fair value of their financial assets.

C.7 Accordingly, the SEC made it clear that, in an inactive/illiquid market, companies could not solely rely on market feeds to measure the fair value of financial assets. More important inputs may include the duration and percentage of price declines, liquidity, outcome of internal models, and reasonable assumptions.

C.8 The clarifications by the SEC offered the financial sector an opportunity to improve their subsequent financial reports. By applying reasonable assumptions to fair value identification, companies would seek remedy for overly stringent write-downs in the past and escape from the vicious cycle between distorted market prices and shrinking asset value, hence having a better-looking bottom line. On the other hand, some market participants were worried that greater flexibility would lead to unreasonable overpricing in accounting, compromising reliability and the transparency of corporate data.

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D. Financial Instruments

D.1 The objective of this project is to improve the decision usefulness of financial instrument reporting significantly for users of financial statements. The project will replace the FASB's and IASB's respective financial instruments standards with a common standard.

The Boards believe that this project will:

- (i) Reconsider the recognition and measurement of financial instruments;
- (ii) Address issues related to impairment of financial instruments and hedge accounting; and
- (iii) Increase convergence in accounting for financial instruments.

D.2 While the Financial Instruments project is officially a joint project, the FASB and IASB have been following different timetables: While the IASB has been conducting its work in separate phases, the FASB has elected to address the project comprehensively. In effect, the FASB's single exposure draft reflects all aspects of financial instrument accounting.

D.3 The IASB plan is the ultimate replacement of IAS 39. The project plan is to be completed in three phases: Phase 1 - Classification and Measurement, Phase 2 - Impairment Methodology and Phase 3 - Hedge Accounting.

Phase 1: Classification and Measurement

D.4 On 12th November 2009, the IASB published IFRS 9 *Financial Instruments* on the classification and measurement of financial assets within the scope of IAS 39 *Financial Instruments: Recognition and Measurement*. IAS 39 sets out the requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items.

D.5 Many users of financial statements and other interested parties have expressed challenges in understanding, applying and interpreting the requirements in IAS 39. In response, the Boards published a discussion paper "Reducing Complexity in Reporting Financial Instruments" (March 2008). This paper discussed the main causes of complexity in reporting financial instruments and possible intermediate and long-term approaches to improving financial reporting and reducing complexity.

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D.6 In the discussions leading to the publication of the ED on Financial Instruments: Classification and Measurement on 14th July 2009, the IASB considered relevant recommendations and suggestions about classification and measurement from the numerous comments received in response to the discussion paper.

D.7 The proposals in the ED formed part of the IASB's comprehensive review of financial instrument accounting and constituted a part of the IASB's response to the global financial crisis. These proposals are also considered consistent with recommendations made by other stakeholders including the G20 and the FSB.

D.8 The IASB believed that the proposals in the ED would reduce complexity in measurement and classification of financial instruments under IAS 39 and respond to concerns raised during the financial crisis such as eliminating the different impairment approaches for available-for-sale assets and assets measured using amortised cost. As a result, the ED proposed a single impairment method to replace the numerous impairment methods under IAS 39 which arise from the different classification categories.

D.9 IFRS 9 introduces new requirements for classifying and measuring financial assets that must be applied starting 1st January 2013, with early adoption permitted. The IASB intends to expand IFRS 9 during 2010 to add new requirements for classifying and measuring financial liabilities, derecognition of financial instruments, impairment, and hedge accounting.

D.10 IFRS 9 specifies how an entity should classify and measure financial assets, including certain hybrid contracts. It requires all financial assets to be:

- (i) Classified on the basis of the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial asset;
- (ii) Initially measured at fair value plus, in the case of a financial asset not at fair value through profit or loss, particular transaction costs; and
- (iii) Subsequently measured at amortised cost or fair value.

D.11 A financial asset shall be measured at amortised cost if both of the following conditions are met:

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- (i) The asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- (ii) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

D.12 An entity may, at initial recognition, designate a financial asset as measured at fair value through profit or loss if doing so eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as an ‘accounting mismatch’) that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different basis.

D.13 While financial liabilities are not within the scope of IFRS 9, as issued in November 2009, the IASB is committed to addressing the issue of classification and measurement of financial liabilities expeditiously. The IASB plans to publish an exposure draft on this part of the project after the FASB issues its comprehensive ED on accounting for financial instruments (covering classification and measurement, impairment and hedge accounting for hedged financial instruments).

Phase 2: Impairment Methodology

D.14 The objective of this phase is to improve transparency surrounding credit quality of financial assets and accounting for provisions for losses on loans. The phase also aims to reflect the economic reality of lending by recognising interest revenue as a credit cost adjusted return, which eliminates the front-loading of interest revenue.

D.15 In October 2008, as part of a joint approach to dealing with the reporting issues arising from the global financial crisis, the IASB joined with FASB in setting up the FCAG²⁵. In July 2009, the FCAG published a report which identified delayed recognition of losses associated with loans (and other financial instruments) and the complexity of multiple impairment approaches as primary weaknesses in accounting standards and their application. One of the FCAG’s recommendations was to explore alternatives to the incurred loss model that use more forward-looking information.

²⁵ Financial Crisis Advisory Group

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D.16 In November 2009, the IASB published an ED “Financial Instruments: *Amortised Cost and Impairment*” which was open for comments until 30th June 2010. The publication of the ED was preceded by a ‘Request for Information’ that was published in June 2009 to invite comments on the feasibility of applying an expected cash flow amortised cost and impairment method.

D.17 The proposals in the ED form part of the IASB’s response to the global financial crisis and are considered consistent with the G20, the FSB and the FCAG among others.

D.18 The ED aims to provide information about the effective return on a financial asset or financial liability by allocating interest revenue or interest expense over the expected life of the financial instrument. The ED further clarifies:

- a) That amortised cost is a measurement that combines current cash flow information at each measurement date with a valuation of those cash flows that reflects conditions on initial recognition of the financial instrument; and
- b) The types of amounts that are allocated over the expected life of the financial instrument (including for a financial asset the initial estimate of expected credit losses).

D.19 According to the ED, amortised cost measurement is based on the following principles:

- a) Amortised cost shall be calculated using the effective interest method – it is the present value of the expected cash flows over the remaining life of the financial instrument discounted using the effective interest rate.
- b) Expected cash flows are anticipated values at each measurement date – estimates of amounts and timing of cash flows are the probability-weighted possible outcomes.
- c) The effective interest method is the allocation mechanism for interest revenue and interest expense. The effective interest rate used for this purpose reflects how the contract sets the interest payments for the financial instrument (i.e. what part of the contractual interest rate, if any, is reset).

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D.20 The ED proposes a transition method that would adjust the effective interest rate to approximate the rate that would have been determined at inception using an expected cash flow method.

D.21 The IASB will set the effective date once it finalises the IFRS. However, it expects that the (mandatory) effective date for any final requirements would be around three years after publication of those requirements. It is however expected that early (voluntary) adoption would be permitted.

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E. FASB's Exposure Draft on Financial Instruments

E.1 The FASB published an ED on 26th May 2010 on "Accounting for Financial Instruments and Revisions to the Accounting for Derivative Instruments and Hedging Activities".

E.2 The main objective of this proposal is to provide financial statement users with a more timely and representative depiction of an entity's involvement in financial instruments, while reducing the complexity in accounting for those instruments.

E.3 Ideally, this proposal would have been issued jointly with the IASB and contain converged guidance. The goal remains for both boards (IASB and FASB) to issue comprehensive improvements to this complex area. However, each board has faced different imperatives that have resulted in different approaches for accounting for certain types of financial instruments, resulting in different timetables for the project.

E.4 Under this ED, most financial instruments would be measured at fair value in the statement of financial position. For some financial instruments, this represents no change however, for certain other financial instruments for which this represents a change, the ED acknowledges that amortised cost information is also relevant and would require its presentation along with fair value information.

E.5 Specifically, the ED proposes that:

- (i) For derivatives and financial instruments for which an entity's strategy is trading, fair value would continue to be required, with all changes in fair value recognised in net income each reporting period. The FASB believes that this better reflects the risks presented by volatility associated with those financial instruments; and
- (ii) For financial instruments for which an entity's strategy is to hold for collection or payment(s) of contractual cash flows, the ED requires reconciliation from amortised cost to fair value on the face of the statement of position. Net income would remain relatively unchanged because only changes arising from interest accruals, credit impairments and realised gains and losses would be recognised in net income each reporting period. With the exception of certain liabilities that qualify for the amortised cost option, all other changes in fair value from these instruments would be recognised in other comprehensive income each reporting period.

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E.5 According to the FASB, a consistent measurement model for all financial instruments should improve comparability across entities and consistency in how an entity accounts for different financial instruments. Changes in market variables affect valuations of both financial assets and liabilities. Accordingly, like financial assets in the proposed model, many financial liabilities would be measured at fair value (with amortised cost also being presented for certain financial liabilities). In addition, core deposit liabilities would be re-measured each period using a current value method that reflects the economic benefit that an entity receives from this lower cost, stable funding source.

E.6 The FASB view is that, by presenting both fair value and amortised cost information on the face of financial statements for instruments held for collection or payment(s) of contractual cash flows, investors can more easily incorporate either or both in their analysis of an entity. Specifically:

- (i) Fair value would provide information about the market's assessment of an entity's expectation of its future net cash flows, discounted to reflect both current interest rates and the market's assessment of the risk that the cash flows will not occur;
- (ii) Amortised cost would provide information about the instrument's contractual cash flows.

E.7 In contrast to the IFRS 9 *Financial Instruments* issued by the IASB, under the FASB's ED, the measurement attribute for most financial assets would be fair value. When specific eligibility criteria are met primarily relating to whether the financial asset is being held for collection of contractual cash flows, amortised cost also would be presented with qualifying changes in fair value recognised in other comprehensive income rather than net income. Under IFRS 9 however, when similar eligibility criteria are met, financial assets are measured at amortised cost and fair value information is disclosed in the notes to the financial statements.

E.8 Further, the IFRS currently measures most financial liabilities (including core deposit liabilities) at amortised cost if they are not held for trading and provides a fair value option for qualifying financial liabilities. On the other hand, under the FASB's proposed guidance, financial liabilities would be measured at fair value, amortised cost (based on eligibility criteria) or a re-measurement amount specifically applicable to core deposit liabilities and provides an amortised cost option for qualifying financial liabilities.

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E.9 The FASB has yet to establish the effective date of the requirements. However, the FASB has indicated that non-public entities with less than \$1 billion in total consolidated assets would be granted an additional four years to measure their loans and loan commitments at a fair value and re-measure their core deposit liabilities that qualify for changes in fair value to be recognised in other comprehensive income. The deferral is to allow these entities to develop and refine capabilities and necessary processes.

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F. Fair Value Measurement

F.1 The objective of the IASB's project on fair value measurement is to simplify IFRS and improve the quality of fair value information included in financial reports; the project does not intend to introduce new fair value measurements.

F.2 In May 2009, the IASB published an ED on Fair Value Measurement which was open for comments until 28th September 2009. The ED was preceded by a discussion paper "Fair Value Measurements" published in November 2006 for comments by May 2007. The discussion paper sought views on whether the IASB should develop a concise definition of fair value and a single source of guidance for all fair value measurements required by IFRS.

F.3 The ED defines fair value as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date" (an exit price). It also establishes a framework for measuring fair value and requires disclosures about fair value measurements. Overall, the ED aims to:

- (i) Establish a single source of guidance for all fair value measurements required or permitted by IFRSs to reduce complexity and improve consistency in their application;
- (ii) Clarify the definition of fair value and related guidance in order to communicate the measurement objective more clearly; and
- (iii) Enhance disclosures about fair value to enable users of financial statements to assess the extent to which fair value is used and to inform them about the inputs used to derive those fair values.

F.4 In the absence of an actual transaction at the measurement date, a fair value measurement assumes a hypothetical transaction in the most advantageous market for the asset or liability.

F.5 If adopted, the proposals in the ED would replace fair value measurement guidance contained within individual IFRSs with a single, unified definition of fair value, as well as further authoritative guidance on the application of fair value measurement in inactive/illiquid markets. The proposals deal with how fair value should be measured when it is already required by existing standards. They do not extend its use in any way.

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F.6 To ensure consistency with the US GAAP, the proposals incorporate recent guidance on fair value measurement published by the FASB and are consistent with a report of the IASB's Expert Advisory Panel published in October 2008 on fair value measurement in illiquid markets. For instance, the proposed definition of fair value is identical to the definition in FAS 157 and the supporting guidance is also largely consistent with US GAAP.

F.7 The ED proposes a fair value hierarchy that prioritises the inputs used to measure fair value into three levels as summarised below. This same hierarchy is used when approaching both the measurement of, and disclosure about, fair values.

- (i) Level 1 inputs: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- (ii) Level 2 inputs: Inputs other than quoted prices included in Level 1 that are directly or indirectly observable; and
- (iii) Level 3 inputs: Inputs that are not based on observable market data. The assumptions used must reflect those that market participants would use, including risk.

F.8 In illiquid or inactive markets, such as the one experienced during the financial crisis, FAS 157 provides that unobservable inputs shall be used to measure fair value to the extent that relevant 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. Therefore, unobservable inputs should 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 should be developed based on the best information available in the circumstances, which might include the reporting entity's own data.

F.9 The IASB and FASB have completed their discussions about the fundamental principles of fair value measurement. Accordingly, the FASB plans to publish an exposure draft of amendments to Topic 820 (Fair Value Measurements and Disclosures) in 2010. The IASB on the other hand will consider the need to re-expose any of the proposals in its exposure draft Fair Value Measurement at a future meeting.

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G. Insurance Contracts

G.1 The objective of the Insurance Contracts project is to address the lack of an accounting standard for insurance contracts. At its May 2002 meeting, the IASB agreed to split the insurance contracts project into two phases:

- I. Phase 1 – This phase was completed in March 2004 and addressed the application of existing IFRS to companies that issue insurance contracts. This process led to an interim standard on insurance contracts; IFRS 4 *Insurance Contracts*.
- II. Phase 2 – This phase seeks to develop a standard on accounting for insurance contracts that will replace the interim standard.

Phase 1

G.2 IFRS 4 became effective 1st January 2005 and applies to virtually all insurance and reinsurance contracts. The standard defines an insurance contract as a “contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder”.

G.3 IFRS 4 permits an insurer to change its accounting policies for insurance contracts only if, as a result, its financial statements present information that is more relevant and no less reliable, or more reliable and no less relevant. In particular, an insurer cannot introduce any of the following practices, although it may continue using accounting policies that involve them:

- a) Measuring insurance liabilities on an undiscounted basis.
- b) Measuring contractual rights to future investment management fees at an amount that exceeds their fair value as implied by a comparison with current fees charged by other market participants for similar services.
- c) Using non-uniform accounting policies for the insurance liabilities of subsidiaries.

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Phase 2

G.4 In May 2007, the IASB published a Discussion Paper (DP) “Preliminary Views on Insurance Contracts” for public consultation on accounting for insurance. This was part of a consultation which began in 2004 when the IASB set up an Insurance Working Group of senior representatives of the insurance industry and other interested parties.

G.5 The IASB (jointly with FASB since October 2008) has been reviewing the comments received on the DP and is working towards an exposure draft in a joint project, the “Insurance Contracts Project”. The joint project is focused on establishing standards for the recognition and measurement of insurance liabilities.

G.6 On 30th July 2010, the IASB published the Insurance Contracts ED on phase 2, which is open for comments until 30th November 2010. The ED is intended to result in a single consistent recognition and measurement standard for insurance contracts and if adopted, the ED will replace IFRS 4. The FASB aims to issue a discussion paper in the 3rd quarter of 2010 which will consider the IASB’s proposed model and include preliminary views on possible improvements to the current guidance.

G.7 The Insurance Contracts ED proposes a comprehensive measurement approach for all types of insurance contracts issued by entities with a modified approach for some short-duration contracts. The approach is based on the principle that insurance contracts creates a bundle of rights and obligations that work together to generate cash inflows (premiums) and cash outflows (benefits and claims).

Scope:

G.8 The scope of the ED includes insurance contracts (including reinsurance contracts) that meets the definition of insurance that an insurer issues or holds and financial instruments containing discretionary participating features that an insurer issues.

Measurement – initial measurement:

G.9 The ED proposes a measurement model for all types of insurance and reinsurance contracts that, except for modification for short-duration contracts, uses the following building blocks:

- (i) A current estimate of the future cash flows;

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- (ii) A discount rate that adjusts those cash flows for the time value of money;
- (iii) An explicit risk adjustment; and
- (iv) A residual margin.

G.10 Accordingly, the ED proposes that an insurer shall measure an insurance contract initially at the sum of:

- (i) The expected present value of the future cash outflows less future cash inflows that will arise as the insurer fulfils the insurance contract, adjusted for the effects of uncertainty about the amount and timing of those cash flows; and
- (ii) A residual margin that eliminates any gain at inception of the contract. A residual margin arises when the amount in (i) above is less than zero. If the results of (i) above is greater than zero (i.e. a loss position), the insurer shall immediately recognise that amount in profit or loss as an expense.

G.11 Risk adjustment shall be the maximum amount the insurer would rationally pay to be relieved of the risk that the ultimate fulfilment cash flows exceed those expected. The ED limits the number of permitted techniques used to measure the risk adjustment to the following: confidence level; conditional tail expectation; and cost of capital. While the ED does not require the use of any one of these techniques for a specific situation, the application guidance includes a discussion of which technique the IASB believes would be most suitable for certain circumstances.

Short-duration contracts:

G.12 Short-duration contracts are those contracts that meet both of the following conditions:

- (i) The coverage period of the insurance contract is approximately one year or less.
- (ii) The contract does not contain embedded options or other derivatives that significantly affect the variability of cash flows, after unbundling any embedded derivatives.

G.13 For these contracts, the ED proposes to apply a modified version of the measurement approach where an insurer shall:

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- (i) Measure its pre-claims liability by allocating premiums over the coverage period;
- (ii) Measure its claims liability at the present value of the fulfilment cash flows, i.e. use the building block approach to measure claims liabilities for insured events that have already occurred.

Measurement – subsequent measurement:

G.14 According to the ED, the carrying amount of an insurance contract at the end of each reporting period shall be the sum of:

- (i) The present value of the fulfilment cash flows at that date; and
- (ii) The remaining amount of the residual margin – an insurer shall initially recognise the residual margin as income in profit or loss over the coverage period in a systematic way that best reflects the exposure from providing insurance coverage, as follows: on the basis of the passage of time, but on the basis of the expected timing of incurred claims and benefits, if that pattern differs significantly from the passage of time.

Summary of key areas discussed under the ED

G.15 The following is a summary of key areas discussed under the ED:

- (i) Scope – Unbundling, and Embedded derivatives
- (ii) Recognition
- (iii) Measurement – Initial measurement; Present value of the fulfilment cash flows; Future cash flows; Contract boundary; Time value of money; Risk adjustment; Non-performance risk; Acquisition costs; Reinsurance contracts; Subsequent measurement; Pre-claims liability for short-duration contracts; Foreign currency; and Financial instruments that contain discretionary participating features.
- (iv) Derecognition
- (v) Presentation – Statement of financial position; and Statement of comprehensive income
- (vi) Disclosures
- (vii) Effective date and transition

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H. European Union (EU) Regulatory Regime

H.1 Solvency II is a fundamental review of the capital adequacy regime for the European insurance industry, planned to take effect from January 2013. It aims to establish a revised set of EU-wide capital requirements and risk management standards that will replace the current Solvency I requirements.

H.2 Solvency II is being created in accordance with the Lamfalussy four-level process:

- (i) Level 1: Framework Principles;
- (ii) Level 2: Detailed Technical Measures - These implementing measures are prepared by the European Commission (EC) following advice from the CEIOPS;
- (iii) Level 3: Strengthening Cooperation Among Regulators; and
- (iv) Level 4: Enforcement.

H.3 According to the “CEIOPS’ advice for Level 2 Implementing Measures on Solvency II: Valuation of Assets and Other Liabilities” (October 2009), Solvency II advocates for an economic balance sheet. Consequently, Solvency II has developed the following overarching valuation principles for solvency purposes:

- (i) Assets shall be valued at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction. Similarly, liabilities shall be valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction;
- (ii) IFRS have been adopted as the reference accounting framework with a view to building a coherent balance sheet to the extent it reflects the economic valuation principles of Solvency II. As a consequence, the definition of assets and liabilities and the recognition criteria under IFRS are, unless stated otherwise, applied to the Solvency II balance sheet. However, the adoption of IFRS as a reference framework does not in any way interfere with the accounting principles, standards and procedures that insurers are allowed to use when preparing their general purpose financial statements (local GAAP);
- (iii) Wherever possible, the fair value of assets must be based on a mark-to-market approach, based on readily available prices in orderly transactions that are sourced

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independently. However, where mark-to-market is not possible, mark-to-model procedures should be used. The insurer should obtain regular external, independent value verification for assets for which there are no homogenous markets and in situations where application of different models is possible;

- (iv) When valuing balance sheet items on an economic basis, insurers should consider the risks that arise from holding a balance sheet item, using assumptions that market participants would use in valuing the asset or the liability; and
- (v) The insurer is primarily responsible for the performance of economic valuations for Solvency II purposes, and for their reporting to supervisors.

H.4 According to the Solvency II Directive, where unhedgeable, the value of technical provisions shall be equal to the sum of a best estimate and a risk margin. Where:

- (i) The best estimate shall correspond to the probability-weighted average of future cash flows, taking account of the time value of money (expected present value of future cash-flows), using the relevant risk-free interest rate term structure; and
- (ii) The risk margin shall be such as to ensure that the value of the technical provisions is equivalent to the amount (re)insurance undertakings would be expected to require, in order to take over and meet their obligations.

H.5 Further, according to the Solvency II Directive, the calculation of technical provisions should be consistent with the valuation of assets and other liabilities, market consistent and in line with international developments in accounting and supervision.

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I. Switzerland Regulatory Regime

I.1 FINMA was formed in 2007 with the Swiss Federal Act merging three bodies: the Federal Office of Private Insurance (“FOPI”), the Swiss Federal Banking Commission (“SFBC”) and the Anti-Money Laundering Control Authority. The objective of FINMA is to protect creditors, investors and insured persons and to ensure that the general functioning of the financial markets is in accordance with financial market legislation.

I.2 The Insurance Supervision Act (“ISA”), which came into effect on 1st January 2006, introduced the SST which is comparable to Solvency II. Similar to Solvency II, the SST is a principles and risk-based calculation of the required and available capital for an insurance company using a quantitative model.

I.3 Since 2008, all insurance undertakings have been required to submit an SST calculation for each reporting period. However, the SST capital requirements will only become legally binding effective 1st January 2011.

I.4 According to a publication by FINMA “Circular 2008/44 SST” (November 2008) which became effective 1st January 2009, pursuant to the ISA and the ISO, both of which came into force on 1 January 2006, the solvency of insurance companies is to be assessed by applying the SST (taking transition periods into account) and also in accordance with Solvency I requirements (refers to calculation of minimum capital requirements). This Circular applies to all insurance companies and groups that are subject to regulatory supervision by FINMA.

I.5 The SST is based on an economic balance sheet approach. Specifically, according to Circular 2008/44 SST, “an insurance company must determine and value all assets and liabilities in accordance with economic principles and in a market-consistent manner, unless specified otherwise in the ISO, insofar as they are material in terms of the above definition. This also includes off-balance sheet items as defined in an accounting sense. It must take into account in particular all contingent liabilities and corresponding rights. The insurance company is to then prepare a market-consistent balance sheet using these values.”

I.6 Circular 2008/44 SST included the following valuation principles:

- (i) All assets and liabilities are to be valued in accordance with economic principles in a market-consistent manner. A market-consistent valuation is to be in accordance with

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and not at variance with information that can be gleaned from trade in liquid financial markets. Where a market value exists for an instrument, this is to be used as the basis of valuation (“marking-to-market” method), otherwise the market-consistent value is to be determined by applying a suitable model (“marking-to-model” method);

- (ii) For market-consistent valuation, the assets and liabilities can be decomposed into their embedded sub-items. The sub-items can then be valued applying the marking-to-market or marking-to-model methods;
- (iii) The market-consistent balance sheet must pass the relevant parts of the calibration test applicable to it; and
- (iv) Any currency can be selected for maintaining the market-consistent balance sheet and presenting the core capital.

I.7 The Swiss insurance regulator uses the SST as a tool to measure the risk of insurance companies. According to the “Technical document on the Swiss Solvency Test” (October 2006), the goal of the SST is to obtain a picture of (1) the amount of risks borne by an insurance undertaking, and (2) the insurance undertaking financial capacity to bear these risks.

I.8 The SST applies to both life and non-life insurers. For instance, valuation of liabilities for non-life insurers under the SST considers the value of provisions and liabilities that are not risk-bearing as a composition of:

- (i) The best estimate of the cash values of the expected values of the future payments for claims whose claims date is in the past. This includes provisions for incurred but not reported claims;
- (ii) Provisions for future costs connected to the claims events mentioned in the first point (ULAE provisions);
- (iii) The unearned premium reserve;
- (iv) The discounted best estimate value of the additional provisions and liabilities that are not risk-bearing

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I.9 On the other hand, for life business, the SST defines the value of the technical liabilities as the expected value (under risk-neutral probability measures) of the future contractually agreed payment flows discounted with the risk-free interest-rate curve. In particular, the best estimate principle must be observed in this regard: The valuation does not contain any implicit or explicit safety, fluctuation, or other loading, but rather refers solely to the expected value of the liabilities.

I.10 According to the SST, the amount of the risk assumed is measured using the target capital while the capacity to bear risks is measured using the risk-bearing capital. Where:

- (i) The risk-bearing capital (or the “available capital”) is the difference between the market-consistent values of the assets and the discounted best estimates of the liabilities; and
- (ii) Target capital (or the “required capital”) is the sum of the “market value margin” and the expected shortfall of the difference between the discounted risk-bearing capital in one year and the current risk-bearing capital. The “market value margin” is defined as the difference between the market-consistent value of the liabilities and the discounted best estimates of their associated payment flows. The market value margin is approximated by the cost-of-capital approach which is the sum of discounted costs of capital for future required regulatory capital for the run-off of the portfolio arising from liabilities and assets replicated to the extent possible.

I.11 By comparing the risk-bearing capital and the target capital, insurance undertakings and the supervisory authority gain valuable information concerning the financial position of insurance undertakings.

I.12 According to a publication by FINMA “Circular 2008/30 Solvency I – Insurance Groups” (November 2008) which became effective 1st January 2009, for reporting purposes, a financial statement prepared in accordance with internationally recognised accounting standards must be used for the calculation of Solvency I. The IFRS and the US GAAP are considered internationally recognised accounting standards.

I.13 This Circular sets out the minimum requirements for the calculation and reporting of the required and available Solvency I for insurance groups (groups) and insurance conglomerates (conglomerates) for submission to the responsible supervisory authority.

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I.14 Further, according to the Circular, the Swiss expert recommendation on accounting (Swiss GAAP FER), which is also used nationally, may be classified as equivalent to the IFRS by FINMA upon application, where the necessary components for calculating the required and eligible equity capital on a consolidated basis are shown separately.

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J. Australian Regulatory Regime

J.1 APRA requires insurance companies to report annual statutory statements under the Australian Accounting Standards Board (“AASB”). The AASB is an independent accounting standard-setter in Australia and is committed to developing, in the public interest, a single set of high quality, understandable accounting standards that require transparent and comparable information in general purpose financial statements.

J.2 Following the adoption of IFRS by the Australian government in 2004, the AASB standards are generally similar to IFRS, as issued by the IASB. Some of the AASB standards relevant to this discussion and which became applicable for the annual reporting periods beginning on or after 1 January 2005 include:

- (i) AASB 139 *Financial Instruments: Recognition and Measurement* which is equivalent to IAS 39. The objective of AASB 139 is to provide the principles for recognising and measuring financial assets and financial liabilities;
- (ii) AASB 1023 *General Insurance Contracts* together with AASB 4 *Insurance Contracts* and AASB 1038 *Life Insurance Contracts* which are equivalent to IFRS 4. The objective of AASB 1023 is to specify the financial reporting for general insurance contracts. The AASB has adopted the requirements of IFRS 4 across these three Standards; and
- (iii) AASB 137 *Provisions, Contingent Liabilities and Contingent Assets* which is equivalent to IAS 37. The objective of AASB 137 is to prescribe the accounting for provisions, contingent liabilities and contingent assets.

J.3 Other relevant guidance includes:

- (i) GRF 300 *Statement of Financial Position* which provides a broader definition for asset valuation for insurance group reporting and allows assets to be valued at fair value if these assets represent all assets controlled and managed by the group to support insurance liabilities. Further, investments backing general insurance liabilities must be measured at fair value; and
- (ii) GPS 311 *Audit and Actuarial Reporting and Valuation* which provides that premium liabilities and outstanding claim liabilities are to be valued at a central estimate

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including an associated risk margin by class of business. This is subject to considerations for materiality and professional judgement of the appointed actuary.

J.4 Under the AASB 1023 *General Insurance Contracts*, APRA requires general insurers to value assets that are integral to insurance operations (i.e. backing insurance liabilities) at fair value.

J.5 On 3rd December 2009, APRA published a discussion paper “Proposed changes to general insurance prudential reporting” which sought to align its current reporting requirements with those of AIFRS while retaining certain prudential elements for capital adequacy purposes and to obtain information which is more effective for assessing the financial performance of general insurers. The discussion paper was open for comments until 12th February 2010.

J.6 Subject to consultation on the discussion paper, it is expected that the final prudential standards and reporting standards will be effective on 1st July 2010, with the first reporting quarter being 30th September 2010. To this end, APRA has proposed the following changes to its current reporting framework:

- (i) The balance sheet and income statement provided to APRA will be based on and consistent with AIFRS;
- (ii) Capital calculations will start with the AIFRS balance sheet and include a series of prudential adjustments that broadly replicate the current capital calculations. Prudential adjustments includes among others, goodwill and other intangibles, deferred tax assets, any difference in technical provisions between AIFRS and APRA (tax effects), certain reinsurance assets not meeting APRA requirements and any other adjustments as required;
- (iii) The APRA returns will include unearned premium, deferred acquisition costs, write-downs from the liability adequacy test²⁶, deferred reinsurance expense and others, thereby enabling performance to be measured on an ‘earned premium’ and ‘incurred claims basis’;

²⁶ Liability adequacy test is a method under AASB 1023 *General Insurance Contracts*, of assessing the adequacy of the unearned premium provision to cover the future liabilities arising from a general insurance contract

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- (iv) The premium liabilities calculation²⁷ will continue to be used for the purposes of capital adequacy; and
- (v) Bound but not incepted (BBNI)²⁸ premium revenue will be removed from the income statement and the capital calculation.

J.7 According to the discussion paper, APRA indicated that “in applying the above proposals, which simplify and refine the reporting process for general insurers, APRA does not intend to change the capital adequacy framework.” However, APRA also acknowledged that some of the proposals may result in consequential changes to capital although they are expected to be relatively minor.

J.8 Further, according to the discussion paper, the capital base under this proposal will continue to be derived from share capital, reserves and retained earnings. However, these items will now be sourced from the AIFRS balance sheet. Prudential adjustments will then be made to the AIFRS capital base including, among others, any difference in technical provisions between AIFRS and APRA (tax effected), goodwill and other intangibles and deferred tax assets.

²⁷ The specification of the premium liabilities calculation are included in the Prudential Standard GPS 310 Audit and Actuarial Reporting and Valuation

²⁸ BBNI relates to business to which the insurer is obliged and committed, but for which the policy has not yet incepted. Under current APRA reporting, insurers must recognise all BBNI premium revenue from the date of acceptance

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K. Canadian Regulatory Regime

K.1 All FREs in Canada are required to adopt IFRS for fiscal years beginning on or after 1st January, 2011. In March 2010, OSFI released an Advisory on the “Conversion to International Financial Reporting Standards by Federally Regulated Entities” covering their expectations and requirements for the implementation of IFRS as well as regulatory capital requirements.

K.2 In developing accounting and regulatory capital policy requirements in this Advisory, OSFI considered three broad principles:

- (i) Where possible, preference should be given to maintaining one set of financial statements for both public and regulatory reporting.
- (ii) To facilitate regulatory monitoring and supervision, where possible, it is preferable that financial statements of different FREs be materially comparable.
- (iii) The specification of accounting options or the requirement of additional disclosures for financial reporting purposes should be kept to a minimum. Only changes that are required for prudential monitoring or for assessing regulatory capital should be made.

K.3 These broad principles are considered to be in support of OSFI’s prudential regulatory system. OSFI decided to retain previous decisions and policy for the determination of accounting and regulatory capital policy requirements for the initial IFRS conversion. Some of the key points in the Advisory include:

- a) Guidance on Fair Value Option will be retained to restrict the ability of FREs to elect to designate a financial asset as fair value through profit or loss under IAS 39 Financial Instruments: Recognition and Measurement.
- b) For investment property, OSFI requires that any fair value gains or losses be recognised in regulatory capital. Any revaluation gains or losses on own-use property will be excluded from regulatory capital.
- c) Life insurers are required to continue using the CALM to value policy liabilities that have previously been accounted for as insurance, and to use that valuation to determine regulatory capital requirements.

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K.4 In order to provide greater flexibility for adoption of IFRS, OSFI will also consider allowing early adoption by FREs on a standard-by-standard basis once a particular IFRS is issued in final form.

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L. Bermuda Statutory Reporting compared to IFRS and US GAAP

Insurance Accounts Regulations 1980 [Schedule III (Instructions Affecting The Statutory Balance Sheet) - Part IV (Instructions for Class 4 Insurers)]	International Financial Reporting Standards (IFRS)	US Generally Accepted Accounting Principles (US GAAP)
Financial Instruments		
Bonds and Debentures - Lines 2 & 3 1. Held to maturity (quoted and unquoted) – Lines 2 (a) (i) and 3 (a) (i) - Measured at cost or amortised cost - Adequate provision made for any permanent diminution in value 2. Other (quoted) – Line 2 (a) (ii) - Carried at their quoted value 3. Other (unquoted) – Line 3 (a) (ii) - Carried at fair value determined in good faith Equities (common stock, preferred stocks and mutual funds) & Other investments - Lines 2 & 3 1. Quoted – Line 2 (c) - Carried at their quoted value 2. Unquoted – Line 3 (c) - Carried at fair value determined in good	Financial Assets ²⁹ - Initially measured at fair value plus particular transaction costs (in the case of a financial asset not at fair value through profit or loss). - Subsequently measured at amortised cost or fair value.	Held-to-maturity instruments ³⁰ - Subsequently measured at amortised cost - Impairment will be assessment at the individual security level and recognised if the fair value of the investment is less than its cost Trading and Available for sale instruments ³¹ - Measured subsequently at fair value - Impairment will be assessment at the individual security level and recognised if the fair value of the investment is less than its cost. Equity instruments ³² - Trading securities are measured at fair value - Available for sale securities are measured at fair value - A decline in fair value below cost and assessed as other than temporary is recognised in earnings

²⁹ IAS 39 *Financial Instruments – Classification and Measurement* - This partially superseded by IFRS 9.

³⁰ FASB ASC 320 *Investments – Debt and Equity Securities*

³¹ FASB ASC 320 *Investments – Debt and Equity Securities*

³² FASB ASC 320 *Investments – Debt and Equity Securities*

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faith Investments in mortgage loans on real estate – Line 5 - Carried at the value of the principal amount outstanding less any provision for doubtful collection Collateral loans – Line 8 - Carried net of any amount considered uncollectable by the directors		Receivables³³ - Reported at fair value - A loan is impaired if it is probable that a creditor will be unable to collect all amounts due.
Investments in Affiliates		
Investments in affiliates – Line 4(a) - Valued either at cost or the equity method of valuation, provided that: - If value arrived at by use of equity method is less than the value arrived at cost, the value arrived at by equity method shall be used; - The directors shall carry at fair value determined in good faith if that value is less than the valuations under the cost method and the equity method.	Investments in Associates³⁴ - Apply the equity method of accounting for investments in associates. - Exceptional circumstances include: - An investment in an associate held by a venture capital organisation or a mutual fund (or similar entity) and that upon initial recognition is designated as held for trading under IAS 39. - An investment classified as held for sale in accordance with IFRS 5 - A parent exempted from preparing consolidated financial statements by paragraph 10 of IAS 27 may	Investments – Equity method and joint ventures³⁶ - The equity method of accounting is used; unless an entity elects to account for their equity method investments at fair value under the fair value option subject to certain conditions. - Impairment: A decrease in the value of an equity method investment, which is deemed as other than temporary, must be recognised as the excess of the investment’s carrying amount over the fair value. Other investments³⁷

³³ FASB ASC 310 *Receivables*

³⁴ IAS 28 *Investments in Associates*

³⁵ IAS 31 *Interests in Joint Ventures*

³⁶ FASB ASC 323 *Investments – Equity Method and Joint Ventures*

³⁷ FASB ASC 325 *Investments - Other*

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	prepare separate financial statements as its primary financial statements. In those separate statements, the investment in the associate may be accounted for by the cost method or under IAS 39 Interests in Joint Ventures³⁵ - Allows two treatments of accounting for an investment in jointly controlled entities: - Proportionate consolidation - Equity method of accounting	- Measured initially at cost - Dividends received in excess of earnings subsequent to the date of investment are considered a return of investment and are recorded as reductions of cost of the investment - Impairment: A series of operating losses of an investee or other factors may indicate a decrease in the value of the investment has occurred that is other than temporary and shall be recognised
Investment Property		
Real Estate – Line 7 - Except where carried at a value determined by an independent appraisal net of encumbrances, it shall be carried at the lower of: - Cost less accumulated depreciation - Fair value determined in good faith, less amount of any encumbrances	Investment Property³⁸ - Initially measured at cost, including transaction costs - For subsequent measurement, firms are permitted to choose between: - A fair value model, and - A cost model Property, Plant and Equipment³⁹ - Initially recorded at cost - For subsequent measurement, firms are permitted to choose between: - Cost model - The asset is carried at cost less accumulated depreciation and impairment	Property, Plant and Equipment⁴⁰ - Long-lived assets classified as held and use - Initially measured at cost, including all costs necessary to make the asset ready for its intended use - Subsequent measurement for depreciation, impairment, and disposal - Long-lived assets classified as held for sale - Initially measured at cost - Subsequently measured at the lower of (a) carrying amount and (b) fair value less cost to sell - Not subject to depreciation

³⁸ IAS 40 *Investment Property*

³⁹ IAS 16 *Property, Plant and Equipment*

⁴⁰ FASB ASC 360 *Property, Plant and Equipment*

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	2. Revaluation model - The asset is carried at a revalued amount, being its fair value at the date of revaluation less subsequent depreciation and impairment, provided that fair value can be measured reliably.	4. Impairment: A loss shall be recognised for any initial or subsequent write-down to fair value less cost to sell. A gain shall be recognised for any subsequent increase in fair value less cost to sell, but not in excess of the cumulative loss previously recognised

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Other Assets		
Letters of credit, guarantees and other instruments – Line 14 - Only non-insurance related instruments are recorded. - Where such an asset is recorded, it is shown net of any allowance for its collectability. - Instruments which relate to insurance operations are not recorded on the balance sheet (off-balance sheet).	Provisions, Contingent Liabilities and Contingent Assets⁴¹ - Contingent assets should not be recognised but should be disclosed where an inflow of economic benefits is probable. - When the realisation of income is virtually certain, then the related asset is not a contingent asset and its recognition is appropriate	Contingencies⁴² - A loss contingency that is: - Probable is recognised in the financial statements - Reasonably possible is disclosed in the notes - remote is not required to be disclosed - A gain contingency is not recognised in the financial statements - Any such disclosure should avoid misleading implications about its realisation - Provisions are measured at the most probable outcome to settle an obligation. If no one item is more likely than another, use the low end of the range of possible amounts - Discounting: Unless specifically permitted by an accounting standard, discounting is only allowed where the timing and amount of the future cash flows are fixed and determinable
Insurance Liabilities – Loss reserves		
Loss and loss expense provisions – Line 17 Class 4:	Insurance Contracts – Phase 1⁴³ The standard:	Claim Costs and Liabilities for Future Policy Benefits⁴⁵

⁴¹ IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*

⁴² FASB ASC 450 *Contingencies*

⁴³ IFRS 4 *Insurance Contracts*

⁴⁴ Exposure draft on *Insurance Contracts*

⁴⁵ FASB ASC 944 *Financial Services – Insurance 40 Claim Costs and Liabilities for Future Policy Benefits*

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• No discounting of loss provisions unless with prior approval by the Authority under Section 56 of the Insurance Act 1978; 2. Class 1, 2, 3, 3A & 3B • Loss provisions may be discounted where: 1. Both the amount of loss provisions and the payment dates of the losses are fixed; 2. Neither the amount of loss provisions and the payment dates of the losses are fixed but the insurer's auditor is of the opinion that that amount and those dates are reasonably ascertainable either in the records of the insurer itself or in those of any group of companies of which the insurer is a member; 3. The loss provisions in question were discounted on or before 31st December 1988 in the insurer's statutory financial statements	1. Prohibits provisions for possible claims under contracts that are not in existence at the reporting date (such as catastrophe and equalisation provisions) 2. Requires a test for the adequacy of recognised insurance liabilities and an impairment test for reinsurance assets 3. Requires an insurer to keep insurance liabilities in its balance sheet until they are discharged or cancelled, or expire, and prohibits offsetting insurance liabilities against related reinsurance assets and income or expense from reinsurance contracts against the expense or income from the related insurance contract • The standard permits an insurer to change its accounting policies for insurance contracts only if, as a result, its financial statements present information that is more relevant and no less reliable, or more reliable and no less relevant. • The standard permits the introduction of an accounting policy that involves re-measuring designated insurance liabilities consistently in each period to reflect current market interest rates (and, if the insurer so elects, other current estimates and assumptions). • The standard also: 1. Clarifies that an insurer need not account for an embedded derivative separately at fair value if the embedded derivative meets the definition of an insurance contract 2. Requires an insurer to unbundle (that is, to account	• Both of the following shall be accrued when insured events occur: 1. Liability for unpaid claims, including estimates of costs for claims relating to insured events that have occurred but have not been reported to the insurer 2. Liability for claim adjustment expenses that is a liability for all costs expected to be incurred in connection with the settlement of unpaid claims • Catastrophe losses: The conditions in Contingencies (above) shall be considered with respect to the risk of loss assumed by an insurance entity for catastrophes that may occur during the terms of policies in force to determine whether accrual of a loss is appropriate • Long-duration contracts: 1. A liability for expected costs shall be accrued over the current and expected renewal periods of the contracts 2. The present value of estimated future policy benefits to be paid to or on behalf of the policyholders less the present value of estimated future net premiums to be collected from policyholders – that is, a liability for future policy benefits – shall be accrued when premium revenue is recognised

⁴⁶ FASB ASC 944 *Financial Services – Insurance 60 Premium Deficiency and Loss Recognition*

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	separately for) deposit components of some insurance contracts, to avoid the omission of assets and liabilities from its balance sheet 3. Clarifies the applicability of the practice sometimes known as 'shadow accounting' 4. Permits an expanded presentation for insurance contracts acquired in a business combination or portfolio transfer 5. Addresses limited aspects of discretionary participation features contained in insurance contracts or financial instruments Insurance Contracts – Phase 2⁴⁴ The Insurance Contracts ED published on 30th July 2010 proposes a measurement approach for insurance liabilities based on the following building blocks: • A current estimate of the future cash flows; • A discount rate that adjusts those cash flows for the time value of money; • An explicit risk adjustment for the effects of uncertainty about the amount and timing of future cash flows; and • A residual margin – an amount that eliminates any gain at inception of the contract.	3. The above liabilities shall be accrued when insured events occur • Reinsurance contracts: 1. If a ceding entity has agreed to service all of the related insurance contracts without reasonable compensation, a liability shall be accrued for estimated excess future servicing costs under the reinsurance contract 2. Contracts that do not result in the reasonable possibility of that a ceding entity may realize a significant loss from the insurance risk assumed generally do not meet the conditions for reinsurance accounting and are to be accounted for as deposits • Financial guarantee insurance contracts: An insurance entity shall recognise a claim liability on a financial guarantee insurance contract when the insurance entity expects that a claim loss will exceed the unearned premium revenue for that contract based on the present value of expected net cash outflows to be paid under the reinsurance contract. Premium Deficiency⁴⁶ • A probable loss on insurance contracts exists if there is a premium deficiency relating to short-duration or long-duration contracts.

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Other Liabilities		
Accounts payable and accrued liabilities – Line 33 - Measurement basis not specified Sundry liabilities – Line 36 - Any liabilities (including prospective and contingent liabilities) not assigned to another line. - Measurement basis not specified Letters of credit, guarantees and other instruments – Line 37 - Only non-insurance related instruments are recorded - Instruments which relate to insurance operations are not recorded on the balance sheet (off-balance sheet) - Measurement basis not specified	Provisions, Contingent Liabilities and Contingent Assets⁴⁷ - A liability is measured as the amount that an entity rationally would pay at the end of the reporting period to be relieved of the present obligation, being the lowest of: - Present value of the resources required to fulfil the obligations; - The amount that the entity would have to pay to cancel the obligation; and - The amount that the entity would have to pay to transfer the obligation to a third party - Re-measurement of the present value of the resources required to fulfil the obligation takes into account changes in estimates of: - The expected outflows of resources; - Market assessments of the time value of money; and - The risk that the actual outflows of resources might ultimately differ from those expected. - Provisions: The amount recognised as a provision should be <u>the</u> best estimate of the expenditure required to settle the present obligation at the balance sheet date, that is, the amount that an entity would rationally pay to settle the obligation at the balance sheet date or to transfer it to a third party. - Contingent Liabilities: Entities should not recognise contingent liabilities - but should disclose them, unless the possibility of an outflow of economic resources is remote.	Contingencies⁵⁰ See above. Commitments⁵¹ - Commitments that qualify as derivative instruments are - Initially measured at fair value - Subsequently measured at fair value - Commitments that are in the form of forward contracts and purchased options designated as held to maturity, available for sale, or trading - Measured initially in a manner consistent with the accounting prescribed for that category of securities - Measured subsequently according to their initial classification Guarantees⁵² - Initial measurement of a guarantee that is: - Issued in a stand-alone arm's length transaction with an unrelated party, the liability recognised shall be the premium received or receivable by the guarantor. - Issued as part of a transaction with an unrelated party, the liability recognised shall be an estimate of the guarantee's fair value. - Issued as a contribution to an unrelated

⁴⁷ IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*; Exposure Draft on IAS 37 January 2010.

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	Financial Instruments⁴⁸ • Financial liabilities can be valued at: 1. Fair value through profit or loss 2. Amortised cost using the effective interest method • Initially, financial assets and liabilities are measured at fair value (including transaction costs, for assets and liabilities not measured at fair value through profit or loss) • Subsequently, financial assets and liabilities (including derivatives) should be measured at fair value, with the following exceptions: 1. Loans and receivables, held-to-maturity investments, and non-derivative financial liabilities are measured at amortised cost using the effective interest method 2. Investments in equity instruments with no reliable fair value measurement (and derivatives indexed to such equity instruments) is measured at cost 3. Financial assets and liabilities designated as a hedged item or hedging instrument are subject to measurement under the hedge accounting requirements of the IAS 39 4. Financial liabilities that arise when a transfer of a financial asset does not qualify for de-recognition, or that are accounted for using the continuing-involvement method, are subject to particular measurement requirements.	party, the liability recognised shall be measured at its fair value • For probable contingent losses for which the amount of loss can be reasonably estimated, the liability shall be the greater of the following: 1. The amount that satisfies the fair value objective 2. The contingent liability amount required to be recognised at inception of the guarantee

⁴⁸ IAS 39 *Financial Instruments – Classification and Measurement* - This partially superseded by IFRS 9.

⁴⁹ IAS 39 *Financial Instruments – Classification and Measurement* - This partially superseded by IFRS 9.

⁵⁰ FASB ASC 450 *Contingencies*

⁵¹ FASB ASC 440 *Commitments*

⁵² FASB ASC 460 *Guarantees*

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	<i>Financial Guarantees</i>⁴⁹ • Financial guarantee contracts are recognised: 1. Initially at fair value 2. Subsequently at the higher of: • The amount determined in accordance with IAS 37 and • The amount initially recognised less, when appropriate, cumulative amortisation recognised in accordance with IAS 18 Revenue. (If specified criteria are met, the issuer may use the fair value option in IAS 39. Furthermore, different requirements continue to apply in the specialised context of a 'failed' de-recognition transaction)	