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Life conference and exhibition 2011
Steven Hall and Raymond Bennett

Financial and Regulatory Reporting

Parallels with Banking Industry

22 November 2011

Introduction: some market commentary

"Sweeping regulatory changes proposed for banks and insurance companies could increase borrowing costs for European companies by up to €50bn annually when new rules come fully into effect, according to estimates by Standard & Poors"

Financial Times

"The new regulatory regime for European Insurers from 1 January 2013 is poised to transform how insurers allocate their assets, leading to shifts in demand and pricing for several asset classes"

Fitch ratings

"The new Basel 3 rules requiring banks to hold more capital are too weak and should be doubled… cutting economic output by 6% over a long period"

Bank of England Discussion Paper, January 2011

"These shortfalls are entirely manageable ... The more difficult question is what effect the new rules will have on the cost and availability of credit and bank profitability"

Head, Capital Advisory, Global Investment Bank

Introduction: changing regulations

Agenda

- Basel 3
  - Background
  - Comparison with Solvency II
  - Lessons to be learned from Basel 3
- Solvency II vs. IFRS 4 Phase II
- International Association of Insurance Supervisors

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Background

Basel 3

Objectives of the Basel 3 reforms

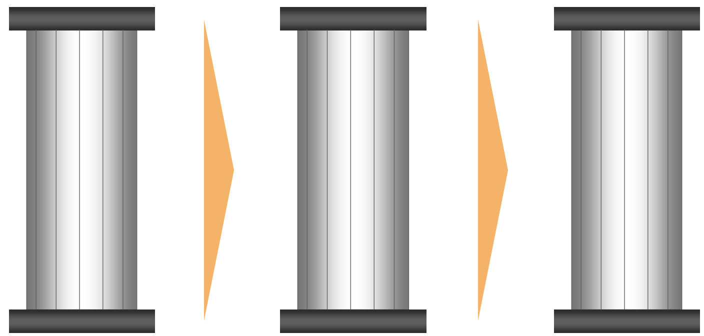
'…strengthen global capital and liquidity regulations with the goal of promoting a more resilient banking sector.'

'…improve the banking sector's ability to absorb shocks arising from financial and economic stress…'
BCBS, December 2009

Main issues driving Basel 3

- Quality of capital
- Excessive leverage
- Capital buffers to be maintained
- Calibration and risk coverage
- Insufficient liquidity

The Basel II framework



Pillar 1	Pillar 2	Pillar 3
Minimum capital requirements	**Supervisory review**	**Market discipline**
• Credit risk • Market risk • Operational risk	• Supervisory review of risk management and regulatory capital	• Enhanced disclosure

Basel 3: Building On Basel II

- What is not changing?
  - Pillar 1 - Minimum capital requirements (RWA) approaches
    - Credit risk – Standardised Approach, Foundation Internal Rating Based and Advanced Internal Rating Based
    - Market risk – Standardised Approach and Internal Models Approach
    - Operational risk - Basic Indicator Approach, Standardised Approach and Advanced Measurement Approach
  - The Principles underlying Pillar 2 appear fundamentally unchanged

Basel 3: Building On Basel II

- What is not changing?
  - Disclosure requirements (Pillar 3) remain significantly the same
  - The role of External Credit Assessment. Institutions (ECAIs) and Export Credit Agencies (ECA) has not fundamentally changed

Basel 3: Building On Basel II

So what **is** changing??

Basel 3: Building On Basel II

- Key Basel 3 changes
  - Longstanding 8.0% Basel minimum ratio increases to 10.5%, including 2.5% “capital conservation buffer”
  - Of this a minimum of 7.0% (including capital conservation buffer) will have to be in the form of “common equity”
  - Possibility of minimum levels being raised a further 2.5% when “countercyclical buffer” triggered by excessive loan growth

Basel 3: Building On Basel II

- Key Basel 3 changes
  - New 3% leverage ratio & 30-day liquidity coverage ratio confirmed
  - Also, there is possibility of an additional Globally Systemically Important Bank capital charge and the ICB proposal recommends a 10% core equity Tier 1 for retail banks
  - Mutuals and cooperatives discussions over Tier 1 capital instruments

Basel 3: Building On Basel II

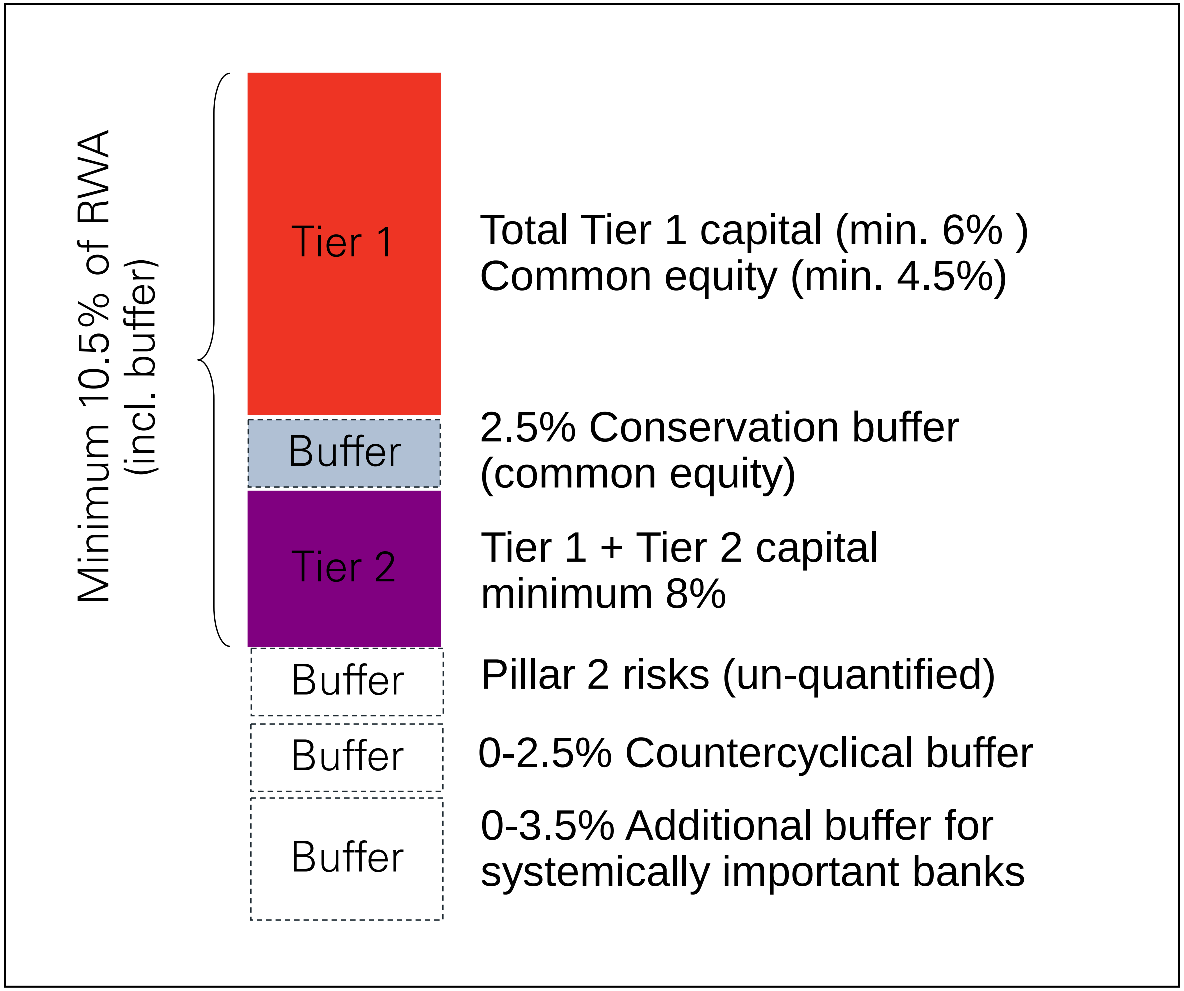
- Phased implementation: changes to capital formally begin 2013; but new leverage & liquidity ratios soft-launched sooner in observation mode (2011)
- Major banks in Europe should find it possible to comply with these new numbers – but may need a significant revamp of capital management, liquidity risk management, stress-testing, & ICAAP

Basel 3: Key design elements

Basel 3

- Capital reform
  - Quality, consistency and transparency of capital base
  - Capturing all risks
  - Controlling leverage
  - Buffers
- Liquidity standards
  - Short term: liquidity coverage ratio (LCR)
  - Long term: Net stable funding ratio (NSFR)
- Systemic risk and interconnectedness
  - Capital incentives for using CCPs for OTC
  - Higher capital for systemic derivatives
  - Higher capital for inter-financial exposures
  - Contingent capital
  - Capital surcharge for systemic banks

Capital reform: Basel capital ratios in 2019

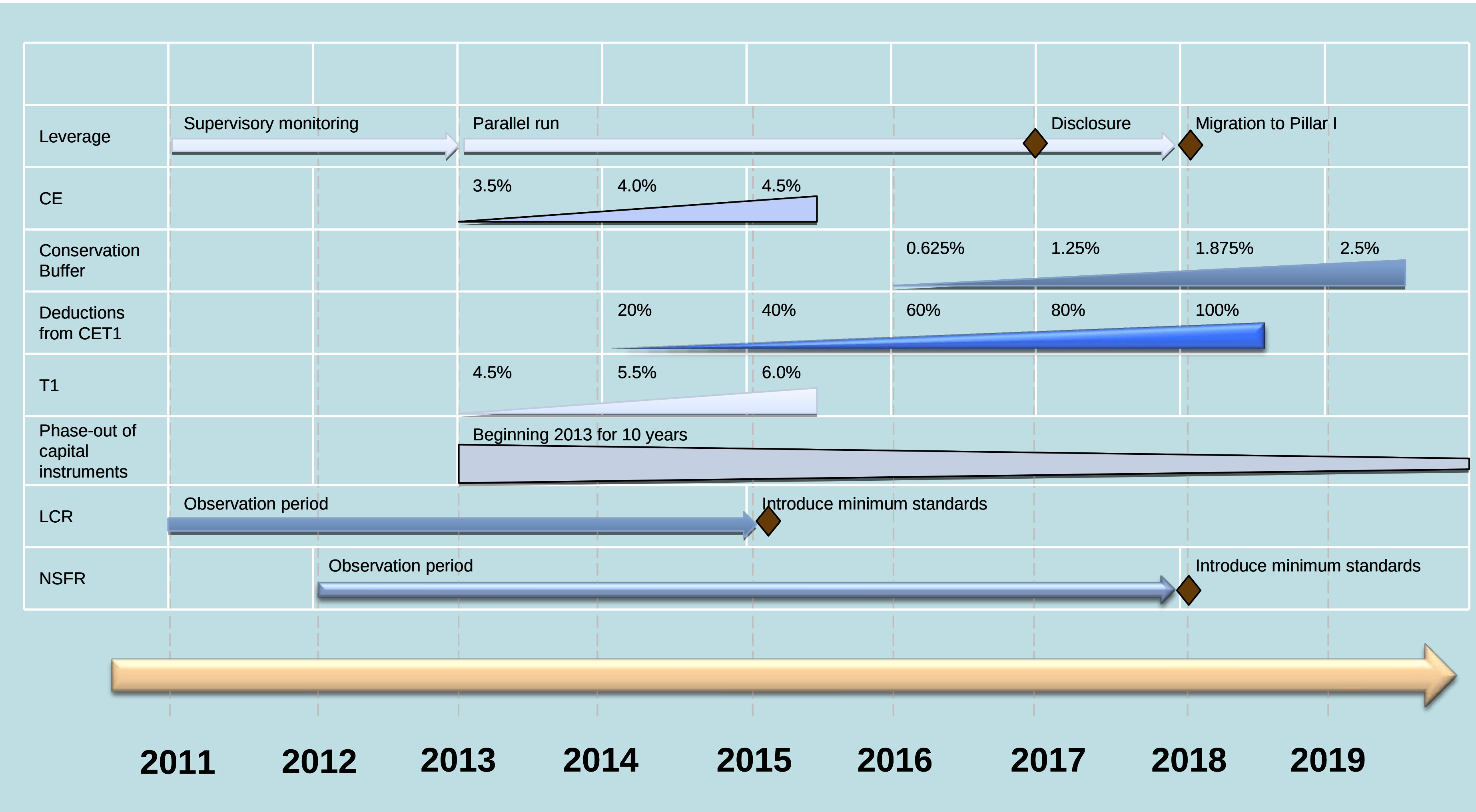


Source: Basel Committee

Liquidity standards: Quantitative liquidity measures under Basel 3

- Basel 3 has seen the introduction of global liquidity standards. The main two measures agreed by the committee were
  - the liquidity coverage ratio
  - the net stable funding ratio
- The net stable funding ratio has been the cause of significant debate within the industry because of the effect it has on potential maturity transformation and subsequently firms' P&Ls
- Within the UK the Basel regime should be complementary to that of the FSA liquidity standards that were introduced in 2009. In most cases FSA requirements have been tougher than those likely to be implemented under the Basel framework

Basel II: Timeline for implementation



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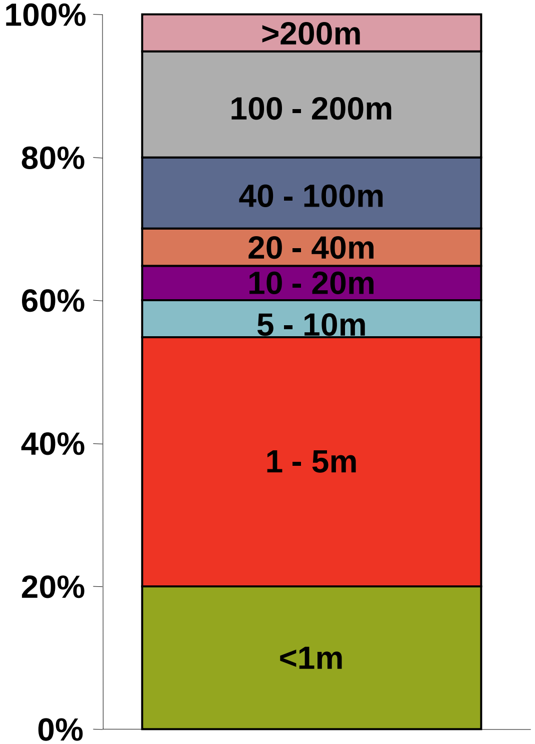
Comparison with Solvency II

Basel 3

Similarities…complex and costly

Basel II budgets (US$)



Source: UK Basel Survey

Basel I

13 papers

Solvency I

2 papers

Basel II

147 papers

Solvency II

Over 80 papers

How complexity and variability can be dealt with?

CEA undertook an analysis on implementation costs

Cost (in €bn)	Implementation costs	Ongoing (per annum) cost
Gross estimate	4.0-6.0	0.6-1.0
Reduction for work already done/planned	2.0-3.0	0.3-0.5
Net estimate	2.0-3.0	0.3-0.5

Implementation challenges

	Challenge	Implementation
Technical	• Modelling complexity	• Should not be underestimated
	• Extent of data requirements	• Lack of data causing problems for banks
	• Complex IT and system requirements	• Difficult to communicate design to IT
Management	• Business case	• Senior Management involvement and responsibility
	• Changing legislation	• Implementation before final rules
	• Availability and quality of resources	• Lack of skilled resources in the market place
	• Risk Management framework	• Role of Internal Audit, convergence of risk and finance functions
	• Documentation requirements	• Proof to regulator

BUT: Insurers are not banks

	Banking	Insurance
Balance sheet perspective	• Asset driven	• Non-life insurers are liability driven – insurance risk • Life insurers are more asset driven – market risk
Key risks	• Credit risk and liquidity risk	• Varies according to products written – insurance, credit and market risks
Key income sources	• Spread on assets • Fee based services	• Underwriting profit • Investment income
Exposure to liquidity runs	• Significant due to maturity transformation role	• Limited due to slow run-off of liabilities • Insurers are sources of liquidity

Key differences between Solvency II and Basel bank approaches

Diversification	Basel - Some implicit diversification; Wider diversification has to be strongly justified Solvency - Explicit allowance under Solvency II
Pro-cyclicality	Basel – Significant issue Solvency II – Attempts being made to deal with
Range of risks included	Basel - Credit, Operational and Market risks under Pillar 1 Solvency II – Inclusion of wider group of risks under Pillar 1 (internal model to capture all quantifiable risks)
Supervisory approach	Basel – Similar approach by supervisors Solvency II – Disparate approach by supervisors currently and aim for harmonisation through formalisation of supervisory colleges
IFRS Compatibility	Basel II – Not considered Basel 3 – Partially considered Solvency II – Partial consideration (IFRS4 still under discussion but similar 'building block' approach adopted)

Comparison of Basel regulation with Solvency II

	Basel	Solvency II
Provenance	• Developed by Basel Committee for Banking Supervision, a global body	• Developed by European Commission and agreed by Parliament and Council
Overall aims	• Promoting ‘safety and soundness’ in the financial system • Linking capital adequacy requirements to banking risks • Improving corporate governance in respect of banking risks • Improving global supervision and the reporting of capital adequacy	• Increase policyholder protection across Europe • Encourage transparency and market discipline • Remove regulatory barriers to entry by setting a level playing field increasing competition
Legal authority	• Basel is not legally binding • Implemented at local level by different regulatory bodies e.g. CRD 4 in EU	• Directive is legally binding on all member states • Member state to translate Directive into national legislation

Comparison of Basel regulation with Solvency II (cont'd)

	Basel	Solvency II
Geographic coverage	• Global application (subject to legal authority point above)	• Europe only, although affect for European insurers with non-EEA business
Approach and structure	• Introduces risk based regime • 3 Pillars • Basel 3 builds on Basel II which broadly remains in force	• Introduces risk based regime • 3 Pillars • Solvency II is more different from predecessor legislation
Internal models	• Range of approaches across Standardised and Internal Models • Capital incentives incorporated to move to internal models	• SCR options = standard formula or internal model • Internal model requires approval
Scope of application	• Calculation at Group level and all solo levels unless otherwise stated	• Group and solo application

Comparison of Basel regulation with Solvency II (cont'd)

	Basel	Solvency II
Current status	• Basel II has been operational since 2007 • Basel 3 is agreed internationally • CRD 4 is in consultation	• Level 1 text agreed in November 2009 • Omnibus 2 (making changes to Level 1) due to be agreed in December 2011 • Level 2 and 3 agreement will following in coming years
Start date	• 2013 with transitional arrangements until 2019 • Soft implementation of liquidity and leverage at earlier dates	• 1 January 2014 looks to be the likely implementation date
Transitional's	• Gradual build up of capital requirements officially • Market deadlines likely to be earlier	• Transitional provisions currently under discussion

Comparison of Basel regulation with Solvency II (cont'd)

	Basel	Solvency II
Portfolio invariance	• Basel assumes portfolio invariance • Supervisory correlation approaches in Pillar 1 with no explicit allowance for internal diversification considerations given	• Firms capture own estimates of diversification in internal model • Prescribed parameters in standard formula
Liquidity	• Specific requirements new to Basel 3 compared with Basel II • Introduction of 2 new ratios – short term LCR, long term NSFR	• Covered by Pillar 2 requirements and internal model
Impact on capital	• Basel II tailored capital to the risks associated with business and provide incentives to move from Standard approaches to Internal model approaches • Basel 3 seeks to raise overall levels of capital	• Solvency II seeks to redistribute capital more in line with the risks faced by the business • No attempt to raise overall capital levels • QIS5 saw a fall in solvency ratios

Comparison of Basel regulation with Solvency II (cont'd)

	Basel	Solvency II
Quality of capital	• Removal of Tier 3 • Enhanced requirements for eligibility of Tier 1 and Tier 2 capital • Much enhanced 'quality' of capital	• Enhanced rules around own funds tiers backing the capital requirements
Consideration of future profits	• Calculations at balance sheet date – no consideration of future income or profits allowed	• Expected profits in future premiums still under discussion
Definition of capital – adjustments	• Goodwill and intangibles deducted from Common Equity Tier 1 capital	• Capital to be held against such items but no prescription on form of capital
Capital volatility	• Focus on stressed parameters to reduce volatility in market risk portfolios • Pro-cyclicality elements will still exist in Banking book	• Arguably more volatile capital position due to market consistent Pillar 1

Comparison of Basel regulation with Solvency II (cont'd)

	Basel	Solvency II
Counter-cyclical buffers	• New regime for counter-cyclical buffers to provide framework to support build-up and release of capital to help in boom/bust times	• [There are considerations of pro-cyclicality?]
Pillar 2 regime	• Well established ICAAP and SREP processes	• Significant focus on risk management framework and wider system of governance
Disclosure regime	• Full Pillar 3 disclosure regime for market discipline • Additional disclosures required following Basel 3 but no fundamental change to approach	• Full Pillar 3 disclosure regime for market discipline • Private regulatory reporting

Basel 3 programmes compared with Solvency II

Basel	Solvency II
Basel 3 proposals more stable. Yet to see FSA proposals.	Uncertainty remains as debates are on-going
Capital and liquidity	Capital and liquidity
Interaction with other major regulatory change programmes	Relatively calm global regulatory environment when started - now significant interaction with other changes
Can take a more piecemeal approach	Outcome only as strong as weakest link, so extensive group-wide monitoring
Fixed regulatory deadline but effective market deadline much earlier.	Working to a fixed regulatory deadline “race to the finish”.
More strategic with key themes around capital and liquidity	Extensive operational implementation activity around model build and use, Pillar 2 requirements and preparation for Pillar 3 reporting.

Interaction between Basel 3 and Solvency II

- Pillar 1 group capital requirement for banks – investment in Life companies deducted from available capital in bank
  - Under Pillar 2, banks are expected to look at all risks they are faced with
  - Hence would typically look to see that the insurer was adequately capitalised in the first place and what stresses it had covered to determine whether additional capital was required

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Lessons to be learned from Basel 3

Basel 3

Lessons from a regulatory perspective

	Likely Impact
Large firms like flexibility; smaller firms like guidance/ rules	M
But this also needs flexibility to align to individual markets and firms	L
Organisations to choose most relevant approach Proportionality built into framework	M
Advantages from involvement – potential winners and losers	M

Comparison with Solvency II and IFRS II

- Regulatory instruments…Lamfalussy vs. Basel 3 mechanism
- Timing of implementation (timeframes between final requirements and full implementation)
- Accounting:
  - Basel 3 starts with accounts as basis; adjustments made to measure solvency position
  - Solvency II technical provisions not based on IFRS/accounts

Comparison with Solvency II and IFRS II (cont'd)

- Speed of implementation (developed over shorter timeframe than SII)
- Transitional arrangements
- Basel 3 – impact on business model
- Basel 3 – publicity

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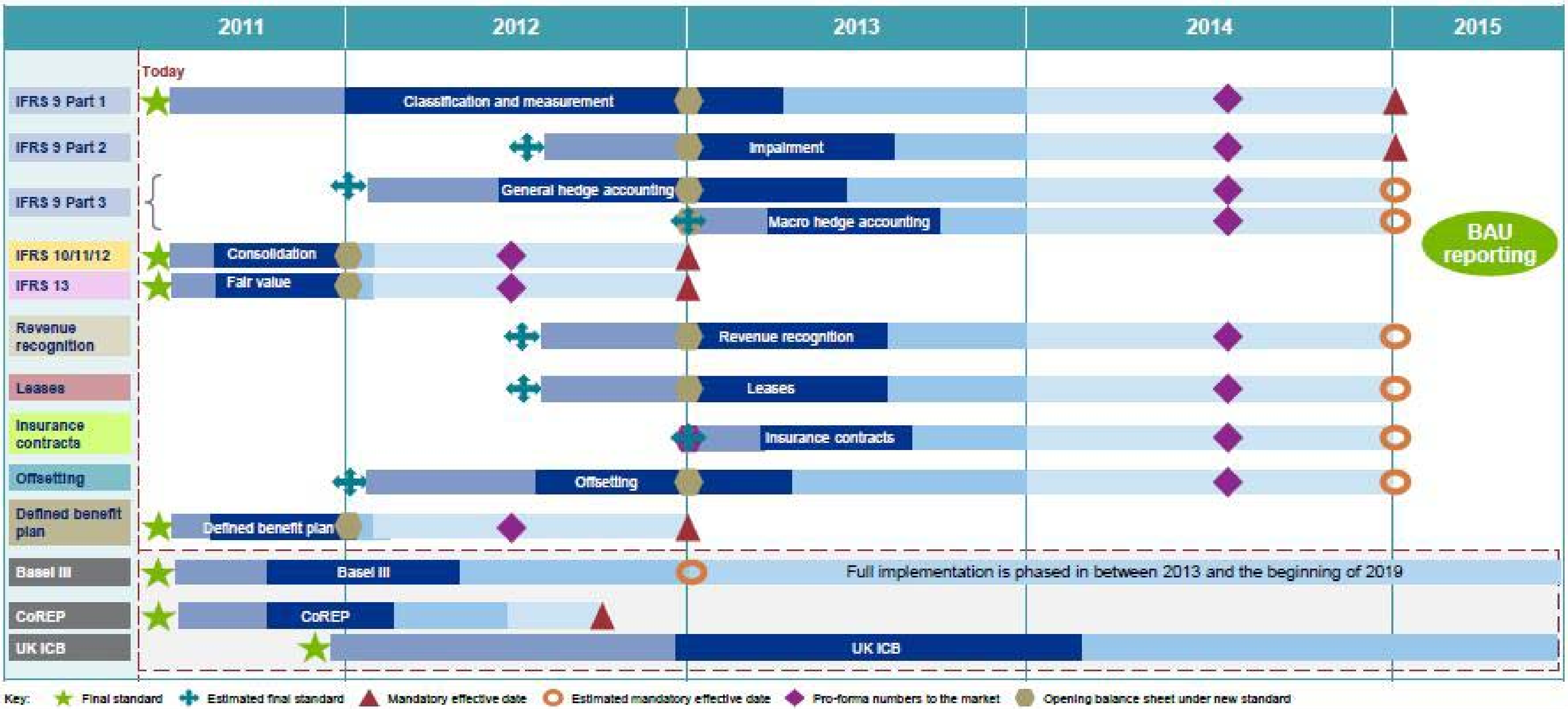
High Level Overview

Accounting Overview

Changing accounting standards



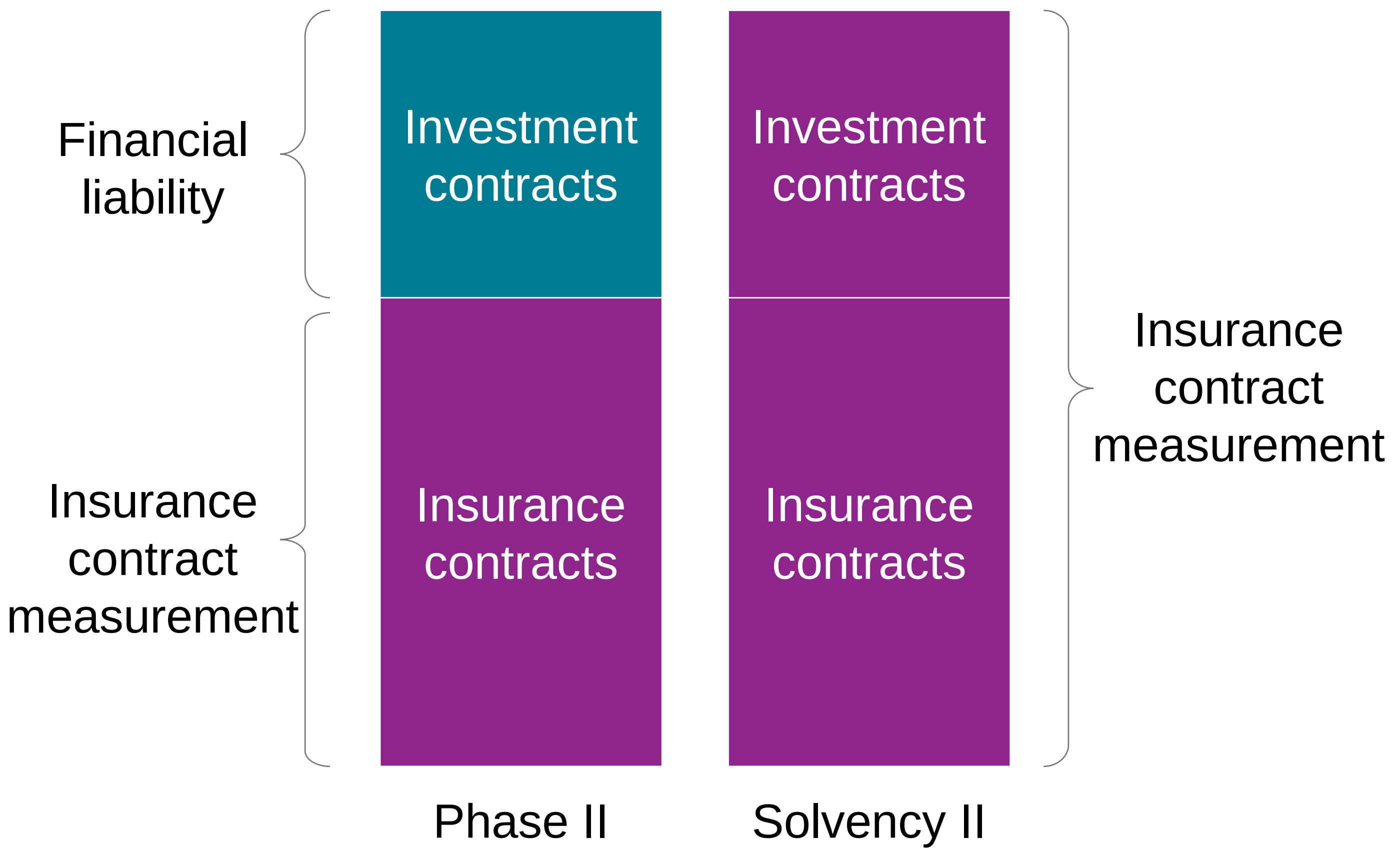
IFRS 4 Phase II versus Solvency II

- IFRS 4 Phase II is principles based, Solvency II is more prescriptive (rules based)
- IFRS 4 Phase II is concerned with consistent measurement, transparency and comparability. Solvency II is concerned with better protection for policyholders, consistency across Europe and competitiveness of EU insurers
- Asset treatment is broadly similar but there are key differences in scope and coverage of liabilities
- IFRS 4 Phase II requires recognition of a residual margin to remove day one profits

IFRS 4 Phase II versus Solvency II (cont'd)

- There are key differences in the calculation of discount rates...
- ...and in the treatment of expenses
- 'Tranching' of business for the purpose of calculating and releasing the residual margin is required under IFRS 4 Phase II – likely to provide significant systems issues.

IFRS 4 Phase II versus Solvency II (cont'd)



IFRS 4 Phase II versus Solvency II (cont'd)

Area	Topic	Phase II	Solvency II (QIS 5)
Measurement	■ Short duration contracts	■ Premium allocation method	■ No distinction
	■ Replicating portfolio measurement	■ Permitted but no obligation	■ Required where whole liability is hedgeable
	■ Residual Margin	■ Removes day one profits	■ N/A
Cash flows	■ Expenses	■ Greater scope to include overheads under Solvency II?	
	■ Contract boundaries	■ Potential differences relating to scope	

IFRS 4 Phase II versus Solvency II (cont'd)

Area	Topic	Phase II	Solvency II (QIS 5)
Time value of money	■ Discount rate	■ Both are risk free rates with no adjustment for own credit risk	
	■ Illiquidity premium	■ Required, limited guidance	■ Different currency rates, with variety of illiquidity premium related to liability characteristics
Risk adjustment/ margin	■ Calculation approach	■ Three options (Confidence level, Conditional Tail expectation, Cost of Capital approach)	■ Cost of Capital approach required
	■ Diversification	■ Recognised at portfolio level, no diversification between portfolios	■ Recognised between lines of business, limited to entity

IFRS 4 Phase II versus Solvency II (cont'd)

- Reinsurance
  - Solvency II requires net calculation of risk margin
  - Phase II requires all calculations to be gross of reinsurance

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High Level Overview of Global Solvency Developments

International Association of Insurance Supervisors

Global Financial Crisis highlighted…

- Regulatory focus was at individual firm level and there was not enough oversight at group or the macro level
- A lack of oversight and monitoring of non-regulated subsidiaries/activities
- Legal and legislative limitations on insurance group supervision
- Limitations in the quality and content of supervision
- A lack of coordination of responsibilities and mechanisms among supervisors
- A lack of effective tools to identify and monitor regulatory arbitrage on a cross-sector and cross-boarder basis

International Association of Insurance Supervisors: global framework

- About the IAIS
  - Established in 1994 as the international standard setter for insurance
  - Represents 190 supervisory jurisdictions with 120 observers
  - Acts as a forum for insurance supervisors to discuss developments in the insurance sector and topics affecting regulation

International Association of Insurance Supervisors: global framework (cont'd)

- IAIS global framework essentially in two components
  - Insurance Core Principles (ICPs)
  - ComFrame (Common Framework for the supervision of Internationally Active Insurance Groups)

Insurance Core Principles (ICPs)

- IAIS principles, standards and guidance apply to individual insurance supervisors who are members of the IAIS
- National regulators are expected to implement the Insurance Core Principles (ICPs)
- ICPs are now in the form of standards with accompanying guidance papers
- 26 ICPs which cover governance, legal, solvency, valuation and group supervisory requirements

Insurance Core Principles (ICPs) (cont'd)

- Enforced by the IAIS, though real enforcement achieved by IMF/World Bank Financial Sector Assessment Program (FSAP)
- New ICPs have just been endorsed and become effective this month
- Example of importance of new ICPs evidenced by the US Solvency Modernisation Initiative (SMI) of the NAIC re: introduction of a US ORSA

Insurance Core Principles (ICPs) (cont'd)

- Application of ICPs
  - Applies to insurance legal entities and insurance groups
  - Does not directly apply to non-insurance entities (regulated or unregulated) within an insurance group, but it does apply to insurance legal entities and insurance groups with regard to the risks posed to them by non-insurance entities
  - Uses a total balance sheet approach

Key standards (ICPs) – example: Capital Adequacy

- Capital adequacy
- Establishes at least two regulatory requirements
  - Minimum Capital Requirement (MCR)
  - Prescribed Capital Requirement (PCR)
- Also provides for the use of internal models to establish level of regulatory capital requirements – three keys tests
  - Statistical quality test
  - Calibration test
  - Use test

ComFrame objectives

- With the Common Framework for the Supervision of Internationally Active Insurance Groups (ComFrame) the IAIS aims to:
  - Develop methods of operating group-wide supervision of Internationally Active Insurance Groups (IAIGs)
  - Establish a comprehensive framework for supervisors
  - Foster global convergence of regulatory and supervisory measures and approaches

Solvency III? IFRS Developments? Supplementary Reporting Requirements?

Looking ahead

Solvency III? IFRS III?

- Basel I… Basel II… Basel 3… trend? Or have we got Solvency II right?
- EIOPA have confirmed that Solvency II will be replaced with the IAIS Standards when these have been developed appropriately
  - 5-10 year timeframe
- Capital targets?
- SIFI – impact?
- Location of capital

What can be done now to be ahead of the curve?

- Capital management strategies: VIF financing, hedging, Fin Re etc
- Implementation of IFRS 4 Phase II – gap analysis, potential impact on business (especially new business or new products)
- Assess data/modelling requirements – remain flexible

Questions or comments?

Expressions of individual views by members of The Actuarial Profession and its staff are encouraged.

The views expressed in this presentation are those of the presenter.

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