The Actuarial Profession
making financial sense of the future

Life Conference 2012
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There's more to Life than Solvency II

Brussels, November 2012

Solvency II myopia

- MIFID
- Basel III
- Dodd-Frank
- Recovery and Resolution Directive
- Wheatley review
- Liikanen review

Are insurers Systematically Important Financial Institutions?

"Financial institutions which typically demonstrate a high degree of leverage, liquidity or maturity mismatch or financial interconnectedness can transmit, and often amplify, shocks arising elsewhere in the financial system"

Central clearing and related issues

- Central clearing
- Discounting
- Other issues (including CVA)

Catalyst for change: September 2008

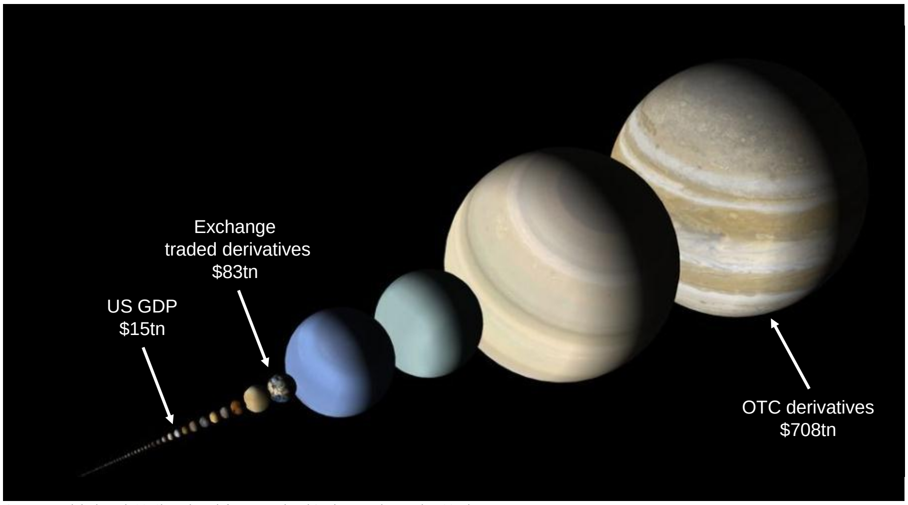
The line in the sand

G20 commitment

"All standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at latest. OTC derivatives contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements."

Increase market transparency, reduce counterparty risk and systemic risk

The scale of the ambition



Sources: Insight (March 2012), and Bank for International Settlements (November 2011)

6

EMIR covers more than just mandatory clearing

Mandatory clearing

- Requirement to clear certain derivative transactions
- ***Pension business of Insurers has a temporary exemption***

Reporting

- Report all derivative contracts to Trade Repositories
- ***Applies to all Insurance business***

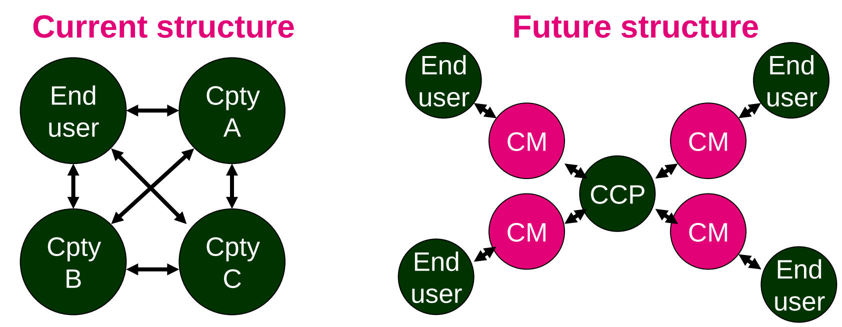
New non-cleared requirements

- Increased collateral requirements
- Likely requirement to post initial margin as well as variation margin
- Minimum operational standards
- ***Applies to all Insurance business***

RULES NOT FINALISED !!

7

Changes from OTC clearing



- Post trade risk management not execution
- End user still trades with chosen bank counterparty (Cpty)
- Transfer trade to clearing member who registers it at a CCP

Changes from OTC clearing contd.

	Current position	Expected centrally cleared	Expected non-cleared regime
Legal agreements	ISDA/CSA with each counterparty.	Need documentation with each counterparty and a clearing member bank (CM) to access clearing house (maybe >1 CM)	Need documentation with each counterparty
Initial margin	Typically none	Only cash or gilts	Flexible
Variation margin	Varies; typically cash and gilts	Only cash	Flexible
Default risk	Exposed to default of the counterparty you trade with	Directly affected only if your CM defaults Loss mitigated by initial margin Back-up CM recommended	Exposed to default of the counterparty you trade with Loss mitigated by initial margin

Value added?

Potential benefits	Potential disadvantages
Provides a range of **protection** in case of default	Likely to increase **cost** and reduce returns
Greater **regulatory transparency**, may help regulators detect systemic risk build up	Interest rate swaps likely to be cleared, but **inflation swaps not likely to be cleared initially** - **reduces possibility of netting margin** between the two
All trades going through a limited number of CM enables more opportunities to **net margin calls**	Only **cash variation margin** accepted by clearing houses - insurers and pension schemes generally don't hold significant cash
Political need for regulators to be seen to take action	Less flexibility from a requirement to deliver **initial margin**

What next?

Implementation

- **New documentation**
- **Reporting and disclosure**
- Appointing clearing agents
- Developing appropriate client models with clearers

Cost

- **Increased costs (both direct and indirect)**
- Opportunity cost of increased and new collateral requirement
- Reduced flexibility
- Liquidity costs
- Splitting of netting sets

Strategy & Innovation

- **Asset allocation**
- Repo and collateral financing
- Synthesising assets
- Tactical, strategic and structural solutions

OTC Derivatives

- Central clearing
- Discounting
- Other issues (including CVA)

CSA discounting

- Traditional method of swap valuation: 6m Libor swap curve
- Market moving to: CSA discounting

What does this mean?

- Derivatives are valued based on the cost of posting collateral
- Normally based on overnight index swaps (OIS)
- Some CSAs allow wider collateral

Why the move to CSA/OIS discounting?

- LIBOR was previously recognised as bank funding rate
  - No longer the case
  - Unpredictable and slow to react
  - Reactive to credit concerns
- Derivatives contracts which give rise to loans
  - Collateral at heart of risk management
  - Cost of collateral more closely aligned to OIS
- LCH moved to OIS in July 2010 following most major banks

Why does this matter?

Existing positions

- Insurers/Pension fund’s swaps are typically ITM – increase to valuation
- Greater focus on CSAs

Future balance sheet

- Solvency II currently uses a 6m Libor curve
  - Creates a basis exposure for insurers hedging using swaps valued off OIS
- Potentially similar issue for pension funds using swaps valuation

Managing the exposure

Re-coupon swaps

- Exposure greater for ITM/OTM swaps

Hedge the exposure

- OIS-LIBOR basis swaps

OIS – the future for interest rate swaps?

- Increasing demand for OIS as floating leg
- Liquidity developing
- Solvency II?

OTC Derivatives

- Central clearing
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Basel III/CRD IV

- Capital Requirement Directive IV sets up risk management framework for banks potentially impacting OTC derivatives
  - Likely to be delayed from target of 1 January 2013
  - CVA charges for OTC derivatives transactions
  - Impact of CVA charges likely to be minimal where initial margin is required in the new regime
  - Pension business of insurers may be exempt from CVA charges

18

CVA charging

- Credit Value Adjustment (CVA charge) takes account of counterparty risk in assessing cost of capital
- Default Value Adjustment (DVA charge) which is an allowance for the institution's own risk of fault that can offset the CVA charge
- Bank should adjust trade price for CVA charge to reflect counterparty risk of client and arguably offset DVA charge to represent own counterparty risk
  - Cost of trading increases for more risky counterparty and reduces for less risky counterparty
  - Impact greatest for long maturity contracts (e.g. may be 1.5-2bp for 20 year interest rate swap)

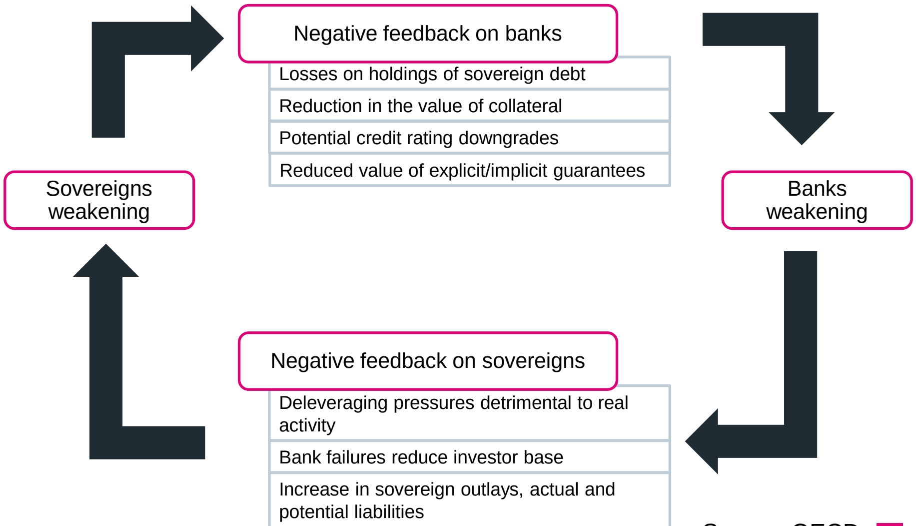
19

Bank deleveraging

Clouds on the banking horizon

Source: Nomura

The bank crisis-sovereign crisis

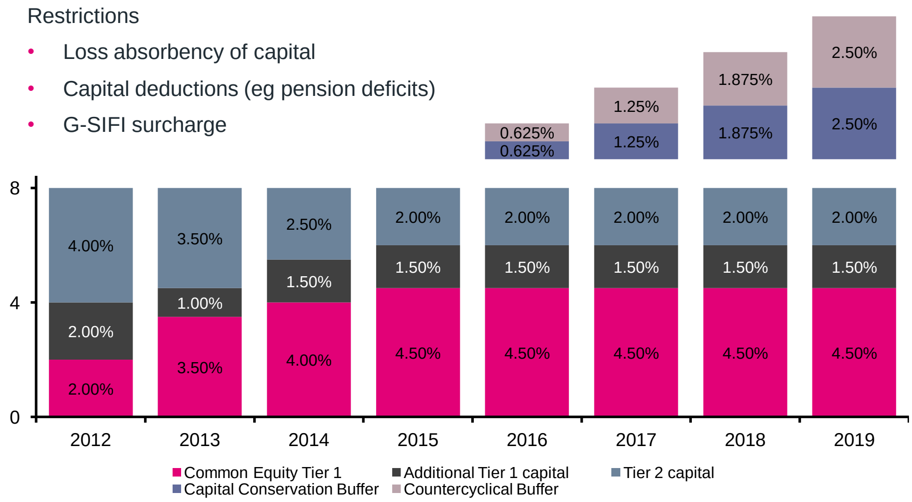


Source: OECD 22

Basel III capital changes

Restrictions

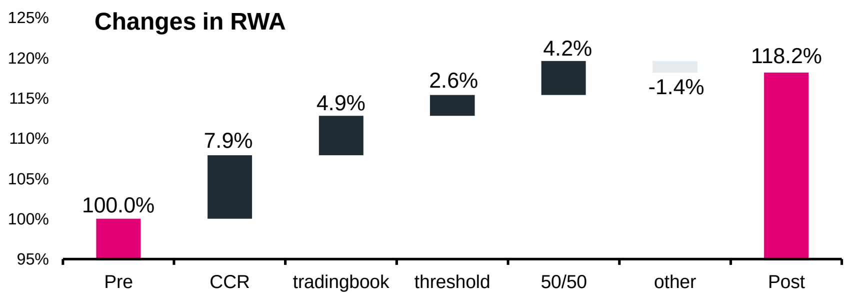
- Loss absorbency of capital
- Capital deductions (eg pension deficits)
- G-SIFI surcharge



Source: Deutsche Bundesbank 23

Basel III – other key areas

- Liquidity and net stable funding ratios
- Limits on leverage ratios
- Increase to capital charges – including CVAs

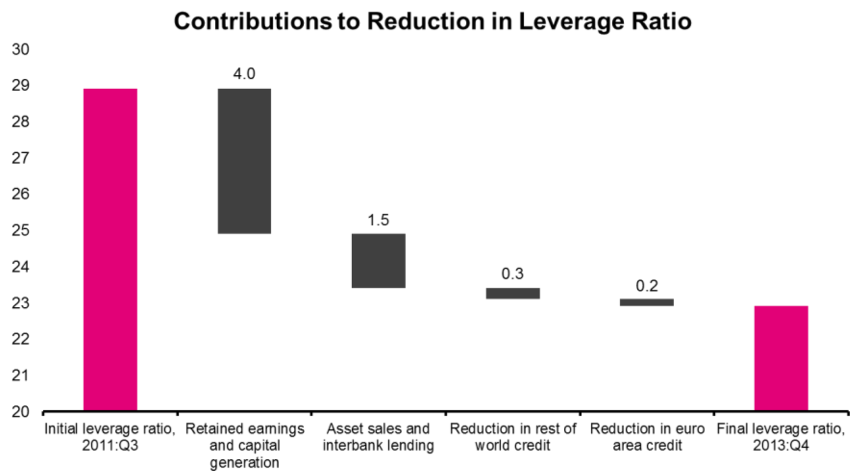


Source: BCBS

Banks responses

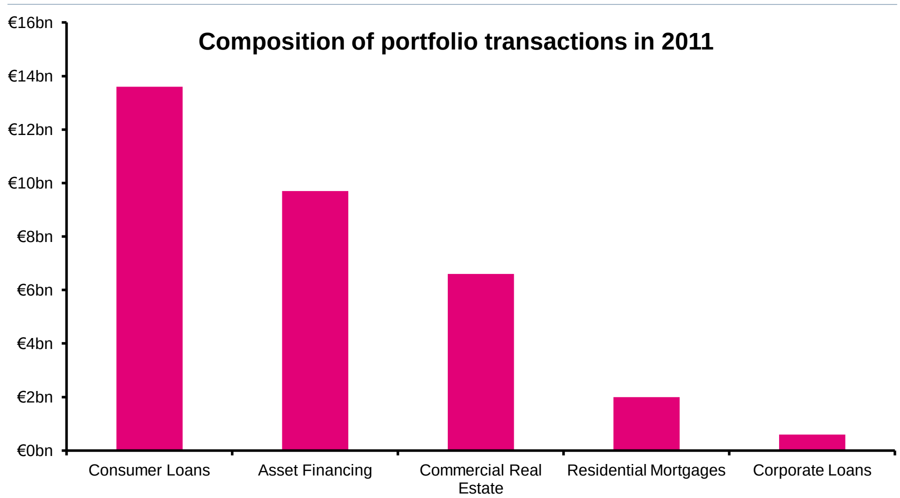
- Capital strengthening
- Change in funding mix
- Optimisation of capital methodologies
- Reduction in new origination of loans and run-off of certain sectors
- Outright sale of legacy loan positions

Sources of deleveraging



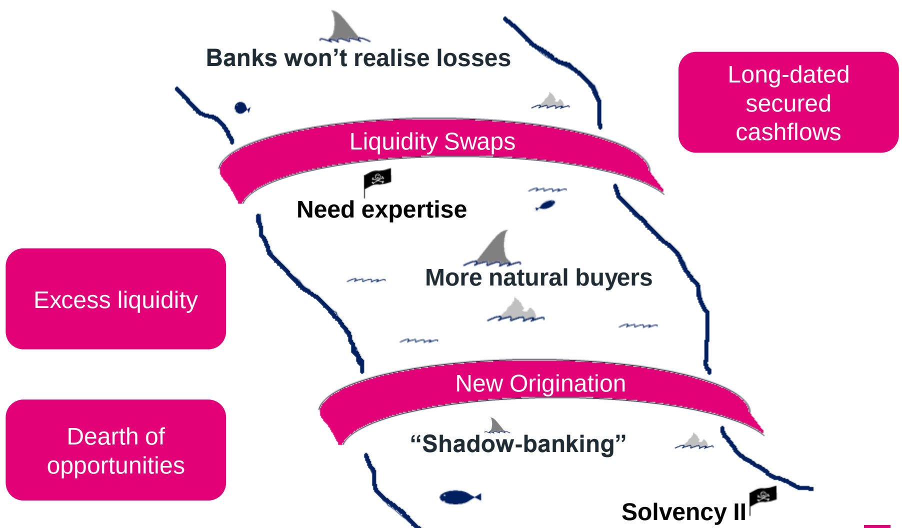
Source: IMF

Asset classes available

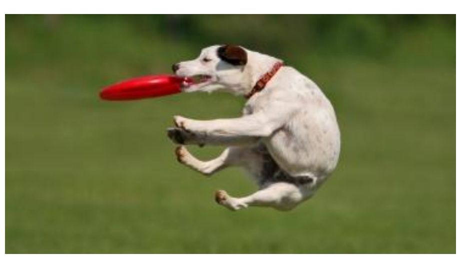


Source: Deloitte

Role for Insurers?



A final thought….

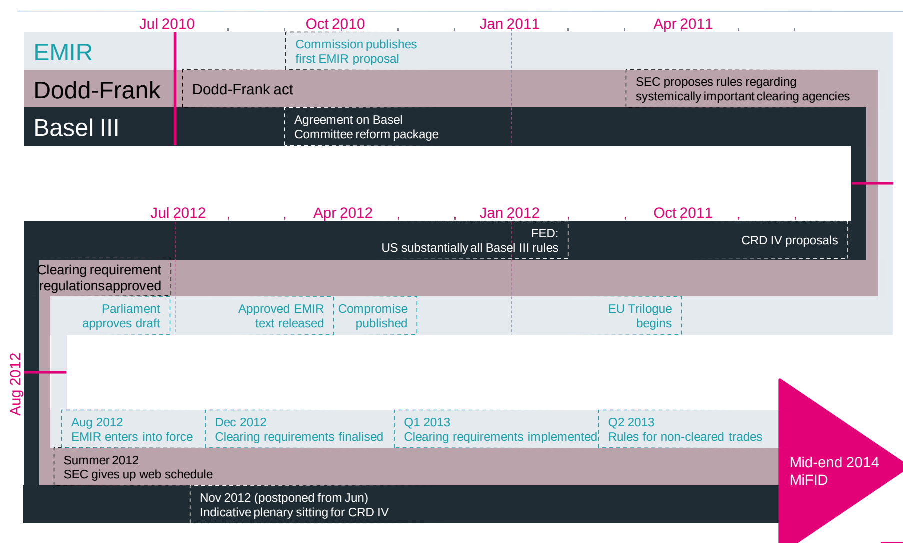


Questions or comments?

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.

Regulatory timetable



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