

Highlights of the Life Convention Colin Murray

Sovereign Debt Living in Limbo

7 March 2012

Agenda

- Summary of Irish sovereign debt crisis
- Allowance for credit risk
- Policyholders' expectations
- Lessons learnt

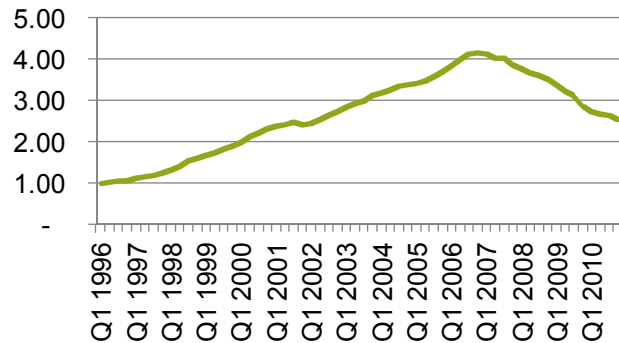
“Promises make debt, debt makes promises”

Summary of Irish debt crisis

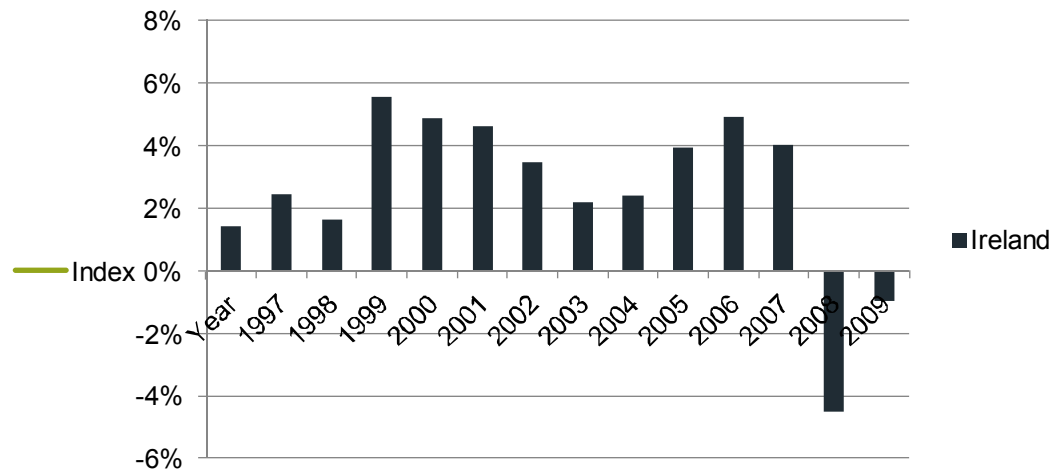


Boom to Bust

House Price Index



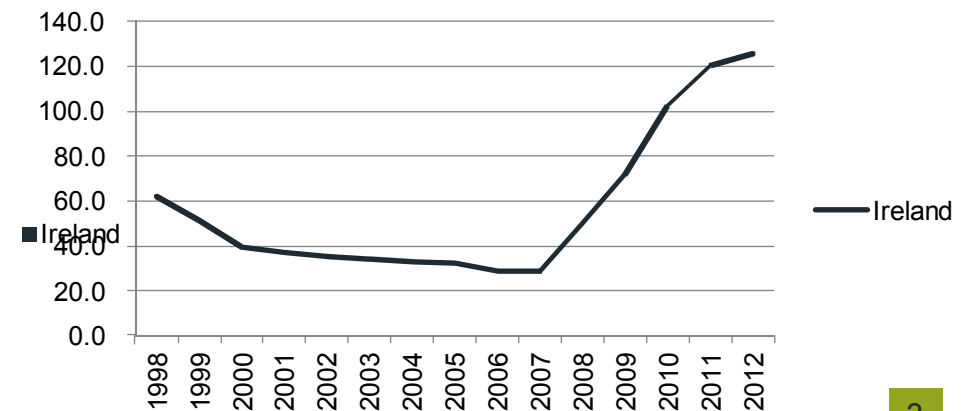
Ireland/CPI



Ireland - Growth GDP



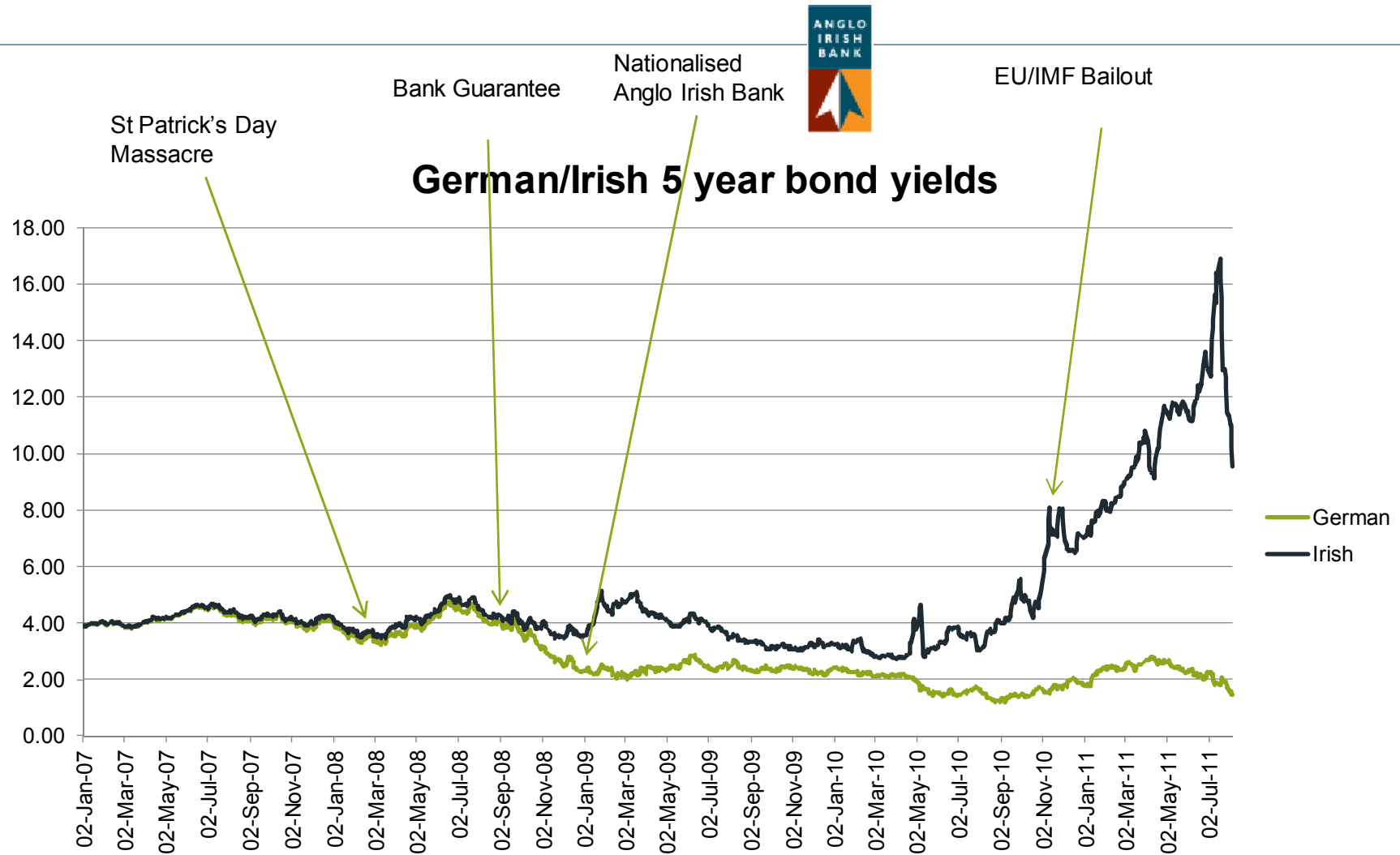
Ireland - Debt/GDP



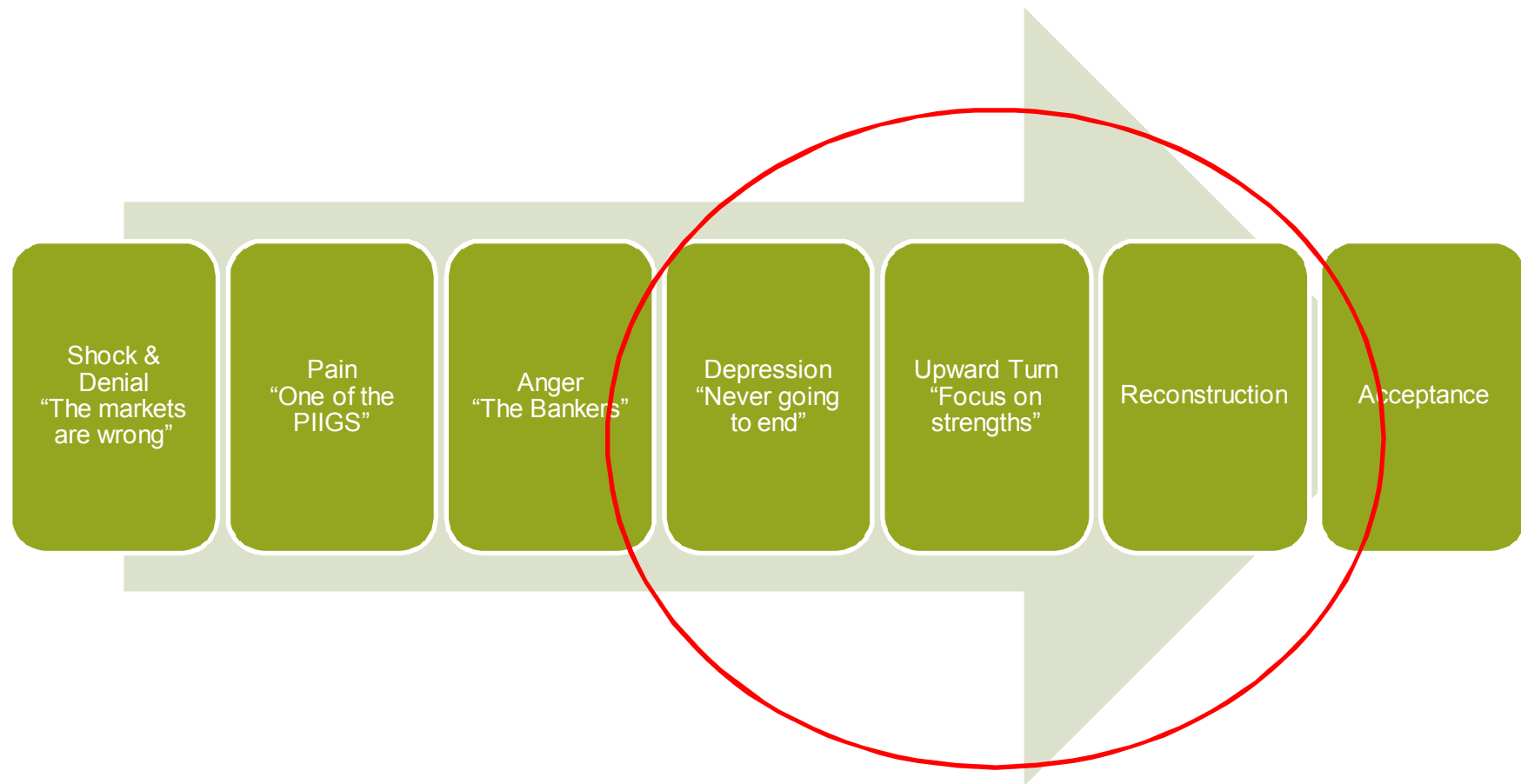
Summary of Irish debt crisis

- But we know now....
 - Budget surplus heavily reliant on property/consumer taxation
 - Credit growth too strong
 - Banks borrowing on short term interbank market
 - Overvaluation of assets
 - Economy lost competitiveness
 - Boom fed on itself
 - Very reliant on benign global economy
 - Very exposed to global slowdown

Chronology of Downfall



Social issues – 7 stages of bankruptcy



Effect on Life Assurance Industry

- Irish government bonds limited direct effect on business
 - Mainly unit linked business, annuities, term assurance
 - Heavy reinsurance
 - Guaranteed business backed by diverse range of European bonds as
 - Up to 2007, supply of Irish bonds was contracting
 - Difficult to get duration on Irish bonds
 - Early to recognise the signals
- Some commercial property difficulties
- Effect of broader economic crash greater
- No insolvencies!

Sovereign Annuity

- New product introduced by Irish government
- Allow insurers to pass on default risk to policyholders
- Permit pension schemes to use higher yield for funding calculations
- Mixed reception

Key Issues in Actuarial World

- What is Irish government bond credit risk?
- What do policyholders expect?

Society of Actuaries in Ireland Working Group

- Consider the issue for valuation rate of interest in S1 according to Irish regulations
- Issues to be considered by the Actuary
- Approaches to estimating credit risk
- Issues specific to concentration risk
- Paper available on www.actuaries.ie

Issues

- Valuation interest rate reflects yield on the underlying assets
- Enables matching for solvency purposes
- Question for the Actuary
 - Assets and liabilities historically moved together
 - Assets values have fallen
 - Should liabilities be reduced accordingly?

Issues

- Should insurer be stronger than the State?
- Is default considered an extreme event that can be covered from surplus assets?
- Do policyholders expect the insurer to survive a State default?
- Consistency across insurers?
- Conclusion : Appropriate to allow for credit risk

Possible approaches to calculate credit risk?

- Historical default rates
- Market Based Measures
 - CDS
 - Z-Spread
 - Asset swap spread
- Solvency II illiquidity premium
- Liquidity measures (bid/offer spread)
- Corporate bond approaches
- Expert opinion

Definitions

Name	Meaning	Use
CDS	Insurance on debt	Assists in determining liquidity premium
Z Spread	Parallel shift in LIBOR zero curve to price asset	Price paid above LIBOR to compensate for credit risk
Asset Swap Spread	Spread above LIBOR on floating leg of swap	Traded measure of credit risk

Measures as at 31 December 2010

Approach	%age of spread over German bond yields attributed to credit risk
Historical	Depends on measure
Market based	75%->100%
Solvency II illiquidity premium	92%
Corporate Bond (BoE)	>50%

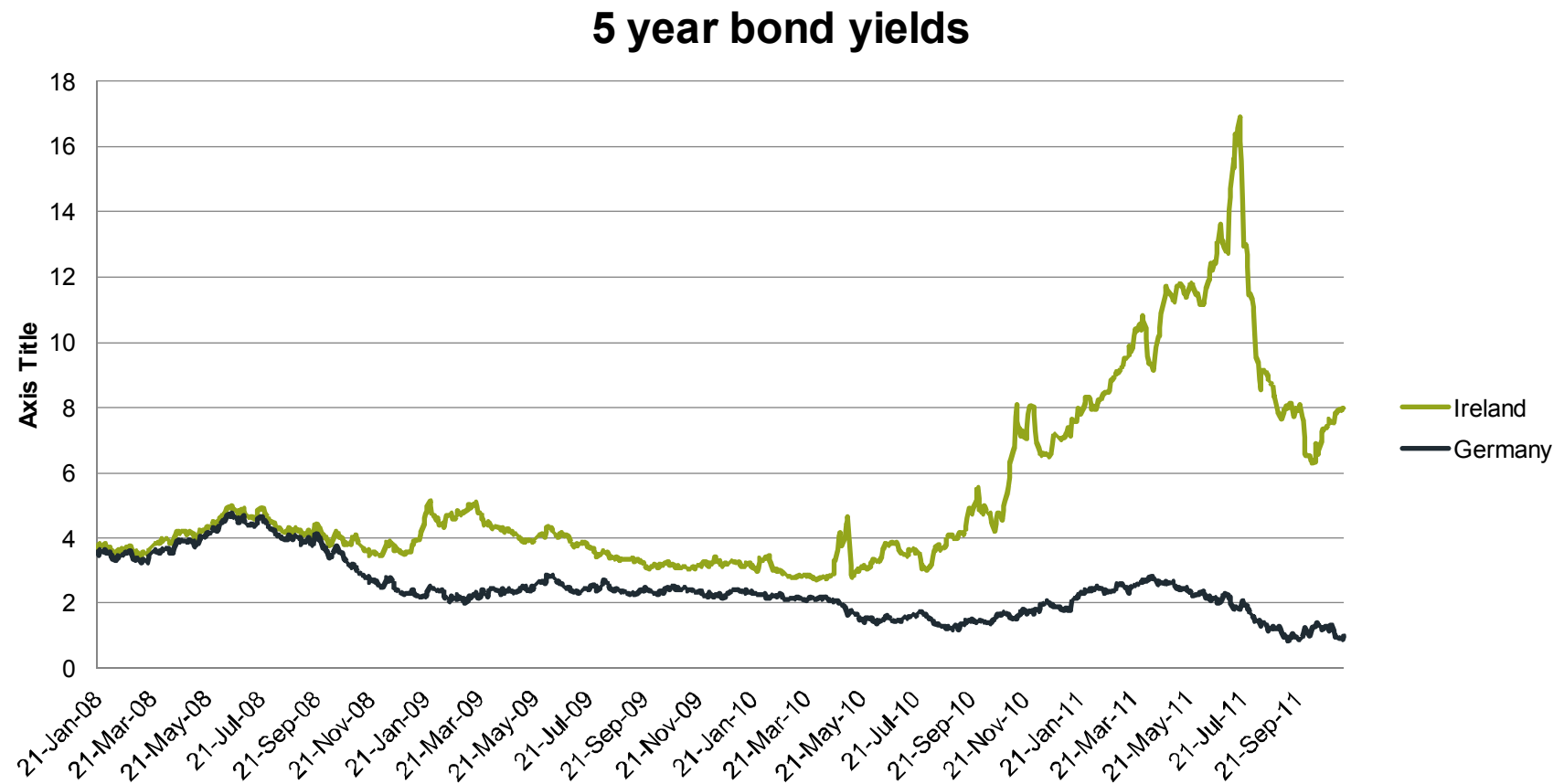
Conclusion of SoAI Working Party

- Range of approaches should be used (rather than a single approach)
- Requirement for prudence in setting assumptions
- As at Dec 2010, view of the Working Group was that – under general circumstances - the largest part of the excess spread of Irish government bonds over risk-free rates was attributable to credit risk for the purpose of setting the valuation interest rate
- Approach needs to be kept under review

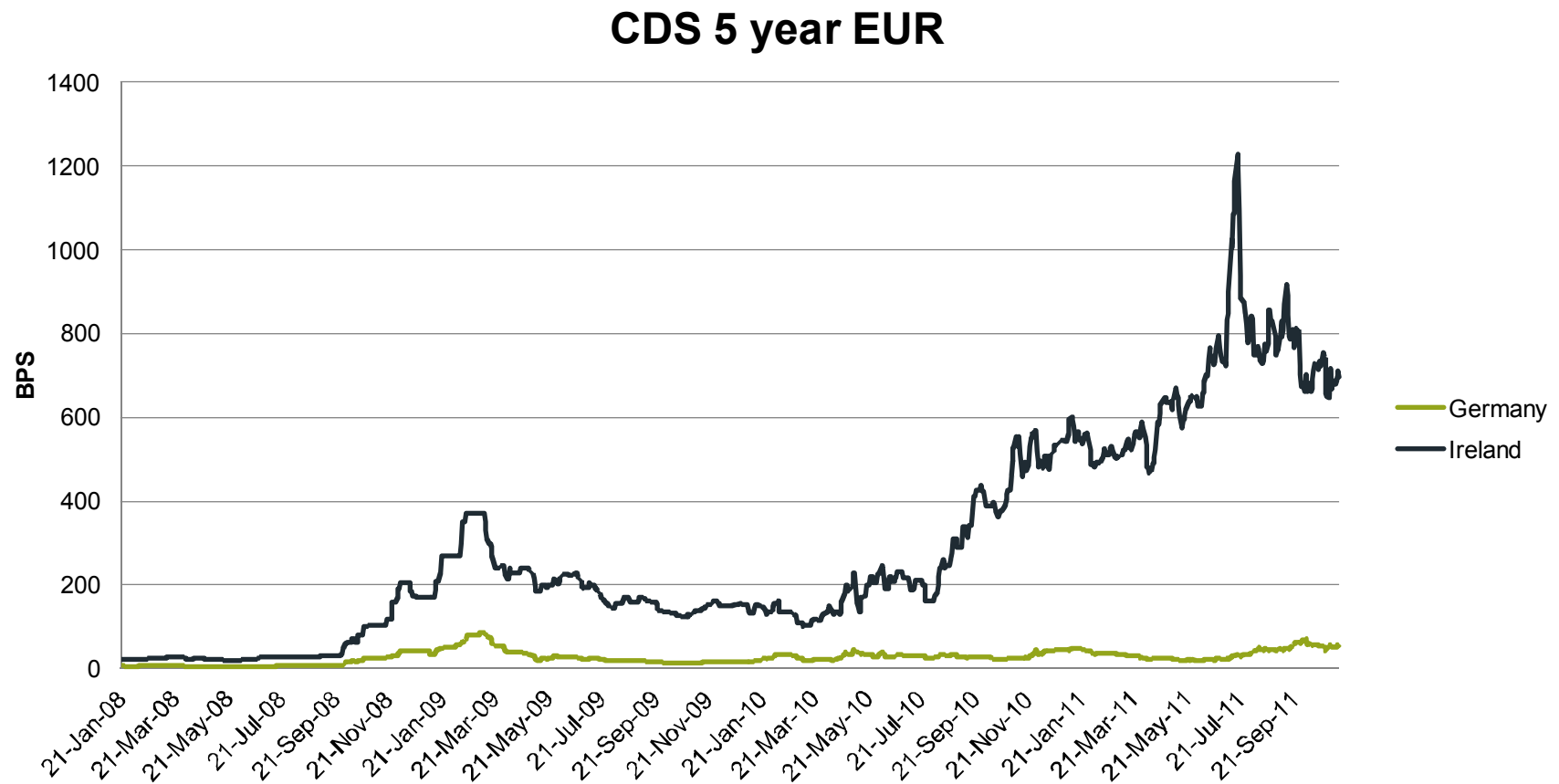
Conclusion of SoAI WP – Concentration Risk

- Binary aspect of risk
- Recommend that scenario testing is provided to the Board
- Further considerations:
 - In the restructuring of sovereign bonds, what is the target solvency?
 - Impact of spreads of a sovereign restructuring
 - Impact on liabilities where counterparty risk has been passed on to policyholders
 - Interpretation of PRE

Update



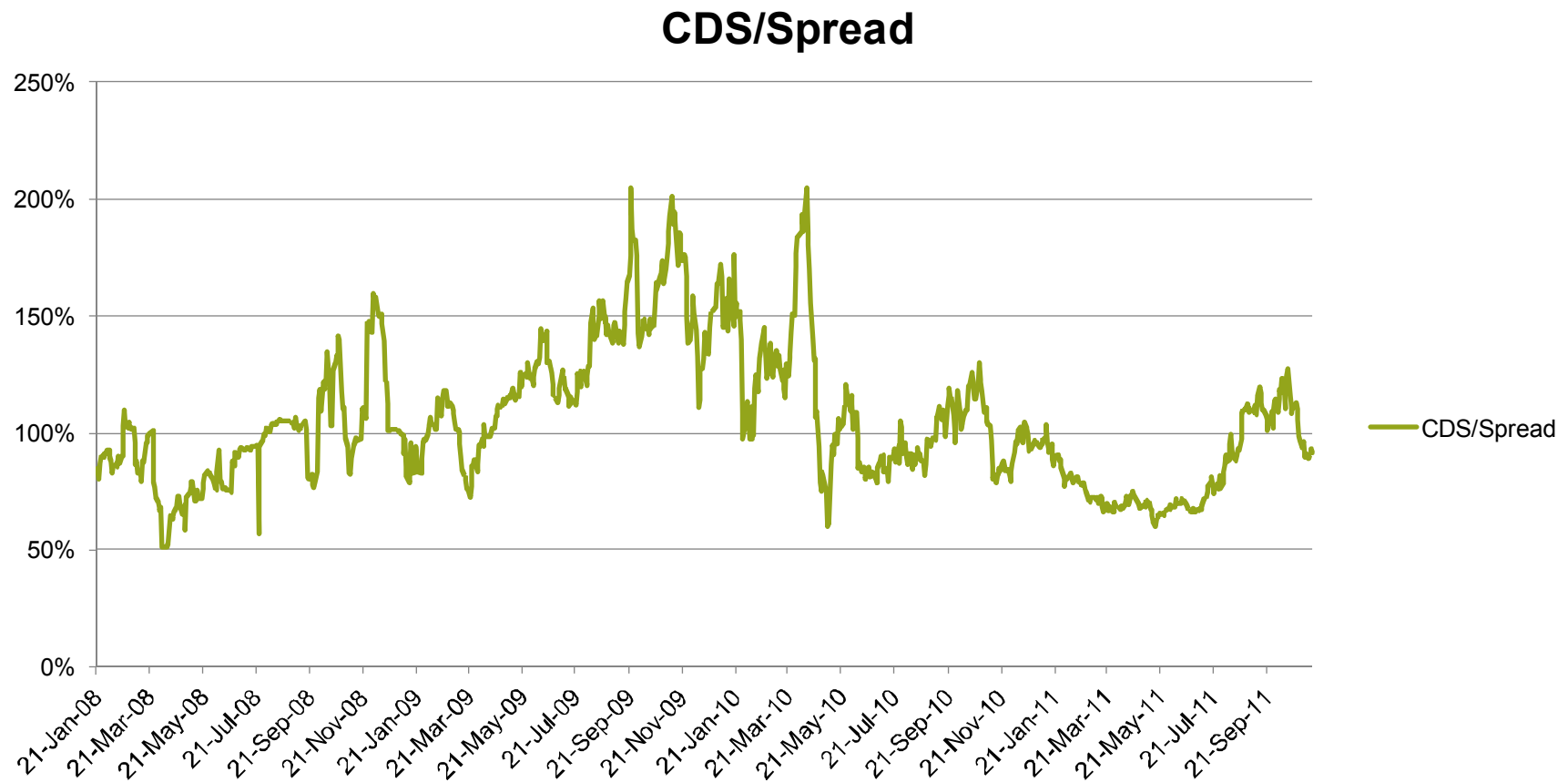
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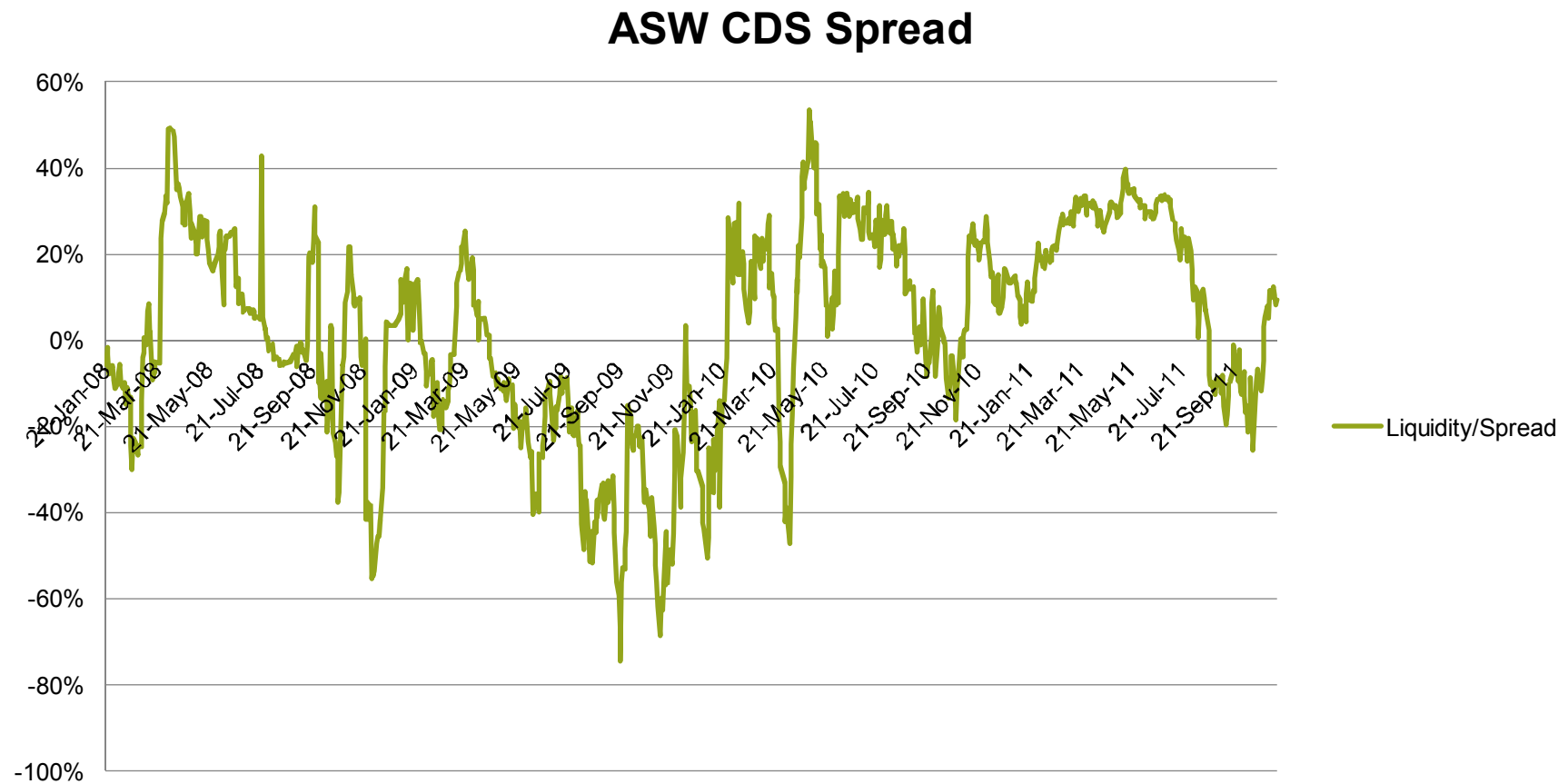
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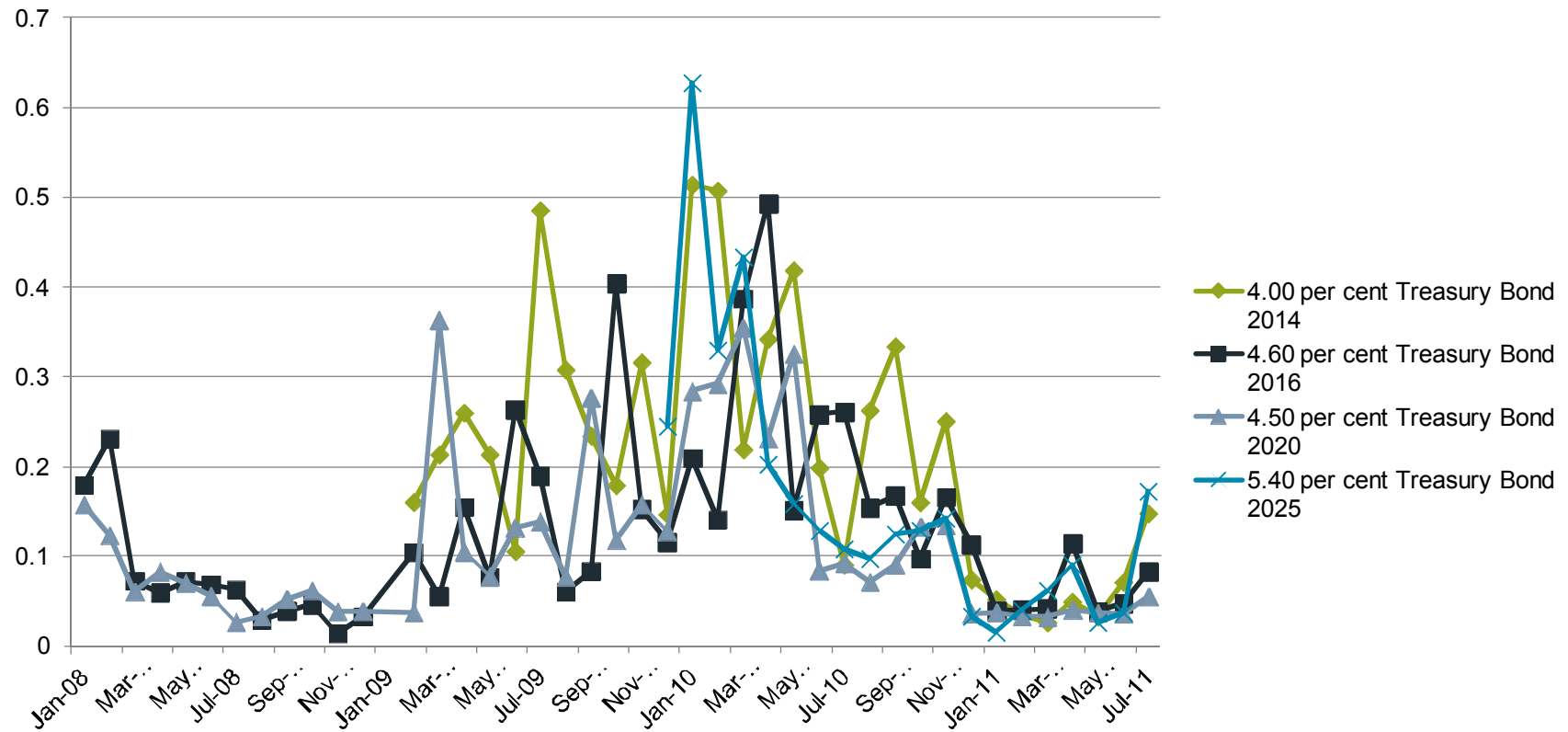


Update



Turnover

Turnover Selected Stocks



Example Scenarios

Default

Restructuring

Spreads widening

Leaving Eurozone

Financial oppression

Policyholders' Reasonable Expectations

- Communication to policyholders
- “We all go down together”?
- Extreme outcome versus possible outcome
- Part of Eurozone
- Financial strength
- Domestic –v- Multinational

Lessons Learnt

- Look at several approaches
- Qualitative as well as quantitative
- Diversification
- Thinking the unthinkable
- Institutions expected to be stronger than State?
- Multinationals
- No country is an island!

Sources

- Bloomberg
- Society of Actuaries in Ireland
- Central Statistics Office
- Irish Stock Exchange
- ESRI