	e Actuarial Profession iking financial sense of the future		
CURRENT ISSUES IN L ASSURANCE SEMINAR			
ROYAL COLLEGE OF PHYSICIANS, 30 MAY 2008	LONDON		
Alternative sources of ca	oital		
Overview of presentation:			
 Introduction Case studies: 1. Bank of Ireland (Index-linked 2. Legal & General (Creation of 			
	The Actuarist Profession making financial sense of the future		
Introduction			
 Improving regulatory capital p Balance sheet acceleration Re-configuring capital structure 			
	The Actuarial Profession		

Introduction

- Rating agencies & markets
- Risk transfer
- Historic difficulties
 - Regulatory hurdles
 - Up-front costs
 - Market appetite

The Actuarial Profession making financial sense of the future

Case study - Bank of Ireland

- Background and reasons for project
- Structure of transaction
- Dynamic structure
- Surplus measurement
- Launching the Notes

The Actuarial Profession

Background - company details

- Bank of Ireland (BOI) mkt. cap. €9.2 bn
- BOI operates in retail sector in Ireland/UK and in capital markets
- Life assurance subsidiary Bank of Ireland Life (BIL) trading as "New Ireland"
- Second-largest life assurer in Ireland
- Sells full range of products

The Actuarial Profession making financial sense of the futu

Background – reasons for project

- Restrictions within Irish regulations on allowable Tier 1 capital from insurance subsidiaries
- Deduction of BIL's Value of In-Force (VIF) from BOI's Tier 1
- BOI keen to take credit for this
- Stable medium-term source of funding

The Actuarial Profession making financial sense of the future

Background - BIL Value of In-Force

VIF at June 2007 split as follows:* Unit-linked Insurance (IFRS4) €425 m
Unit-linked Investment (IAS39) €375 m
Non-linked Insurance (IFRS4) €100 m
Total: €900 m

- Seeking to take credit for IFRS4 VIF
- Limit based on VIF in the accounts

Source: BOI presentation to Society of Actuaries in Ireland

The Actuarial Profession

Case study - Bank of Ireland

- Background and reasons for project
- Structure of transaction
- Dynamic structure
- Surplus measurement
- Launching the Notes

Structure - Balancing parties' goals Parent bank Life assurer Regulator Noteholders Structure • Discussions: BOI, BIL, Watson Wyatt, Goldman Sachs, Lehman Bros Discussions with Regulator IFRS4 VIF - Unit-linked only - €400 million Dynamic block of business Index-linked repayment profile No direct payment from life company Surplus calculation within the life company Coverage from IAS39 ("Investment") policies Structure - Additional coverage Commitment to use surplus from "Investment" policies Only if necessary Dividend stopper

Case study - Bank of Ireland

- Background and reasons for project
- Structure of transaction
- Dynamic structure
- Surplus measurement
- Launching the Notes

The Actuarial Profession making financial sense of the future

Dynamic structure: In-force unit-linked VIF run-off

10 12 14 16 18 20 22 24

The Actuarial Profession making financial sense of the future

Dynamic structure

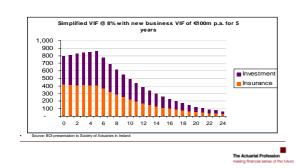
- If dynamic structure not used
 - Note repayments begin immediately
 - Very short-term if just based on existing block
 - High project cost for short term

Dynamic structure – new business

- If dynamic structure used
 - Top up with new business annually for 5 years
 - Only if necessary
 - Avoids over-collateralisation
 - No discretion based on results of calculations
 - Freedom for life company

The Actuarial Profession making financial sense of the future

Dynamic structure – unit linked VIF profile with new business



Case study - Bank of Ireland

- Background and reasons for project
- Structure of transaction
- Dynamic structure
- Surplus measurement
- Launching the Notes

Surplus measurement - previous deals - Closed books - Surplus measurement based on accounting information - Time-consuming process

Surplus measurement

- aims of Bank of Ireland's project

- Compatible with ongoing insurance business
- Need to allow for future new business
- Simple
- Transparent
- Consistency with cashflows on which Notes were launched
- Regulatory approval

The Actuarial Profession making financial sense of the future

Surplus measurement

- approach adopted

- Based on actuarial systems
- VIF calculations analyse components of expected future profits
- Adjust each component of expected on an annual basis to derive "actual" profits
- Adjustments based on accounting information
- Goal of simplicity
- No expense risk

Surplus measurement - example • "Actual" profit item = Expected profit item x [actual proxy measurement] [expected proxy measurement] The Actual Protection The Actual Protection Surplus measurement - example

Example (only indicative figures)				
expected 2008 FMC = €50 m				
opening 2008 FUM = €5.0 bn				
expected closing 2008 FUM = €5.3 bn				
actual closing 2008 FUM = €4.9 bn				
reported "actual" FMC = €48 m				
• €50m * [1/2 * (€5.0bn + €4.9bn)] = €48m				
[1/2 * (€5.0bn + €5.3bn)]				

Surplus measurement Similar process for other components Independent review Dispute resolution process

Case study - Bank of Ireland

- Background and reasons for project
- Structure of transaction
- Dynamic structure
- Surplus measurement
- Launching the Notes

The Actuarial Profession making financial sense of the future

Launching the Notes – Rating agencies

- Reviewed by Moody's and Standard & Poor's
- Watson Wyatt review of 22 sets of stress & scenario tests
- Risk of increased lapses would have largest effect
- Followed by investment market falls
- Ongoing stress test each year as part of the dynamic block structure

The Actuarial Profession

Launching the Notes – Monoline insurer

- Time line
- Involvement of Ambac to wrap the Notes
- Detailed due diligence of VIF and legal documentation
- Wrapper covered €380 million at 'AAA' *
- (Balance rated at 'A-')

* Source: BOI presentation to Society of Actuaries in Ireland

The Actuarial Profession making financial sense of the futur

Launching the Notes – cost of issue ■ €400 m raised placed on deposit at EURIBOR ■ Funding costs: ■ €380m at EURIBOR +0.75% p.a. ■ €20m at EURIBOR +3.09% p.a. ■ Average cost EURIBOR +0.87% p.a. ■ Ambac fees ■ Source 804 presentation is Society of Adularies in Instinct