The Actuarial Profession
making financial sense of the future

Life Securitisation
Paul Stanworth, RBS

Highlights of the 2005 Life Convention
London 20 February, Edinburgh 1 March

What is securitisation?

Securitisation is the process of converting illiquid assets into asset-backed instruments which can be sold in the debt capital markets

In a securitisation transaction stable long term cash flows are discounted to provide funding today by raising debt in the capital markets

This debt is then repaid from the cash flows generated by the underlying assets

What can be securitised?

All of the following products which have life related contingencies could be securitised :

- Term assurance;
- Unitised products;
- Annuities;
- With-profits;
- Equity release mortgages;
- Conventional Mortgages;

Annuities (longevity risk) and with-profits (contractual complexity of bonus structures and asset allocation changes) products are the most challenging from a securitisation perspective

What can be securitised? (cont.)

It is necessary to also consider;

Volume of new business and strain for each product type sufficient?

Average costs must be covered

Whether inclusion of multiple products dilutes the profile and focus of the transaction?

These are **complex risks** to combine

Whether inclusion of multiple jurisdictions dilutes the profile and focus of the transaction?

Jurisdiction are key to **enforceability of security**

Why Securitise?

Cash/liquidity benefits

Securitisation can proved cashflow which may be required for expenses and/or advances to policyholders

Solvency capital management

Securitisation will provide a release from capital requirements provided suffucient risk transfer has occurred

Credit Rating support

Market activity in insurance securitisations

- Insurance Securitisation has expanded significantly over the last five years

Insurer	Securitisation Type	Capital Raised (m)	Year
American Skandia	Liquidity/ M&E Securitisation	$900+	1996-1998
NPI	In-force Business	£260	Apr 1998
Prudential (US)	In-force Business	$1,925	Dec 2001
Norwich Union	Equity Release	£1,751m	2001 - 2005
MONY	In-force Business	$745	Apr 2002
Hannover Re	DAC Securitisations (L1 – L4)	€ 731	1998-2002
GE Financial	Reg XXX Financing	$1.3bn	July 2003
Barclays Life	In-force Business	£400	Nov 2003
Norwich Union	New Business Strain	£200	Oct 2004
Banner Life	Reg XXX Financing	$600	Nov 2004
Friends Provident	In-force Business	£380	Dec 2004
GE Financial	Reg XXX Financing	$850	Dec 2004
Forethought	VIF Monetisation	$280	Dec 2004
Scottish Re	Reg XXX Financing	$850	Feb 2005

Investor Options

Funding is supported by the quality of the cash flows and the transaction structure and investors are **generally isolated from the credit quality and performance of the originator of the assets**

Investors are required to perform **extensive analysis** of the risks in isolation

Investors include:

- Public Bond Markets
- Private Debt Markets
- Banks

Funded versus Unfunded versus Synthetic

Funding a transaction does not always result in the originator receiving cash:

Method	Mechanism	Risks to investor
Funded	Cash is forwarded to originator	Repayment providing assets create cashflow, losses if assets have losses
Unfunded	Cash is held in trust	Cash held in trust released if assets create cashflow or revert to originator if assets have losses
Synthetic	No cash is exchanged	Losses funded by investor if assets have losses

Funding options

	Public	Private	Comments
Profile	✓✓✓	✓	Can publicise private deal, but public deal inevitably higher profile
Advance rate	✓✓	✓✓	Depending on circumstances, conduit transaction may achieve similar advance rates to bond deal
Pricing	✓✓	✓✓	Strong monoline & investor appetite for structured insurance assets
Long Term	✓✓	✓	Bond market funded VIF-type transactions can provide long term funding and capital. Conduits limited to around 7 years average life.
Flexibility	✓	✓✓✓	Conduit deal is a bilateral transaction and offers much greater flexibility, especially restructuring

Rating Agency

Standard & Poor's

Key to be treated as **operational leverage** and excluded from the calculation of financial leverage, based on:

- No recourse to the corporate entity
- Sufficient and ring fenced VIF to support the debt.

If the securitisation replaces senior debt, they key is the impact on Total Adjusted Capital

Moody's basis

Treatment is as other embedded value loans which are rating neutral or better provided proceeds fund existing businesses and are not used for risky ventures

Impact on regulatory capital

Regulatory Peak: No long-term insurance contract can be treated as an asset for regulatory purposes

Hence, those insurance contracts with positive "economic" values (i.e. assets) are assigned a value of zero

However these same insurance contracts can be used as collateral for a securitisation and the advance assets are is included in the valuation as a regulatory asset (or "admissible asset")

The valuation therefore becomes the net of the value of the contract (which is set to zero) plus the value of the advance from the loan (which is positive), thereby creating a regulatory asset subject to no creation of a liability

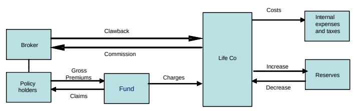
Capital Alternatives

Capital Form	All–in Cost above LIBOR	Permanent ?	Investors
Equity	250 – 400	Yes	Institutional
Debt capital	80 – 120	Yes	Institutional
Securitisation	**65 – 80**	**No**	**Banks, CP Investors & Bond Investors**
Financial Reinsurance	unknown	No	Reinsurers

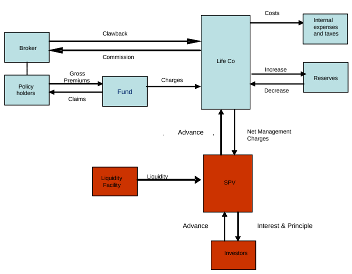
"Frictional" and running costs have fallen to comparable levels with other alternatives.

Development periods have also fallen an represent a competitive alternative to more traditional forms of capital.

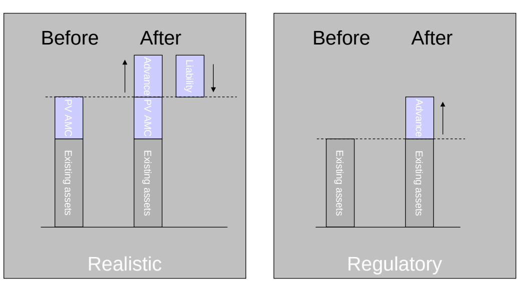
Case Study



Case Study



Case Study



The Future?

- Greater use of securitisation
  - More Products
  - New Jurisdictions
  - Advancements in technology