The Actuarial Profession
making financial sense of the future

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Sovereign Credit Risk and International M&As

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Introduction

- A talk covering certain issues that a globally active insurer faces when making an acquisition in an emerging economy having a relatively low sovereign credit-rating
- Not a talk about doing business in faltering European/Western economies ….
- … but many shared issues

- Apply insights to “gilts vs swaps” debate

1

Agenda

1. Scene-setting
2. Domestic perspective – Own-government credit risk
3. International perspective – Host-government credit risk
4. Government-bond credit-risk blind spot
5. Joint Ventures
6. Solvency valuations – government bonds vs swaps
7. Summary

1. Scene-setting

- Insurers in developed countries may look for growth in emerging economies
  - Eastern Europe
  - Asia/Far East
  - South America/Africa
- Risk-minimal investment strategy for guaranteed liabilities – likely to involve domestic government bonds
- Commonly rated BBB or below
- Yields generally higher than those of AAA developed economies
- Reflects, inter alia, higher inflationary expectations and credit risk

1. Scene-setting

	10-year domestic government debt	
Developed Countries (e.g.s)	Rating (Fitch)	Annualised Yield (%)
Germany	AAA	2.2
UK	AAA	2.6
USA	AAA	2.2
Emerging Countries (e.g.s)		
India	BBB-	8.3
Philippines	BBB-	5.9
Russia	BBB	8.4
Turkey	BB+	8.9

Source: Fitch; Colleague/Bloomberg (data as at 31.8.2011)

1. Scene-setting

Do countries ever default on their domestic debt?

Yes!

- Despite ability to print money
- Otherwise, domestic debt ratings would all be AAA (for genuine sovereigns)

Selected episodes of domestic debt default or restructuring*

1930s-1950s	Bolivia (1927), China (1932), Greece (1932), Spain (1936-39), US (1933), UK (1932), Germany (1948), Japan (1946-52)
1970-2007	Russia (1998-99), Ukraine (1998-2000), Argentina (1982, 1989-90, 2002-05), Brazil (1986-87, 1990), Mexico (1982), Zimbabwe (2006)

*Table 3 (extract) of Appendix, "The Forgotten History of Domestic Debt" – Reinhart (Maryland and NBER) and Rogoff (Harvard and NBER) (April, 2008)

2. Domestic perspective – Own-govt credit risk

"So what if 'risk free' is not really risk free!"

- Domestic insurer offering guaranteed benefits in emerging economy (rated < A, say)
- How should domestic insurer allow for own government credit risk?

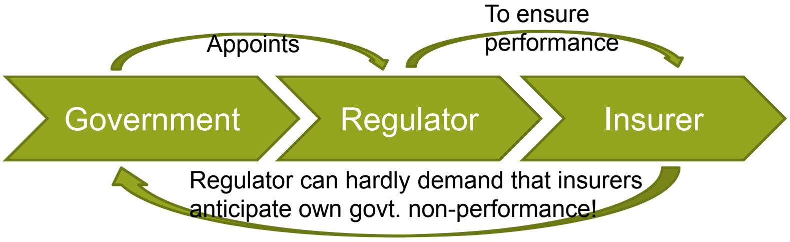
Choice A – Ignore credit-risk of own-government bonds (OGBs)	Choice B – Mitigate credit-risk of OGBs
- Ignore possibility of OGB default	- Purchase protection for OGBs
- Large slice of the "credit-risk premium" can go to policyholder	- AAA foreign government bonds + FX overlay
- Competitive products	- Over capitalise
- No global reputation at stake	- Extra security has a cost
	- Who pays – P/Hs or S/Hs?
	- Impacts competitive position

- Choice A inevitably wins

2. Domestic perspective – Own-govt credit risk

Role of local regulator

- Is a local regulator concerned about own government default?
- Generally not (e.g. India, Philippines, Turkey – all rated < A; Solvency II (QIS5))



- But some European regulators are not seeing it this way at present! (Can have adverse impact on local bond market.)

3. International perspective – Host-govt credit risk

"To wrap or not to wrap"

- Internationally active insurer looks to acquire our domestic insurer
- How should it approach the host government debt exposure?
  (Pru's $35.5bn bid for AIA in 2010: AIA held $18bn of government-debt exposures, including $7.4bn in Thai bonds, A-/negative.)
- Depends on action the international insurer would take on host government default
- "Wrapping" or "not wrapping"

3. International perspective – Host-govt credit risk

Wrapping

- International insurer would stand by domestic insurer in the event of domestic government debt default
- Effectively wrapping the domestic debt with its own resources
- Has its global reputation to think about
- But this credit wrapping has a cost
- Will impact acquisition price and new business pricing – may not be able to compete!
- Consider alternative product mixes (unit-linked; short-tailed GI)

3. International perspective – Host-govt credit risk

Not-wrapping

- International insurer decides at outset that it would not pump in more capital if host government defaults
- Competitive deal bid-price and competitive products in local market
- Justifications for walking away from an insolvent subsidiary (*as a result of host-government default*):
  - Host government could have pulled other levers to fund its deficit
  - Claim "political interference"
  - Undamaged global reputation?
- Can't walk away if not in separate legal entity

3. International perspective – Host-govt credit risk

Word of warning

- Only do business on a "not wrapping" basis if you really mean it!
- Capitulation (i.e. wrapping) in the event of a host government default is bad news for the shareholders
- Worst of both worlds for shareholders
  - Overpaid for target
  - Under-priced new business
  - No favourable publicity at outset
  - End up paying for the default anyway
- But may occasionally make sense to inject a little to save a lot

4. Government-bond credit-risk blind spot

- Even a “not-wrapping” approach has an economic cost
- Simplified example: €100 shareholder investment in government bonds via

  (i) an investment company
  (ii) net assets within an insurance company

  Instantaneous partial default – 5%

12

4. Government-bond credit-risk blind spot

Case A
Investment in government bonds via an investment company

A		L	
Govt bonds backing equity	100	Shareholders’ equity	100

5% bond default

A		L	
Govt bonds backing equity	95	Shareholders’ equity	95

- 5% partial default costs shareholders 5%

13

4. Government-bond credit-risk blind spot

Case B

Investment in government bonds via insurance company surplus

A		L	
Govt bonds backing p/h liabs	1000	Policyholder liabilities	1000
Govt bonds backing equity	100	Shareholders' equity	100

5% bond default

A		L	
Govt bonds backing p/h liabs	950	Policyholder liabilities	1000**
Govt bonds backing equity	95	Shareholders' equity	45

** Assumes no yield-change impact to illustrate the key point

- Default has a geared effect on shareholders (>>5% in this e.g.)
- Policyholders get first call on all shareholder assets – net assets, VIF, franchise
- MCEV principles miss this "put spread"!

5. Joint Ventures

- Condition of entry in certain countries is to team up with a local company
- Frequently name of global partner is prominent (e.g. in India – ICICI Prudential, Bajaj Alliance, HDFC Standard Life, Aviva)
- Local player may have no global reputation to protect
- May be perfectly "happy" to walk away if own government defaults ("force majeure")
- Where does this leave the global partner? Can't simply keep its 26% (say) of the company solvent!
- Danger exists that global insurer gets <<100% of profits but pays 100% of large losses!

5. Joint Ventures

Some mitigators

- Pick your partner carefully
- Have either a small share or very large share
- For small shares, think carefully before including global brand names

6. Solvency valuations – govt bonds vs swaps

Risk-free rates – Insights from BBB-rated emerging economies

- Insurance is all about giving policyholders financial security
- Value liabilities for solvency purposes using “risk-free” rates
- What is risk-free? Gilts (governments) vs Swaps
- Historically AAA government-bonds regarded as being virtually risk free
- Swaps were seen as having other advantages
- CEIOPS agonised on the issue under Solvency II

QIS4 (2008): CEIOPS → govt bonds; EC → swaps

L2 Impl. Meas. (Oct. 2009): CEIOPS → govt bonds

(Feb. 2010): CRO Forum → swaps

(Jul. 2010): QIS5 → swaps

6. Solvency valuations – govt bonds vs swaps

How risk free does "risk free" need to be?

- Fundamental question: for solvency valuations, do we require absolutely risk-free rates?
- Risk is not absolute – need to *measure it against a suitable reference point*
- Who's frightened of a wasp when you're chased by a lion?!
- Assertion: Appropriate reference point for policyholder security is own-government performance (whether AAA or not)
- If the insurer's own government defaults, all bets are off!
- Government-appointed regulator can hardly expect regulated insurers to perform if government itself doesn't perform!

6. Solvency valuations – govt bonds vs swaps

Government default doesn't have to ruin domestic insurers (1)

- Functional society has a number of pre-requisites
  - One is a functional and responsible government
- Government with funding difficulties can pull any of a number of levers:

Spending cuts	Tax rises	Money printing	Default

- Decision on where axe falls will take impact on all stakeholders into account, including financial institutions
- If government exercises the default option, it can still protect its own banking and insurance industry and their customers
- Perhaps for this reason, regulators in countries such as India (BBB-) and Philippines (BBB-) ignore own-government credit risk

6. Solvency valuations – govt bonds vs swaps

Government default doesn't have to ruin domestic insurers (2)

German currency reform 1948
- Financial institutions had all Reich securities removed from their balance sheets
- Received state equalisation claims to restore solvency if impaired ("The German Currency Reform" by Jack Bennett, Annals of the American Academy, Jan. 1950)

Russian domestic default 1998
- Insurance companies (and individual investors) had special option to redeem their debt on original terms

Argentine default 2002
- Most contracts were denominated in USD
- Pesification of dollar A&Ls subject to Argentine law
- SV obligations could be met by govt bonds (in $) at par
- Decree 558 – liquidity loans, sub-debt, SV waiting periods

6. Solvency valuations – govt bonds vs swaps

Solvency II – creating risk?

- Reference rates based on swap yields
- Practical difficulties investing to replicate
- Introduces a spread-risk between own-government-bond assets and technical provisions (unjustified if policyholder risk-base-line is own government)
- Particularly evident in the Eurozone at present (PIIGS)
- BUT gilt/swap debate ought to be irrelevant under SII anyway
  - 1-year risk horizon followed by portfolio transfer at "MVL"
  - Market price of liabilities is what another player would demand ….. following a 1-in-200 shock!
  - Govts + MVM_1 ≡ Swaps + MVM_2
  - Different debate!

7. Summary

- Global insurer making an acquisition in a "weaker" economy must decide upfront how it is going to approach host-country sovereign credit risk
- Even a "non-wrapping" approach has an economic cost
- Global brand "asymmetries" pose dangers in joint-venture arrangements
- If base-line risk for policyholders of regulated insurers is own-government debt performance → use of own government bond yields to value liabilities

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.