Reinsurance as a Capital Management Tool

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Table of Contents

- Capital Management - Introduction
- Reinsurance to Create Value
- Types of Reinsurance Structures
- Case Studies
- Trends
- Closing Remarks

Capital – Key Points

- Why is Capital important?
  - *It ensures long term survival of the insurer*
  - *It provides ammunition for future growth opportunities*
  - *It provides security / confidence to policyholders*

- Why is Capital Management important?
  - *Capital is a scarce resource and seeks the highest risk adjusted returns*
  - *Shareholders and analysts exert pressure to achieve these returns*
  - *Policyholders expect competitively priced products*

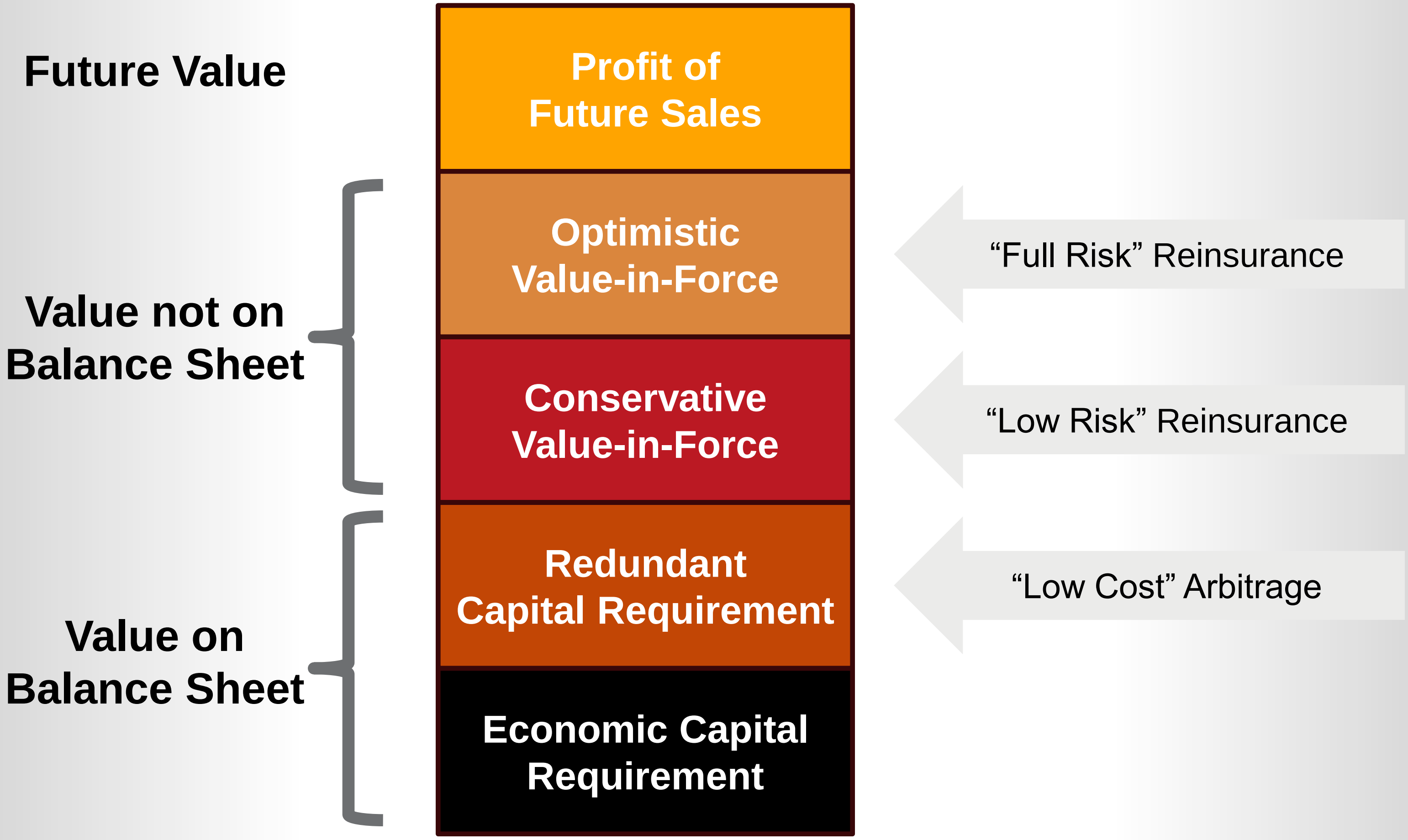
Sources of Capital

- Capital markets for equity, debt, hybrid debt
- Sell assets i.e. blocks of business
- Reinsurance
- Embedded Value Securitisation (essentially reinsurance through public markets)
- For subsidiaries, capital injection from parent

Why are capital motivated reinsurance attractive?

- Generally the cheapest source of capital:
  - Form of **secured lending** (e.g. secured with future profits)
  - Can be highly subordinated (e.g. tail risk transfer only)
  - Can be delivered as B/S asset (no cost of funding) or cash
  - Can generate **Tier 1 capital**
  - Repayment is contingent, hence **not leverage**
- Readily available from reinsurers
- Private & flexible
- Do not require extensive road shows or shareholder approval
- Execution does not depend on market sentiment of the day
- Market is open whilst e.g. securitization market still only open for cat bonds (short tenor, unwrapped)

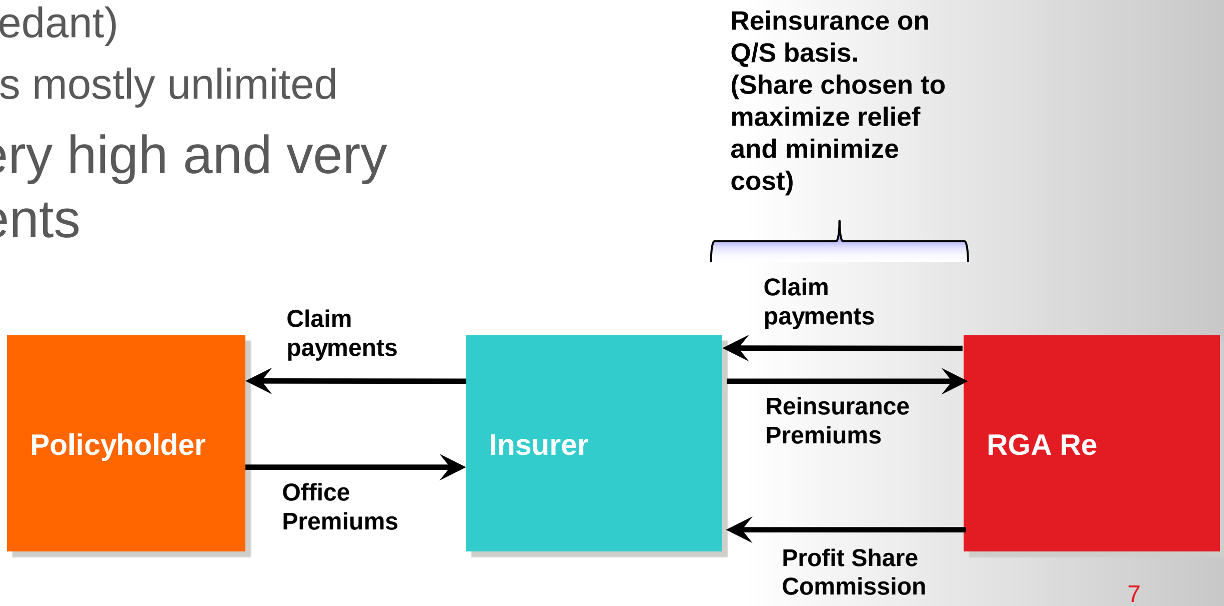
Reinsurance to Create Value



RGA

Low Cost Capital Arbitrage

- Based on economically excessive capital requirements in jurisdiction of insurer.
- Reinsurer can sometimes hold same risk for much less capital.
- Reinsurer charges a fee applied to capital benefit and returns profits in excess of fee via experience refund
- Asymmetric risk profile:
  - reinsurer's upside is limited to a fee, (excess returned to cedant)
  - downside protection is mostly unlimited
- Arbitrage between very high and very low capital requirements



Drivers of Capital Arbitrage

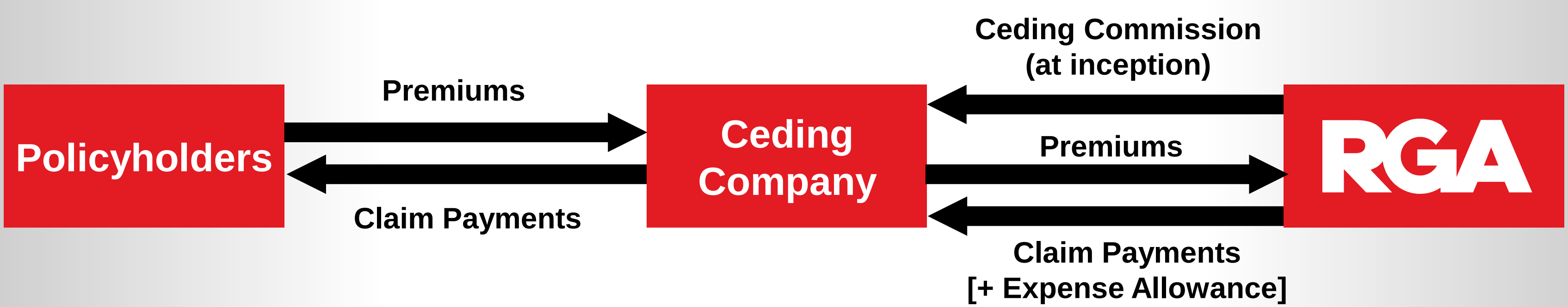
Statutory Reserves

- Use of prescribed mortality tables and interest rates (when materially different from experience)
- Statutory requirements vs. rating agency capital requirements
- Zero lapse assumption or 100% immediate lapse assumptions (cash surrender value floor)
- Flooring/zeroising of negative reserves
- Adjustment of statutory reserves to give partial credit for DAC
- Ignoring surrender charges and MVAs
- Disregarding the value of hedging
- Discount rates that do not reflect full illiquidity of liability

Uneconomic underlying assumptions can cause insurers to have redundant capital, but Reinsurance can help to provide capital relief so capital can be used more *efficiently* within the insurer's global business"

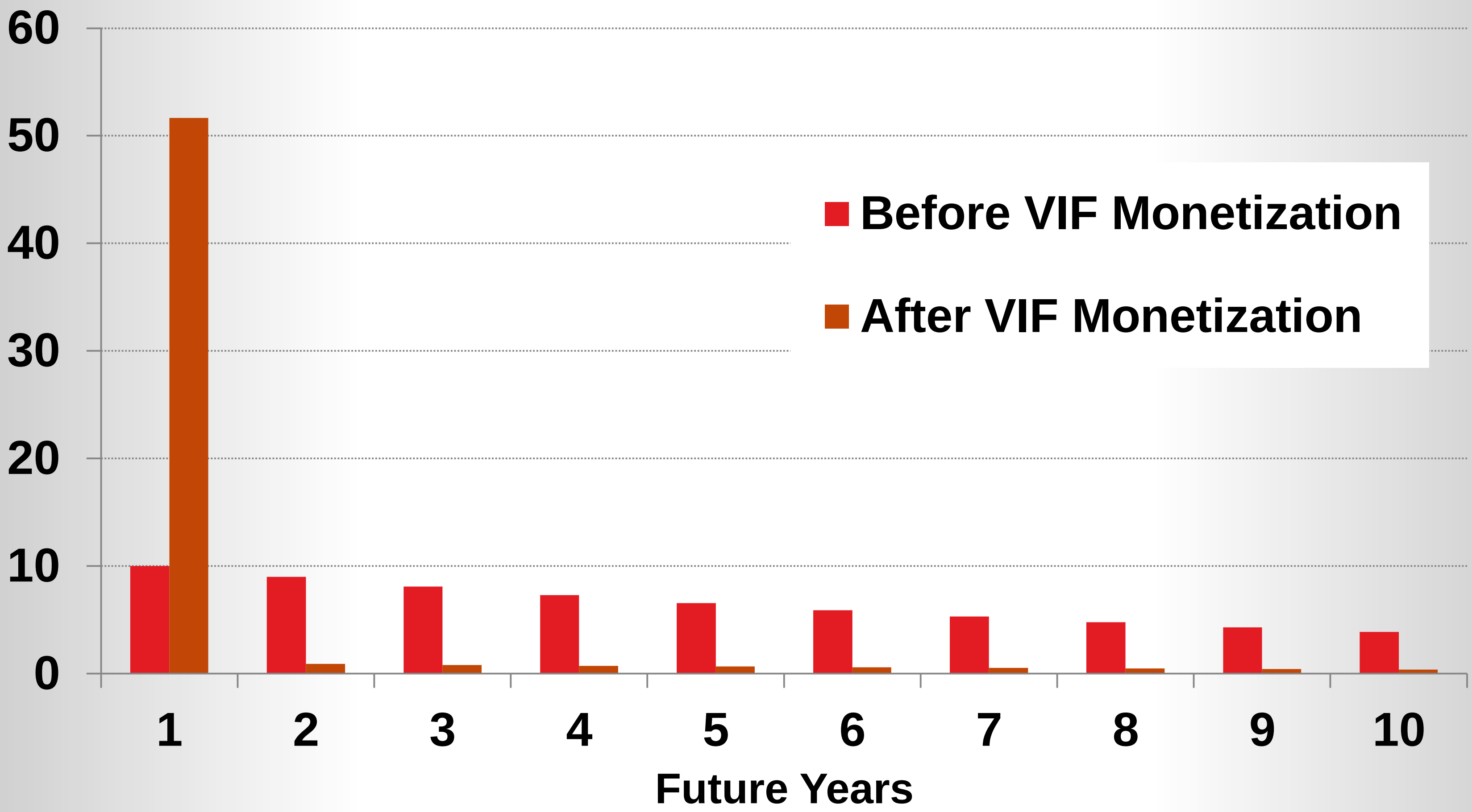
Reinsurance Agreement for VIF Monetization

- Large Quota Share (“QS”) of an existing insurance portfolio (“Underlying Portfolio”) is reinsured to RGA:
  - RGA pays Ceding Commission based on the VIF
  - RGA receives future original premiums and pays claims over the <u>full remaining term</u>
  - No right to recapture
  - Administration remains with Ceding Company
  - No Experience Refund or Loss Carry Forward



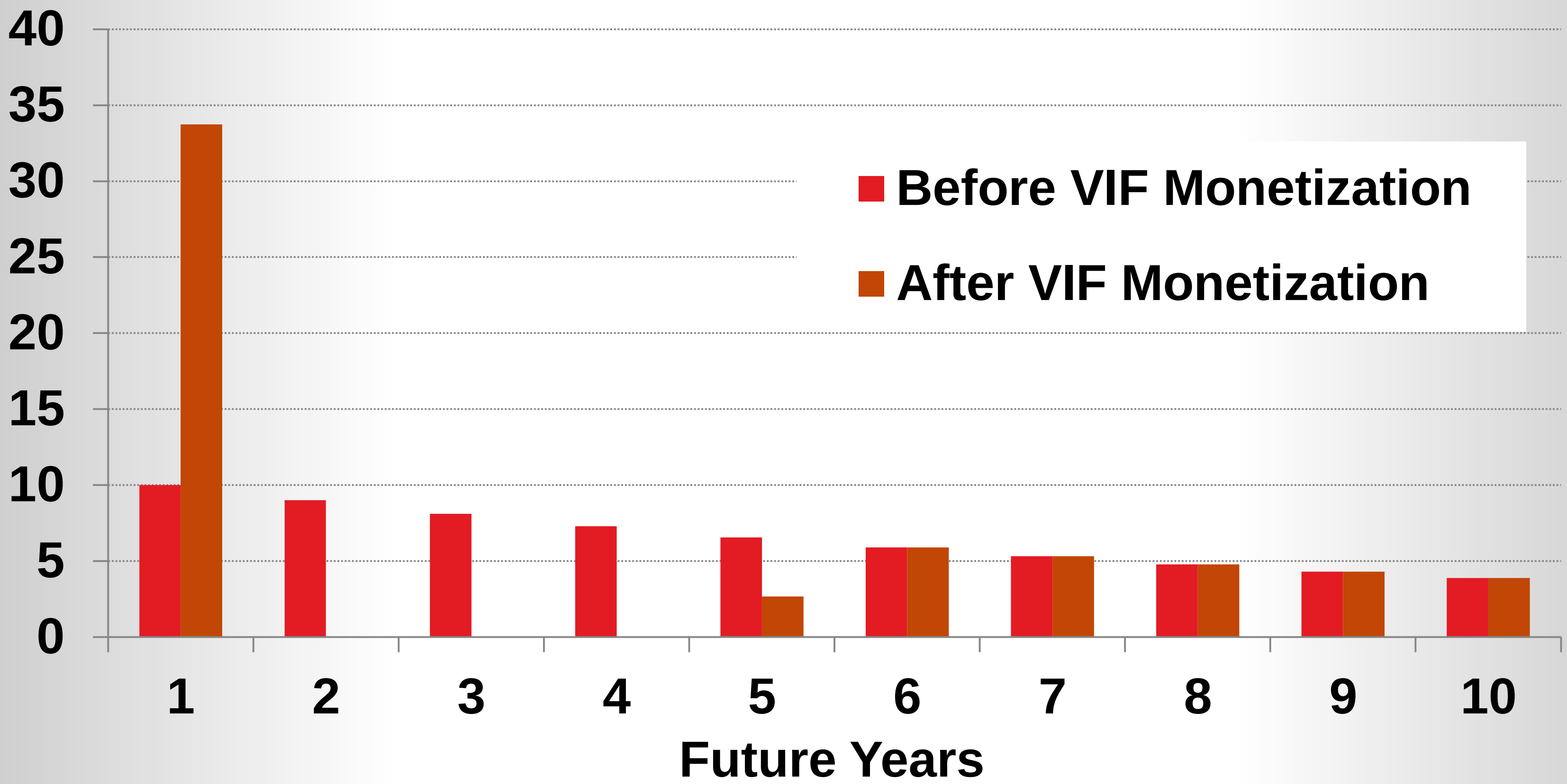
VIF Monetization – Example

Impact of VIF Monetization (90% Quota Share) on Future Income



Lower Cost Alternative

- As all risks of the Underlying Portfolio are transferred during term of Reinsurance, similar income statement treatment of the Ceding Commission is expected

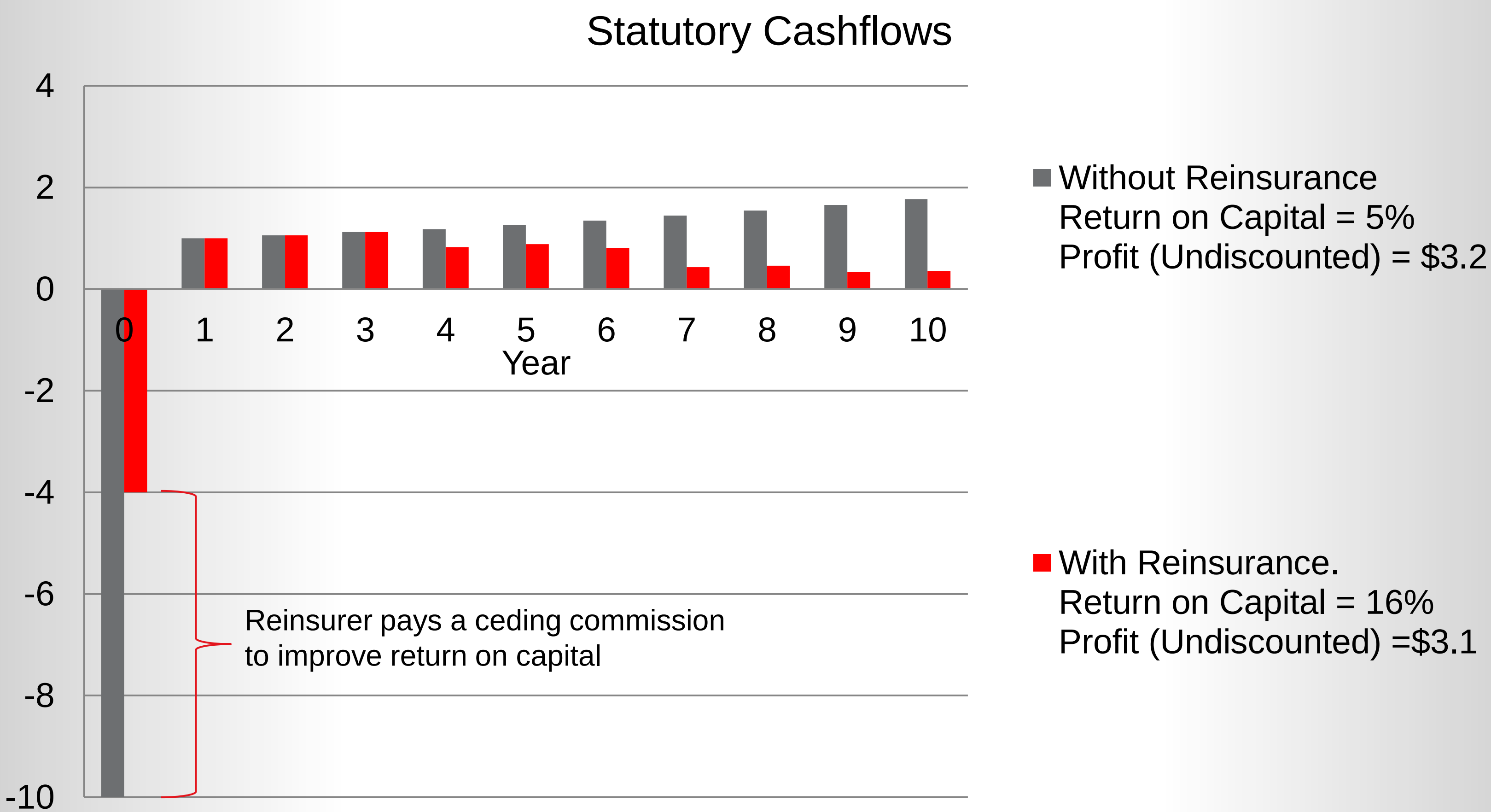


Standard VIF Monetization (“Full Risk”) compared to Lower Cost Alternative (“Low Risk”)

	Full Risk	Low Risk
Indicative Ceding Commission (% of Value-in-Force)	50% to 70% of VIF	30% to 50% of VIF
Duration	Full remaining term Underlying Portfolio	Until recovery of Ceding Commission
Beneficiary of Future Profits	All future profits for Reinsurance Company	After recovery of Ceding Commission, future profits for Ceding Company
Costs	Equity-like costs	Debt-like costs: pre-agreed percentage of remaining Ceding Commission

Reinsurance for New Product Pricing

Capital Management – Illustration



RGA

In Europe trend towards reinsurance for monetization

Selected examples

2003
- £400mn
- Securitization
- Entire closed book of Barclays life

2004
- £380mn
- Securitization
- Closed book of Friend Provident

2007
- €400mn
- Securitization
- Dynamic defined book (potential to add new business for first 5 years) of Bank of Ireland

2012
- €490Mn
- Quota share reinsurance 100%
- Closed book with renewals of Santander

2013
- €630Mn
- Quota share reinsurance 90%
- Closed book with renewals of BBVA

Source: Press search

Case Study: Capital Support for Start Up in Japan

Overview	
Client Background and Objective:	▪ Japanese insurance company set up to be pure VA writer ▪ Commissions payable cause losses under statutory accounting and therefore significant new business strain ▪ Financing new business strain on annuity business
Rationale:	▪ Parent wanted subsidiary to be financially independent, as future planned equity injections were reallocated to other lines of business
Transaction Structure:	▪ 85% quota share on a modified coinsurance basis ▪ Initial reinsurance commission is withheld (i.e. it is not paid in cash unless it has not been amortised when the last policy is finished) ▪ 100% participation in profits after deduction of RGA's fee and losses are carried forward ▪ Emerging profits are used to amortise the amount of initial reinsurance commission owed ▪ On an expected basis the transaction is cashless
Risk Transfer:	▪ Surplus relief transaction meeting Japanese regulatory requirements; RGA upside is the fee income, downside is potentially unlimited ▪ Risks transferred: greater than expected deaths and lower than expected investment returns causing the withheld ceding commission to not fully amortise
Capital Impact:	▪ Withheld ceding commission is an asset (Account Receivable) on the insurer's balance sheet ▪ Reinsurance chosen as a cost effective non-cash solution to fund new business statutory capital

Case Study: AFLAC Japan Surplus Relief

…on the surplus relief transaction... Aflac Japan recognized approximately ¥20 billion in ceding commission in March of this year for new policy issues from April 2011 through March 2012, for three of our products…We estimate this transaction benefited our solvency margin ratio at March 31, 2012 by approximately 20 points.

– **Aflac**, Financial Analysts Briefing,

Greater Capital Return Visibility…Today AFLAC hosted its investor day. We came away more positive on the stock…we feel that the company has multiple tools at its disposal to improve the solvency margin ratio, including another surplus relief transaction (1Q12 transaction resulted in 20pts of relief)…

– **Credit Suisse**,

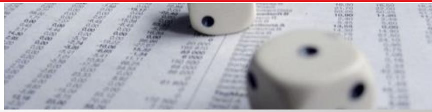
Case Study: Taiping Financial Reinsurance

Taiping Life has entered into a financial reinsurance contract….whereby the admitted assets (applied in calculation of statutory solvency) would be increased gradually….. It is estimated that the statutory solvency in the second quarter of 2013 would be increased by approximately RMB 4 billion.

– **China Taiping Insurance Holding Company**, 2012 Interim Results Presentation

….Taiping Life entered into a reinsurance arrangement to cede part of its mortality and accident and health risks which will free up around Rmb4 bn of capital…..Solvency concern is removed…. Capital raising and group restructuring is not imminent…. However, the capital raising could be postponed by reinsurance agreement for another 1-2 years. We see this as an important catalyst and maintain our OUTPERFORM

– **Credit Suisse**,



Changing regulatory & accounting environment

Global trends in regulation of financial services

1. Market consistent valuations
2. Risk adjusted capital regimes
3. Improved capital quality (loss absorbency)
4. More disclosure & transparency

New rules and regulations

- Basel III
- Dodd-Frank
- Solvency II
- IFRS 4 Phase 2

RGA

Capital Motivated Reinsurance Trends

- Introduction of Solvency II / RBC frameworks leads to market risk dominating the capital requirements
  - Everywhere in Asia has RBC except for China & Hong Kong

- Introduction of principle based / best estimate reserving leads to reduction in capital arbitrage strategies

- Future trends will revolve around reinsurance to:
  - Improve diversification benefits – remove concentrated risks / swap risks
  - Manage investment risk – via coinsurance
  - Reduce capital volatility – VIF monetisation still has a role to play
  - Reduce capital requirements where reinsurer has more aggressive view of risk

- No system is perfect and there may still be inefficiencies that can be addressed via reinsurance