



Volatility Management of Equity-Based Insurance Guarantees

CBOE RMC EUROPE 2013

Penha Longa Resort, Portugal

3:45 p.m. – 5:00 p.m., 01 October 2013

Pin Chung, PhD, FRM, ASA, MAAA



Genossenschaftliche FinanzGruppe
Volksbanken Raiffeisenbanken

Outlines

1. Introduction to Equity Based Insurance Guarantees
2. New product designs including volatility control products, low volatility by stock selection and VIX-linked structures
3. Volatility profile of equity based insurance guarantees, with and without new designs
4. How insurance companies manage risks

Introduction

Moderator:

Pin Chung, Chief Financial Officer and Chief Investment Officer, R+V International Business Services Limited

Speakers:

Andrew Rallis, Senior Vice President & Global Head of Asset/Liability Management, Met life

Philippe Combescot, Head of Americas Equity Derivatives Structuring & Strategy, BNP Paribas

Stefan Jaschke, Head of Quantitative Methods, Munich Re

EBIG essentials

Investment Guarantee types:

GMDB, GMIB, GMAB, GMWB, GLWB

Benefit features:

Return of Principal, Resets, Roll-ups, Ratchets, Combination

Asset Allocation methods:

Freedom of choice, Forced asset allocation, Volatility control,
Momentum and trend based optimization

EBIG essentials

From policyholder point of view:

- Simple product design to secure the value of investments
- Meaningful protection to mitigate the following:
market risk, inflation risk, longevity risk
- Reasonable liquidity
- Fee level reflects riskiness
- Easy to adjust portfolio
- Transparent exposure levels
- Possibility to pay additional irregular premiums
- A user-friendly interface to monitor and manage policy

EBIG essentials

From insurance company point of view:

- Reasonable profitability and sustainable competitiveness
- Hedgable guarantee
- Unhedgable risks are manageable
- Avoidance of anti-selection
- Reasonable incentive to agents and customers
- Creation of a long-term relationship with policy holders
- Agents understand the product
- Minimizing market conduct risk
- Select and adapt level of flexibility offered to policy holders

Disclaimers and Acknowledgements

- Materials presented above are personal opinions only, I own all errors.
- Thanks to Robert Mattson, Dr. Dirk Gorges and Dr. Volker Brauer for discussions.
- Pin Chung, CFO/CIO, R+V International Business Services Limited, pin.chung@ruv.ie