

Dear Sir or Madam,

The Life Bond group welcomes the initiative taken by the Bank for International Settlements to look into the subject of a regulation of the longevity risk transfer market and its impact on the stability of the worldwide financial system; we as the Life Bond group are glad to be able to comment on the previous analyses of the Bank for International Settlements. The Life Bond group fully supports the Bank's initiative to prevent future distortions by means of an adequate regulation of the transfers of longevity risks on the capital market. We regard this moderate regulation as necessary in order to create a stable framework for a future risk transfer market with qualified participants in the financial market, who – in our view – must be experienced in the management of longevity risks. Additionally, risk concentrations should be avoided by means of a functioning risk transfer market.

The Life Bond group was founded more than 12 years ago. We are the German asset manager for professional and semi-professional investors for investments in secondary and tertiary market life insurances, which is why we have dealt with the transfer of longevity risks for many years. We have a firm view on the worldwide development of markets for longevity risks as well as the specific national developments. In the following we focus on hypothesis 2 of your consultative report of August 2013.

The volume of transformed longevity risks, above all in the form of longevity swaps, will increase in the next few years. In this context the following risks will be increasingly monitored by the regulatory authorities:

- Transparency risk: the volume of traded longevity risk is unknown
- Management risk: the management risk is on the rise due to a cumulation of longevity risks at only a few addresses
- Address risk: no quality standards for risk takers

The regulatory authorities will have to create a regulatory framework which looks into the following questions:

1. How is the longevity risk to be defined? What are the prerequisites for longevity risks to be gathered?
2. What prerequisites are to be met by risk sellers and risk takers in order to get access to the market for the trade with longevity risks?
3. How are the rules for the trade with longevity risks to be formulated?

The second point of the BIS consultative report "Longevity risk transfer markets: market structure, growth drivers and impediments, and potential risks" of August 2013 is directly linked with the necessary prerequisites of the takers of longevity risks from a regulatory point of view.

The regulatory authorities should make sure that the takers of longevity risks have special abilities and distinct experience in the management of these specific risks. The provision of historical data is also part of this. In particular, it must be ensured that the asset managers have a specific conceptual know-how in the evaluation and management of longevity risks. This know-how must be demonstrated by means of standard processes and specific instruments. A verifiable, long-term track record is a must-have. The result of these qualities is a specification statement for asset managers, who want to act as risk takers of longevity risks. If an asset manager meets the requirements, s/he will receive an admission attestation as a participant in the market for longevity risks.

With regard to this point you will find the respective information in the PowerPoint presentation attached to this e-mail. My colleague in management, Christian Seidl, and I would be happy to outline our project approach in a personal meeting with you.

Please do not hesitate to contact me if you have any questions.

Best regards,

Rüdiger Frischmuth

Dr. Rüdiger Frischmuth
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Joint Forum: Longevity risk transfer markets: Market structure, growth drivers and impediments, and potential risks

Dr. Rüdiger Frischmuth
Christian Seidl

Hohenschäftlarn, October 18th, 2013

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BANK FOR INTERNATIONAL SETTLEMENTS

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Specialists in Life Insurance Markets.

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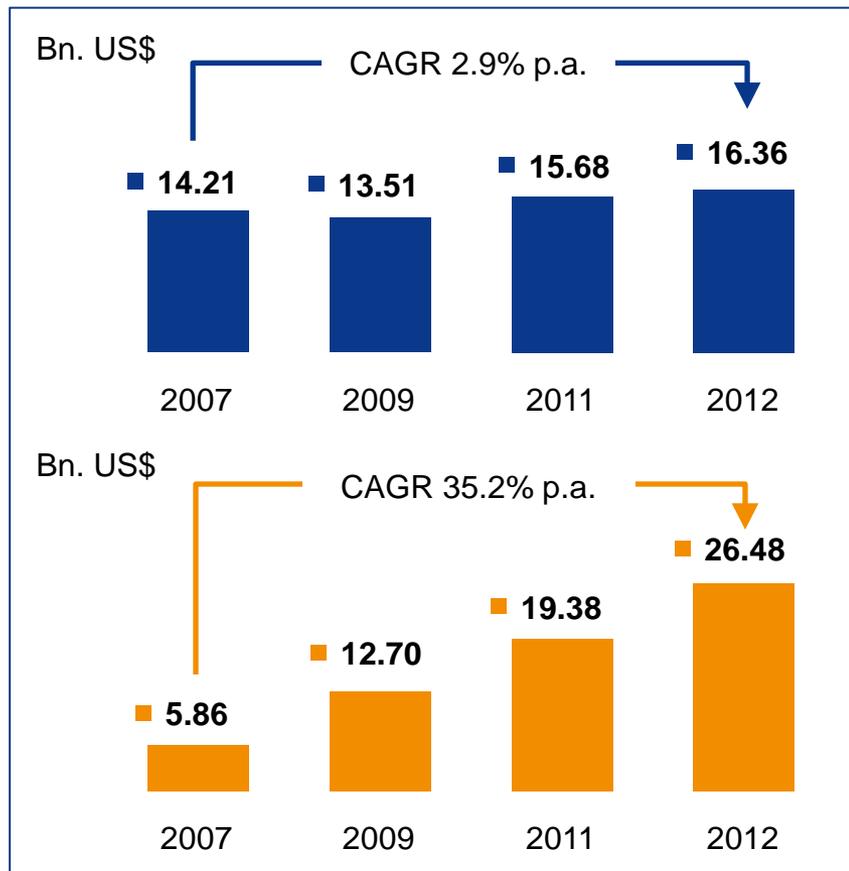
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1	Initial situation
2	Problem statement
3	Solution statement

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The defined benefit volume increased slightly, the transferred defined benefit volume soared



Defined benefit volume in bn. USD



- Between 2007 and 2012 defined benefit claims increased by 2.9% p.a. (on average) (CAGR)
- Transferred volume of longevity risks rose by 35.2% p.a. (on average) between 2007 and 2012
- Significant transactions above all in Japan, the UK and the US

■ Defined Benefit Volume worldwide ■ Transferred Defined Benefit Volume worldwide

Sources: Towers Watson Global Pension Asset Studies 2008-2012; LCP Pension Buyouts Reports 2008-2013

Supply and demand are key drivers of traded volumes – demographic trend and regulators are amplifiers

RISK SELLERS

- Dwindling staff number leads to negative financing effects
- Unpredictable P&L drains due to longevity risks
- Increasing outplacement of longevity risks from the balance sheets

RISK TAKERS

- Low interest rates in developed countries lead to a dividend crisis
- Climbing demand for non-correlating investments with excess returns and controllable risks according to risk types

STATE

- Increasing shift from state-run schemes to the private sector (pension plans)
- Rising participation of the private sector in the financing of hospital care

REGULATORS

- Creation of institutional regulators for the trade with longevity risks
- Standardization of benefits
- Definition of evaluation procedures
- Definition of quality standards for risk takers
- What is happening on the markets

DEMOGRAPHY

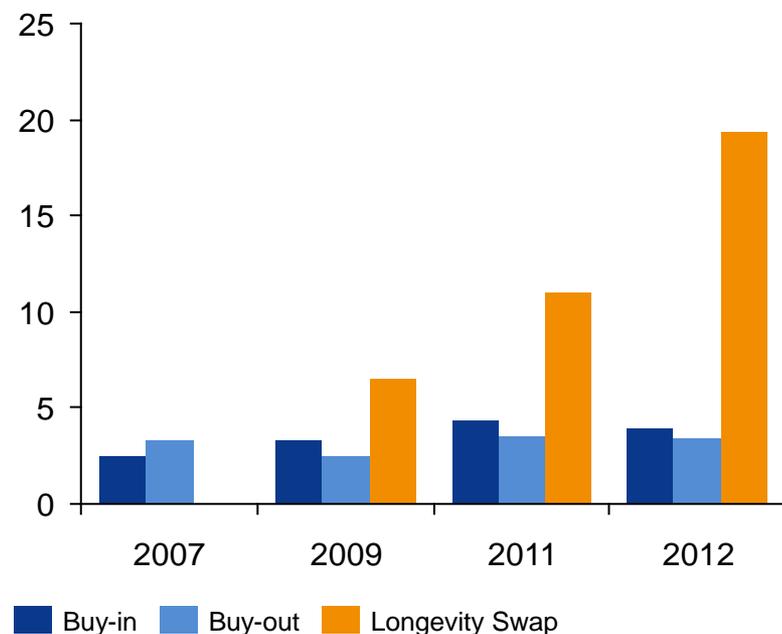
- Low number of children in developed countries (the US, Europe)
- Mounting financing problems due to higher life expectancy in developed countries
- Uncertainty over the impact of medical advancements on the longevity risk

SWAP deals with highest growth rates over the past few years

A further increase in transactions is expected

Communicated transactions in Europe

(Bn. US\$)



Reasons for growing shares of SWAPS

- Assets of a company stay within the company
- Professional hedging of longevity risks through third parties
- Existing claims of the employee towards the employer persist (pension payments)
- Standardized administration and transaction processes lead to high efficiency
- Financing effect persists
- Relative cost advantages over buy-in or buy-out due to standardization

Sources: Hymans & Robertson, "Buy-outs, buy-ins and longevity hedging" reports; LCP Pension Buyouts Reports 2008-2013

Selected communicated transactions of the past few years

Year	Country	Company	Style	Volume
2013	United Kingdom	BAE Systems Pension Plan	Longevity Swap	GBP 3.2 bn
2012	United Kingdom	Akzo Nobel	Longevity Swap	GBP 1.4 bn
2012	Netherlands	Aegon	Longevity Swap	EUR 12.0 bn
2010	United Kingdom	BMW Pension Plan	Longevity Swap	GBP 3.0 bn
2012	USA	General Motors	Full Buy-out	USD 26.0 bn
2012	USA	Verizon Communication	Full Buy-out	USD 7.0 bn
2011	United Kingdom	Uniq	Full Buy-out	GBP 830 m
2008	United Kingdom	Powell Duffryn	Full Buy-out	GBP 400 m
2012	United Kingdom	MNOPF	Full Buy-in	GBP 680 m
2009	United Kingdom	CDC	Pensioner Buy-in	GBP 370 m

Sources: LCP Pension Buyouts Reports 2008-2013

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Increasing volume of longevity transfer requires institutional constraints

Market participants and market platform for longevity risks (LR)

- Management risk due to cumulation of longevity risks at only a few addresses
- Volume of traded LR unknown
- No quality standards of risk takers

Risk Sellers

- Pension funds
- Large as well as small- and medium-sized enterprises
- Private persons

Requirements for longevity risk transfer market

- Formal and content-based standards for traded longevity risks
- Allowed access to the market for risk sellers and risk takers
- Regulations for auctions

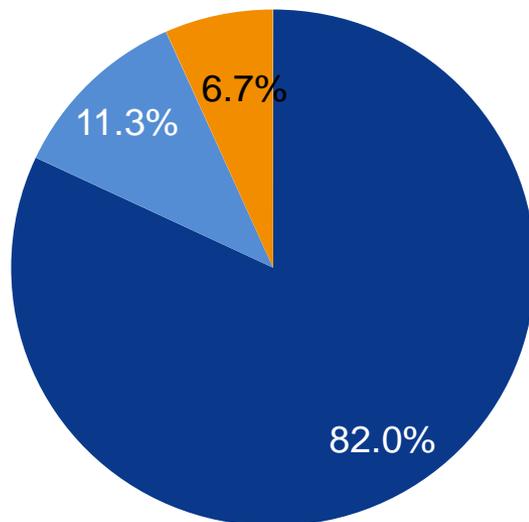
Risk Takers

- Banks, savings banks
- Pension pools
- Reinsurers
- Family Offices
- Private persons

Evaluation and management of longevity risks critical success factors of risk takers

Risk concentrations and skills needed for the evaluation and management of LR

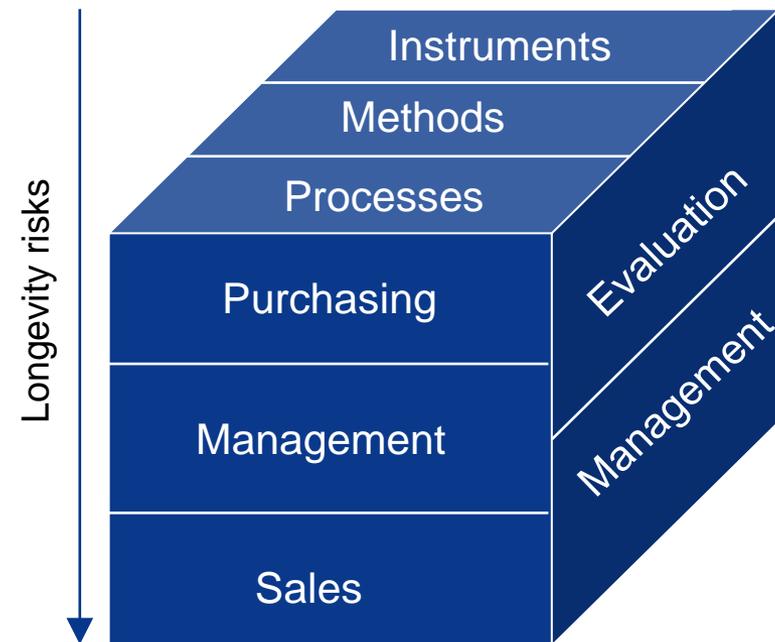
Dominance of single deals on the longevity risk transfer markets (communicated longevity swap transactions Europe 2012¹)



- Deal Deutsche Bank - Aegon Q1/2012
- Total of all deals Q2/2012
- Total of all deals Q3/2012

1) In Q4/2012 no communicated transactions

Skills needed by longevity risk managers

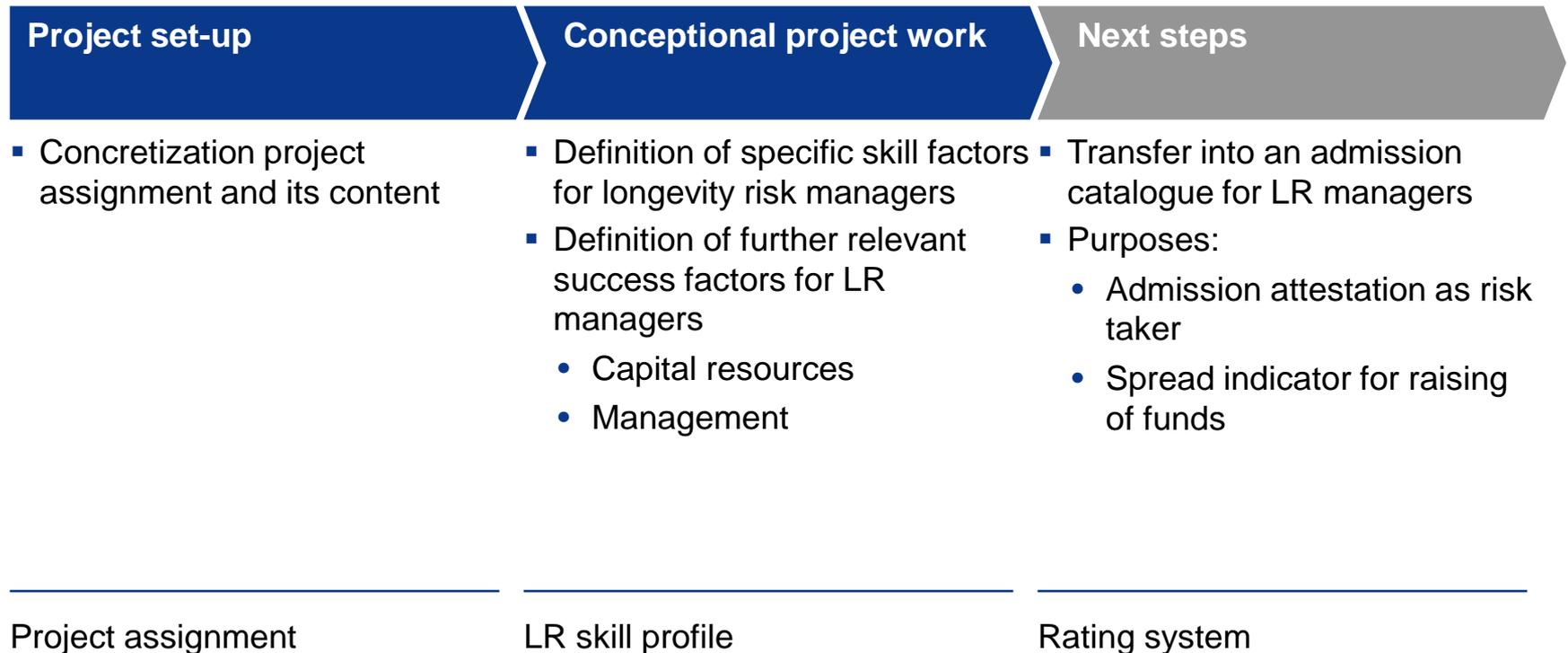


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Project aim is the creation of a skill profile for longevity risk managers



Project approach



Longevity risk manager needs distinct skills for the evaluation and management of longevity risks



Evaluation and management of longevity risk

Analytical skills to estimate life expectancy and access to reference data

Client/demand oriented approach

- Applicable evaluation of longevity risk primarily depends on the composition and structure of the LRT or rather the lives covered by the transaction
 - Life expectancy estimation of each individual based on medical records, e.g. individual portfolio of pensioners
 - Life expectancy estimation of a certain group or reference population, e.g. pensioners of a single corporation, entire working class pensioners
 - Life expectancy estimation of the whole population, e.g. specific country, worldwide

Access to detailed and up-to-date historical mortality data

Medical and actuarial know-how to scale future mortality projection

- Medical improvement and pharmaceutical research and development
- Disease patterns and course of diseases especially with older age population
- Impact of social life, education, income and wealth

Proven expertise in the assessment of longevity risk

- Many years of experience in longevity related investments or asset classes
- Strong track report
- Good reputation

Market intelligence

- Knowledge about the LRT markets and its players
- Knowledge about the options to mitigate longevity risk and about the universe of existing LRT instruments
- Knowledge about regulatory, legal and tax requirements and characteristics depending on the jurisdiction or the special situation of the party looking for LRT

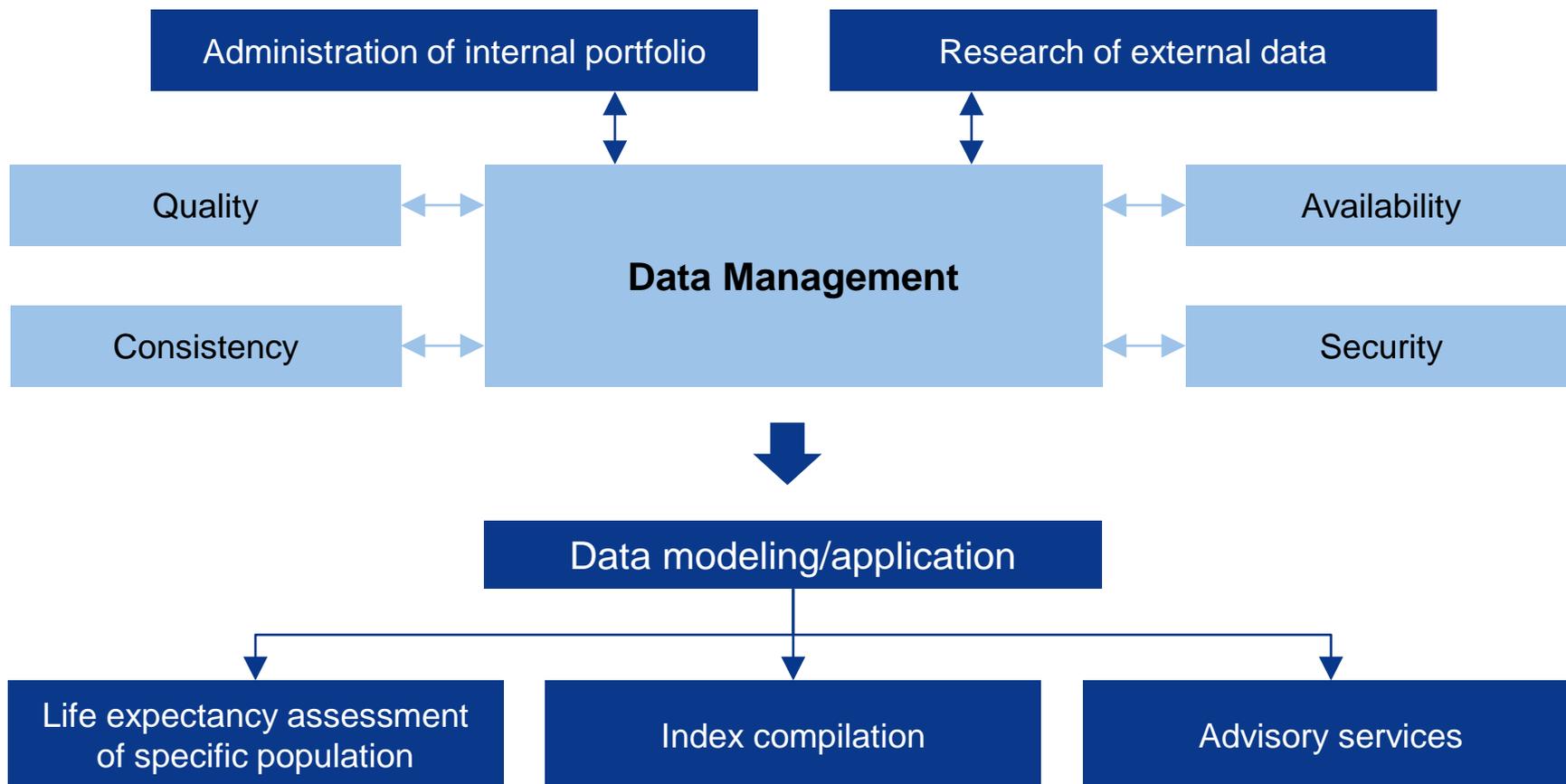
State-of-the-art operation, processes and (software-)tools including back-up solutions

Monitoring of longevity risk

- Tools to analyze and compare actual to expected mortality on an observed population
- Tools to prepare updated projections and scenarios of future mortality/life expectancy based on actual mortality experience on an observed population

Detailed and field-tested data base as well as excellent actuarial concepts success factors of longevity risk managers

Data management



Further success factors of longevity risk managers



Size of enterprise, controlling und management

Organisation

- Categorical separation of portfolio and risk management up to the management level
- Adherence to compliance standards to avoid conflicts of interest in the LR management

Investment processes

- Hedging behaviour based on market development
- Interlocking of top-down and bottom-up-processes in the analysis and evaluation of LR

Results

- Track Record in AM

Risk management

- Focus on customer-specific risk profiles and requirements
- Definition of risk budgets from the selection and analysis of the objects to constant qualitative and quantitative controls within the investment processes; implemented consistently

Management quality

- Qualification and stability of the management
- Distinct functional expertise with verifiable track record

Capital resources

- Solvency regulations at least pursuant to Solvency II standard



Forecast: Job profile of the longevity risk manager is input for rating



Skills

Founded: 1875 by John Fairfield Dryden
Headquarters: Newark, New Jersey
Global Employees: 48,000 (19,115 in the US)
Management: John R. Strangfeld (Chairman, CEO)
Total AuM: \$1,044 trillion

Gross life insurance in force: \$ 3.6 trillion worldwide

Financial Strength Ratings:

A.M. Best Company: A+
 Fitch Ratings: A+
 Standard & Poor's: AA
 Moody's: A1

NEW

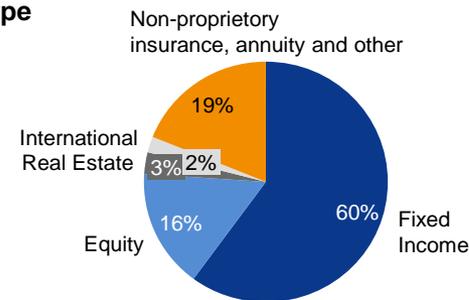
Rating LLR: Management Rating

- Core Competencies:** Insurance products, retirement solutions, investment management,
- Rankings:**
- 2nd largest life insurer in the US based on total admitted assets
 - 5th largest individual life insurance business in the US in terms of statutory net written premiums
 - 8th largest institutional asset manager worldwide.
 - Largest seller of individual life insurance in the US based on recurring premiums
 - **Largest risk taker of longevity risks worldwide**

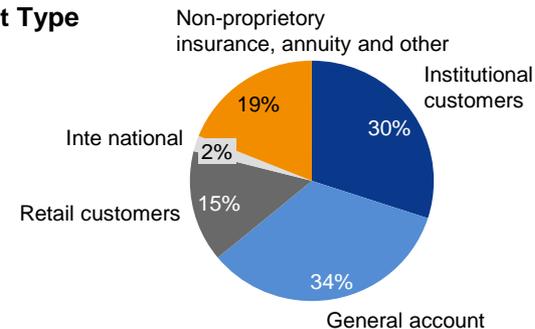
NEW

Prudential Financials assets under Management (AUM) – Significant scale and breadth

AUM by Asset Type



AUM by Client Type



Source: Prudential Financial Inc., Life Bond Research

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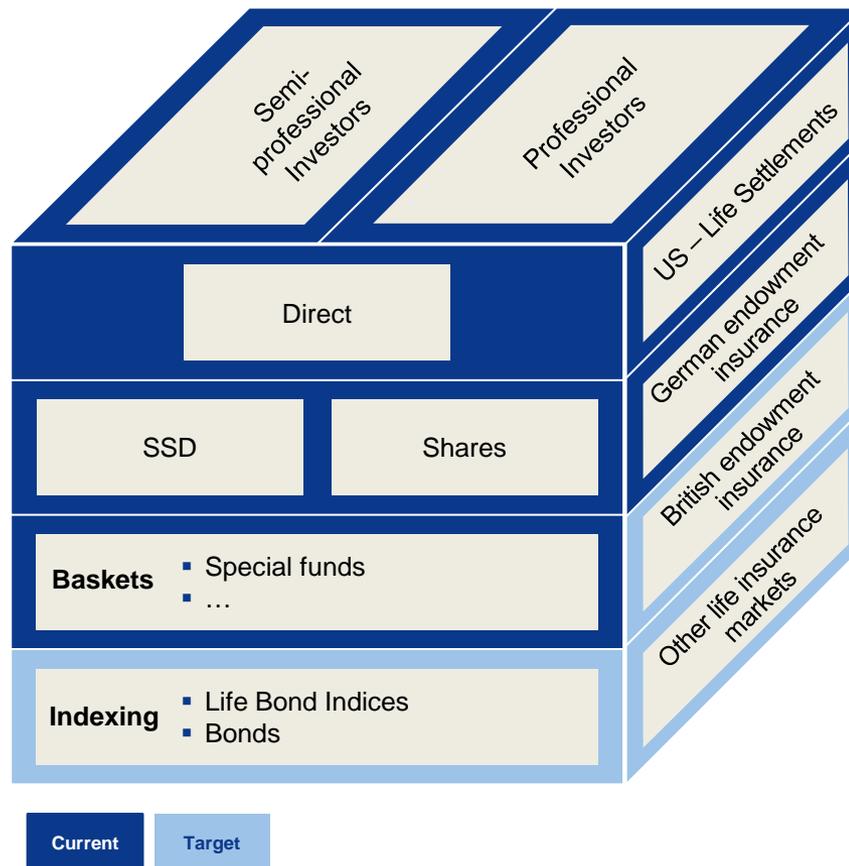
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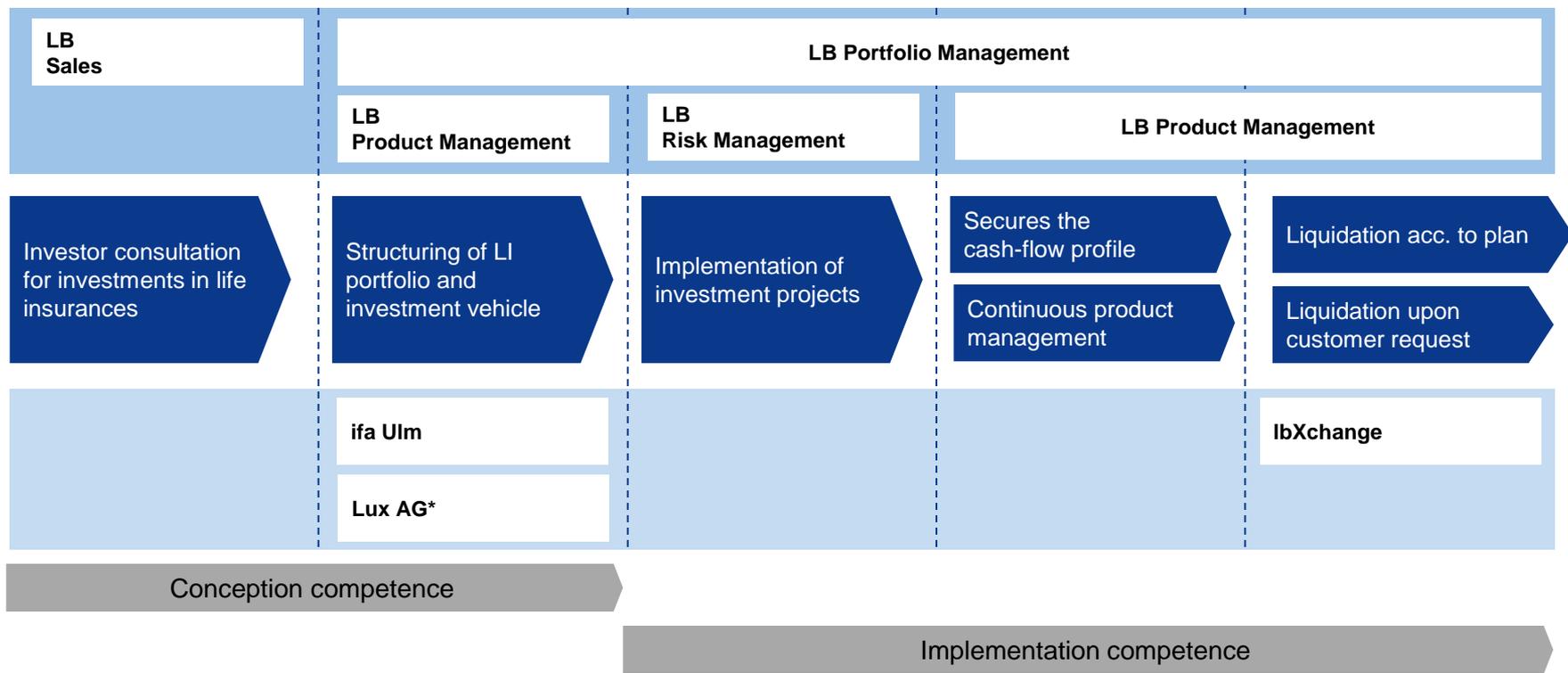
Appendix

Life Bond is the German asset manager in secondary market life insurances (1/2)



- 100% owner-operated asset manager founded in 2001
- Management with distinct network in the financial industry, excellent industry expertise and international experience
- High level of expertise and experience in structuring and management of investments in life insurances
- Long-term successful cooperation with renowned cooperation partners along the value-addition chain for customer-specific, efficient product, portfolio and risk management
- Conceptualization of specific investment alternatives for qualified investors

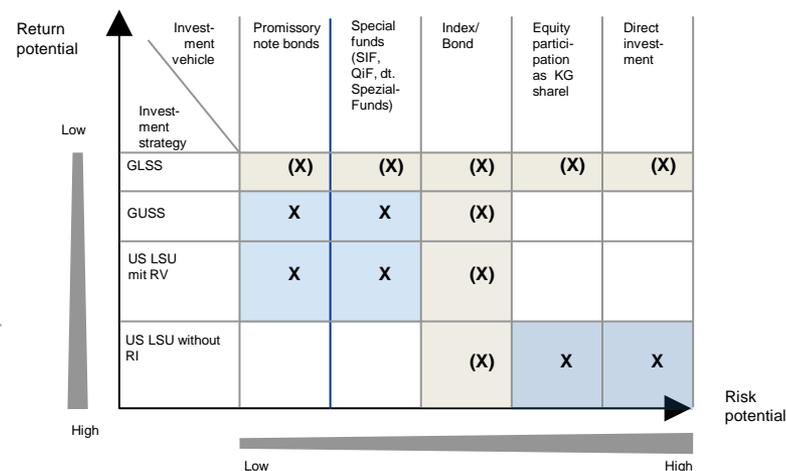
Life Bond is the German asset manager in secondary market life insurances (2/2)



* Luxemburger Verbriefungsgesellschaft belongs to the Life Bond Group

Life Bond with product and consulting expertise in the area of life insurances

Qualified investors	Professional investors	Pension funds
		Pension pools
		Benefit plans
		Primary banks
Semi-professional investors	Family offices	
	Private equity investors	
Others	Investment advisors, associations, authorities	



GLSS = German Life Settlement Strategy
 GUSS = German/ U.S. Life Settlement Strategy
 US LSU = US Life Settlement Underlying
 RI = Reinsurance

Existing product combinations (blue)
 Planned product combinations (yellow)

- Investment Advisory
- Research
- Consultation re. longevity risks

Life Bond Management GmbH Management



Dr. Rüdiger Frischmuth

Dr. Rüdiger Frischmuth is Executive Vice President of the Life Bond Management GmbH and is responsible for the areas sales and product development. Prior to that and for more than 11 years he was a partner at zeb/rolfes.schierenbeck.associates, one of the leading European consultancies for financial service providers. Between 1995 and 2000 Dr. Frischmuth worked in corporate development and was head of the division Asset Management Services of the HypoVereinsbank AG. After that he became CFO of Home Shopping Europe AG (HSE AG).

Life Bond Management GmbH Management



Christian Seidl

Christian Seidl is Executive Vice President of the Life Bond Management GmbH and is responsible for the areas asset management and product development. Prior to joining the Life Bond Group in 2003, Christian Seidl held several management positions in the Schörghuber Group in Munich. Christian Seidl trained as a bank clerk and completed his business studies at the University of Regensburg, Germany, before he started his career as an assistant auditor at PriceWaterhouseCoopers in 1996. Christian Seidl has for many years been active in the international secondary markets for life insurances and in the industry's association BVZL e.V. (www.bvzl.de), where he is a member of the Executive Board International as well as team manager USA.

Life Bond Management GmbH Project management



Stefan Teubler

Stefan Teubler is Life Bond's in-house actuary and responsible for all mathematical and statistical computations and modelings in connection with policy evaluation and ongoing administration, portfolio analytics and the development of new US life settlement investment products. He was born in 1981, studied at the University of Technology Munich, Germany, and earned his diploma in Financial and Business Mathematics. Stefan Teubler started his carrier by joining the Life Bond Group in January 2008.

Life Bond Management GmbH Project management



Michael Klaes

Michael Klaes is responsible for product development and product management. Before he joined Life Bond in July 2013, Michael Klaes was the head of the business development unit of a German mid-cap company. Prior to that, he worked for more than ten years as product manager and Head of Product Management for Structured Products at DWS Investment GmbH. Michael Klaes holds a diploma in business administration from the Frankfurt School of Finance & Management (HFB) and is a Certified EFFAS Financial Analyst (CEFA).