

# The Ongoing Revolution of the Insurance Business Model

Bear Stearns International Conference

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*Be Life Confident*

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- Transformation of the insurance business model
  - AXA, a pioneer in the transformation of the model
  - Solvency II, an accelerating factor
  - Conclusion

## From warehousing risks ...

- ▶ 1. The insurance business model
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- ▶ 3. Solvency II, an accelerating factor
- ▶ 4. Conclusion

- Insurance business model based on **warehousing risks** :
  - ▶ Risks taken from policyholders
  - ▶ Risks pooled and **borne by the insurers**
  - ▶ Traditional **reinsurance programs**
- Requiring **large diversification** and good underwriting
- Requiring a relatively **large amount of capital**, not always efficiently used

### *The Old World*

- Focus on product returns without properly measuring risk/volatility
- Management of assets independent from management of liabilities
- Accounting rules far from “marked-to-market”
- Few rated companies
- Few institutional investors



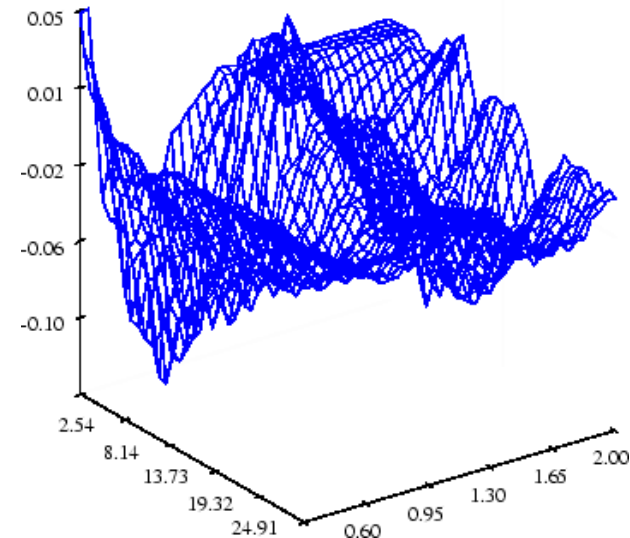
## ... to understanding, restructuring and transferring risks (1/2)

- ▶ 1. The insurance business model
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- Business model evolving towards **management & intermediation of risks** :
  - ▶ Risks taken from policyholders
  - ▶ Risks pooled and **structured by the insurers**
  - ▶ Risks externalized through **reinsurance programs & financial markets**
- Requiring **efficient diversification**
- Requiring **moderate amount of capital** with appropriate capital management

### *The New World*

- Focus on products' risks / value
- Integrated assets / liabilities management
- Accounting rules closer to "marked-to-market"
- Many rated companies
- More institutional investors



## [ ... to understanding, restructuring and transferring risks (2/2)

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- **Risks can be insured = Risks can be securitized**
  
- **Market risks** being more dynamically managed through the use of suitable hedges (bought or built) :
  - ▶ UL with guarantees
  - ▶ General Account embedded options
  
- **Insurance risks** being externalized through :
  - ▶ Financial markets
  - ▶ Reinsurance markets
  
- **Other risks** still being kept and borne by insurers :
  - ▶ Scale (mutualisation of risks)
  - ▶ Requirement of a specific expertise
  - ▶ Prohibitive market prices

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## AXA acts as a pioneer in dynamic hedging...

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- **Securitization and dynamic asset management** are the new tools for risk management and capital management, aiming to :
  - ▶ Improve capital utilization in the insurance industry
  - ▶ Add transparency and liquidity to liabilities
  
- **Dynamic hedging of UL with guarantees :**
  - ▶ Enabled through a global platform (AXA Life Europe)
  - ▶ Used across the Group
  - ▶ Fostering product innovation & giving a competitive advantage

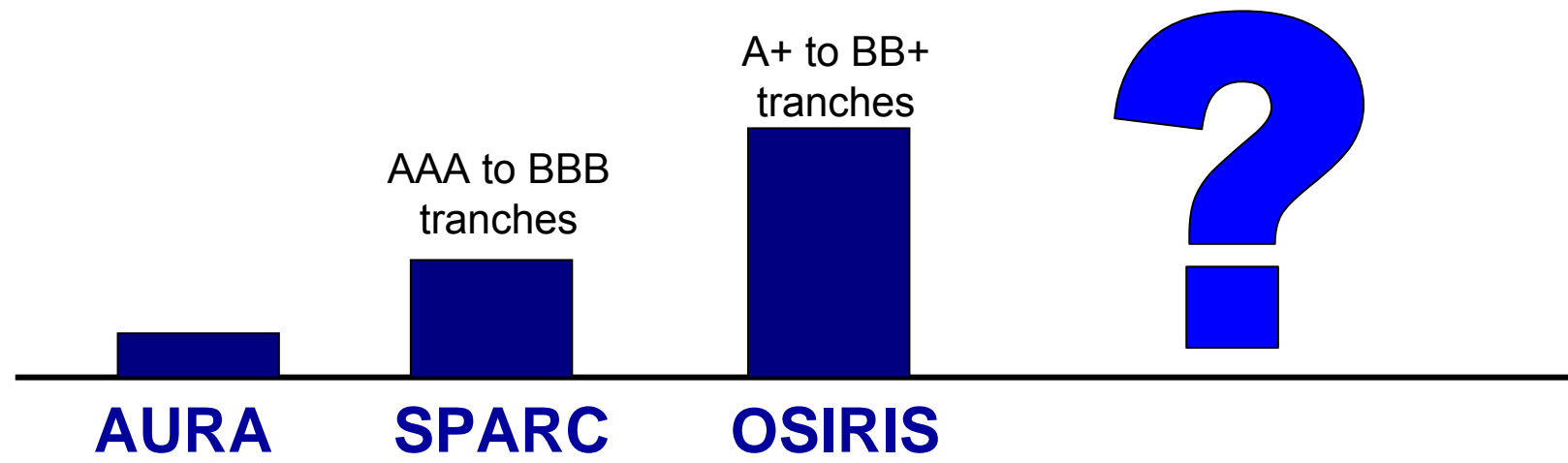


# [ ... and insurance-linked securities (1/2)

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## ■ Examples of AXA's innovative Life & P&C insurance-linked securities (ILS) transactions :

- ▶ AURA Re (2005): 1<sup>st</sup> P&C Cat bond issued by AXA (€68m)
- ▶ SPARC (2005): 1<sup>st</sup> securitization of a motor insurance portfolio (€200m)
- ▶ OSIRIS (2006): 1<sup>st</sup> extreme-mortality risk coverage program (€300m issued)

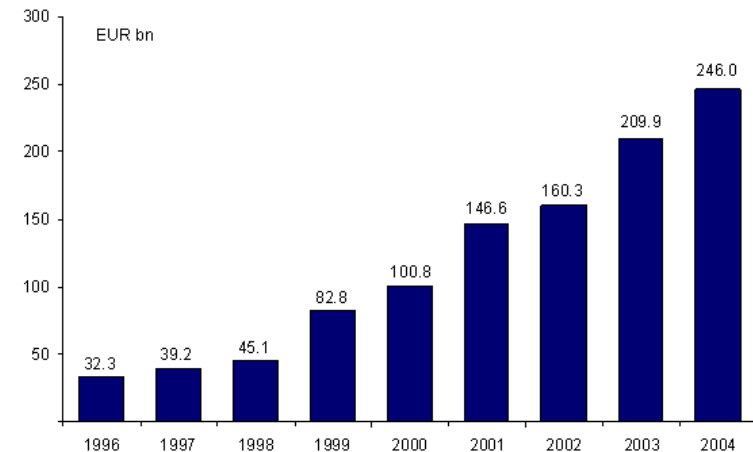


## ... and insurance-linked securities (2/2)

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- Volume of ILS still small in the ABS market, but potential is high
- The market is expected to expand rapidly, according to Swiss Re!
  - ▶ P&C securities x2 over the past 5 years
  - ▶ Life bonds x3
  - ▶ Expected growth by 2016: x6 to x15
- Securitization of new classes of risk:
  - ▶ Credit reinsurance risk (SwissRe, €252m)
  - ▶ Liability risk (Oil Casualty Ins/Avalon Re: \$405m)

➔ What's next ?



Source: Deutsche Bank Securitization Research

### European ABS Market

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## A new regulatory framework

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- **Solvency II is still under development** but the framework is already well established :
  - ▶ Benefits of diversification
  - ▶ Market consistent approach / total balance sheet approach
  - ▶ Risk based capital measure through a one year V@R
  - ▶ Recognition of specificity of insurance industry in Pillar 2 (multi year approach, etc.)
- **Latest developments are encouraging** although issues need to be addressed e.g. the coordination of European supervision
- **Solvency II should accelerate the change in the insurance model :**
  - ▶ Use of all sorts of risk mitigation techniques
  - ▶ Supported by development of cutting edge financial techniques

## Key impacts on AXA

- ▶ 1. The insurance business model
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- For AXA, the new framework will validate strategic decisions made years ago :
  - ▶ Systematic use of cash-flow forecasting models
  - ▶ Resistance to short-term shocks
  - ▶ Stable & sound equity & corporate bond exposure, commensurate with Group resources
  - ▶ Dynamic management of the convexity, in particular through derivatives
- ➔ Benefits related to our commitments to economic approaches should continue to emerge thanks to our strategy based on :
  - ▶ Sound economic principles
  - ▶ Diversification
  - ▶ Recognized superior risk management practice

## Key impacts on the industry

- ▶ 1. The insurance business model
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- **Solvency II** should :
    - ▶ Lead to better risk management
    - ▶ Provide a **more efficient capital management environment**
  - The **industry consensus** is stronger and stronger:
    - ▶ CFO Forum EEV principles and Expanded principles for IFRS 2
    - ▶ CRO Forum responses to the Solvency 2 CEIOPS calls for advice
  - Accounting (**IFRS 2**) & regulatory (**Solvency II**) frameworks should embrace the **same concepts**
  - Changes are expected to foster ...
    - ▶ Transparency
    - ▶ Discipline and risk management...contributing to higher/less volatile ROEs and leading to more attractive insurance stock valuations
- ➔ Solvency II might **give Europe** a great opportunity to have a **competitive advantage** compared to other insurance markets in the world

## Focus on asset / liability management (1/2)

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- **Strategic asset allocation target** → maximization of the economic value under the constraints of:
  - ▶ (Economic) risk taking capacity
  - ▶ Solvency capital requirements
  - ▶ Rating requirements
  - ▶ Accounting requirements (IFRS)
- Solvency II aligns economic and solvency constraints leading to a **simplified ALM**
- Immediate penalty (capital) of risks to bring **more disciplined approach**
- The **capital relief associated with risk mitigation** will encourage :
  - ▶ Larger use of derivatives
  - ▶ Larger use of broader investment class
- **For investors**, Solvency II should translate into the **multiplication of financial instruments backed by new risks** (mass risks like motor, peak risks like cat bonds, structural risks like longevity, etc.)

## Focus on asset / liability management (2/2)

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- AXA is managing actively its interest rate risk exposure:
  - ▶ duration gap
  - ▶ convexity gap (mainly through swaptions)

Dec 2005	Assets Duration (yrs)	Liabilities Duration (yrs)	Duration Gap (yrs)	Convexity Gap (bps)
Life - Euro Zone	7,5	9,1	1,6	103
Life - Total	7,2	8,2	1,0	94
Life & P&C - Total	7,0	7,9	0,9	

Dec 2006 (inc. Winterthur)	Assets Duration (yrs)	Liabilities Duration (yrs)	Duration Gap (yrs)	Convexity Gap (bps)
Life - Euro Zone	7,9	8,8	0,9	56
Life - Total	7,4	7,9	0,5	79
Life & P&C - Total	7,2	7,7	0,5	

**Reduction in duration gap  
and in convexity gap**

- Reduction in duration gap will lead to reduction in regulatory capital requirements under Solvency II

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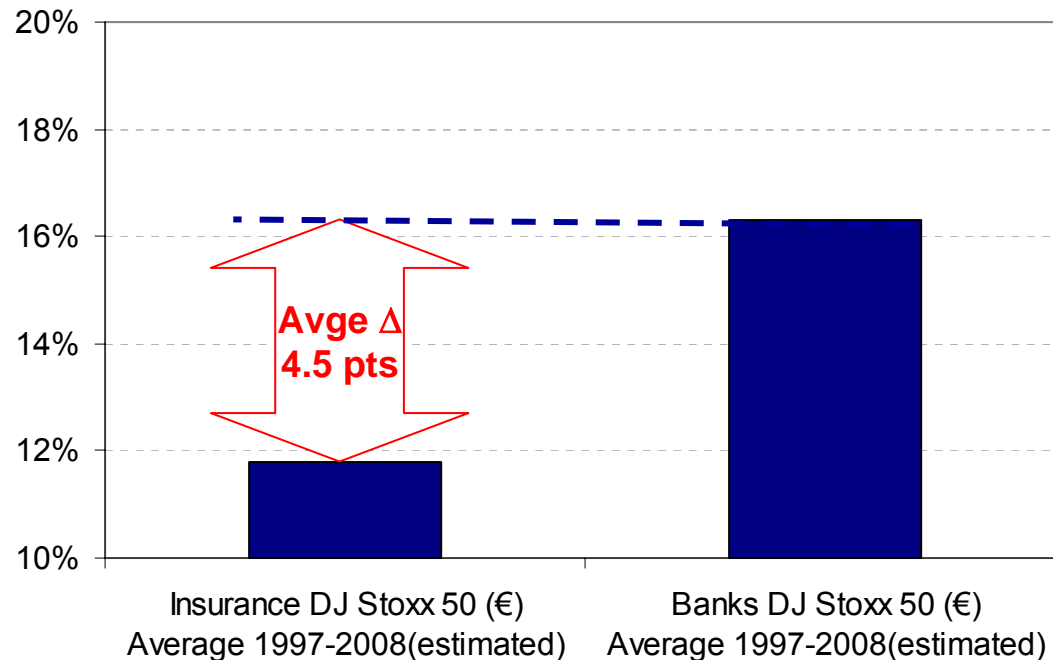
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# Benefits of our commitment to economic approaches should continue to emerge

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- Coming years should confirm and reinforce the appropriateness of AXA's business and capital management strategies
- Attractiveness of insurance industry as an asset class expected to increase

## Insurance and Bank RoE





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