SwissLife

Investors' Day
Risk Management/New Accounting Standards

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Zurich, 2 December 2004

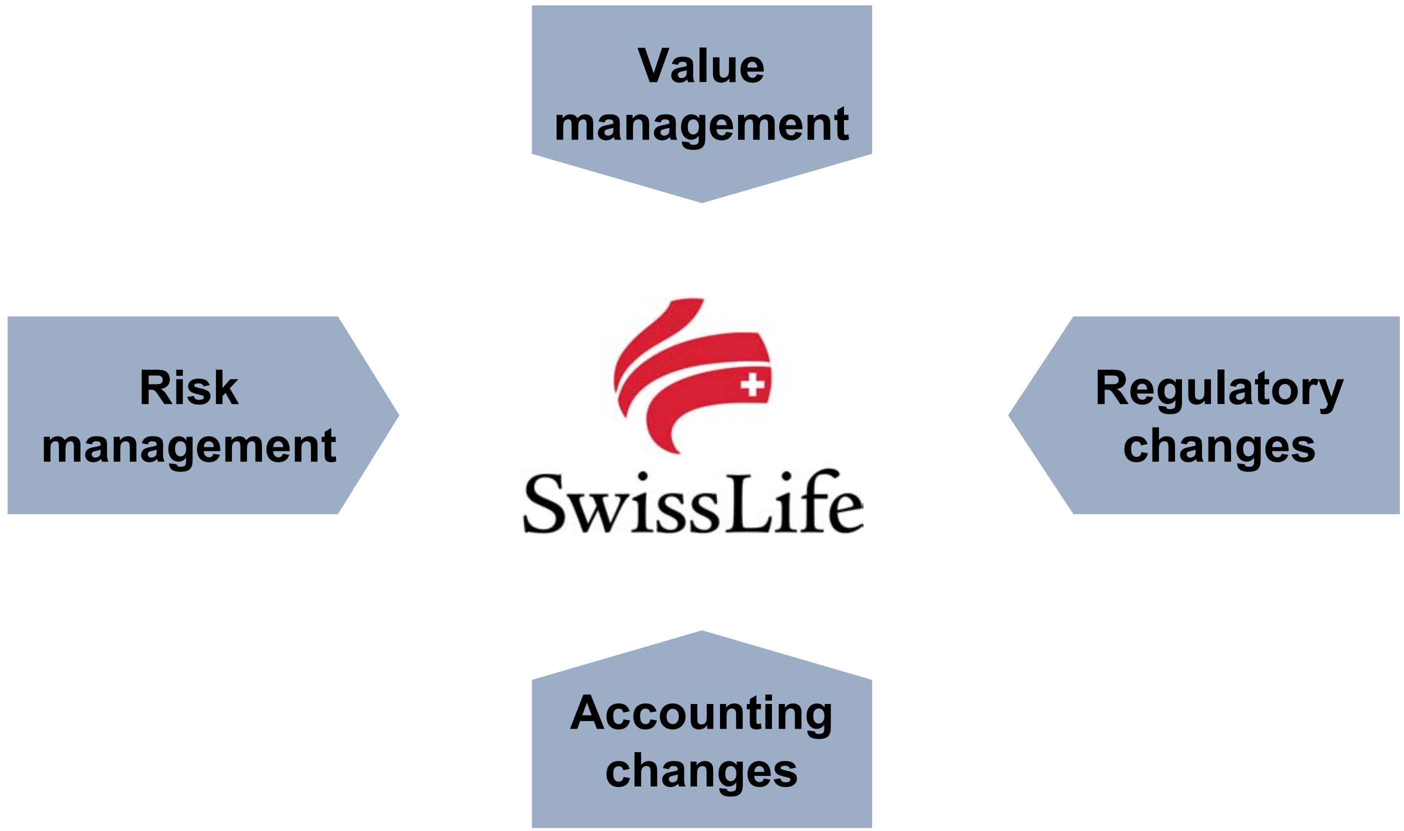
Agenda

1. Introduction
2. Risk management
3. Value management
4. Regulatory changes
5. Accounting changes
6. Consequences for the organisation
7. Further developments

Achievements in 2004

- Better understanding of liabilities leading to a more thorough ALM process
- Group-level risk management and ALM organisational structure put in place
- Further de-risking measures taken (e.g. reduction of the duration gap)
- Major contribution to development of Swiss Solvency Test

Factors influencing Swiss Life



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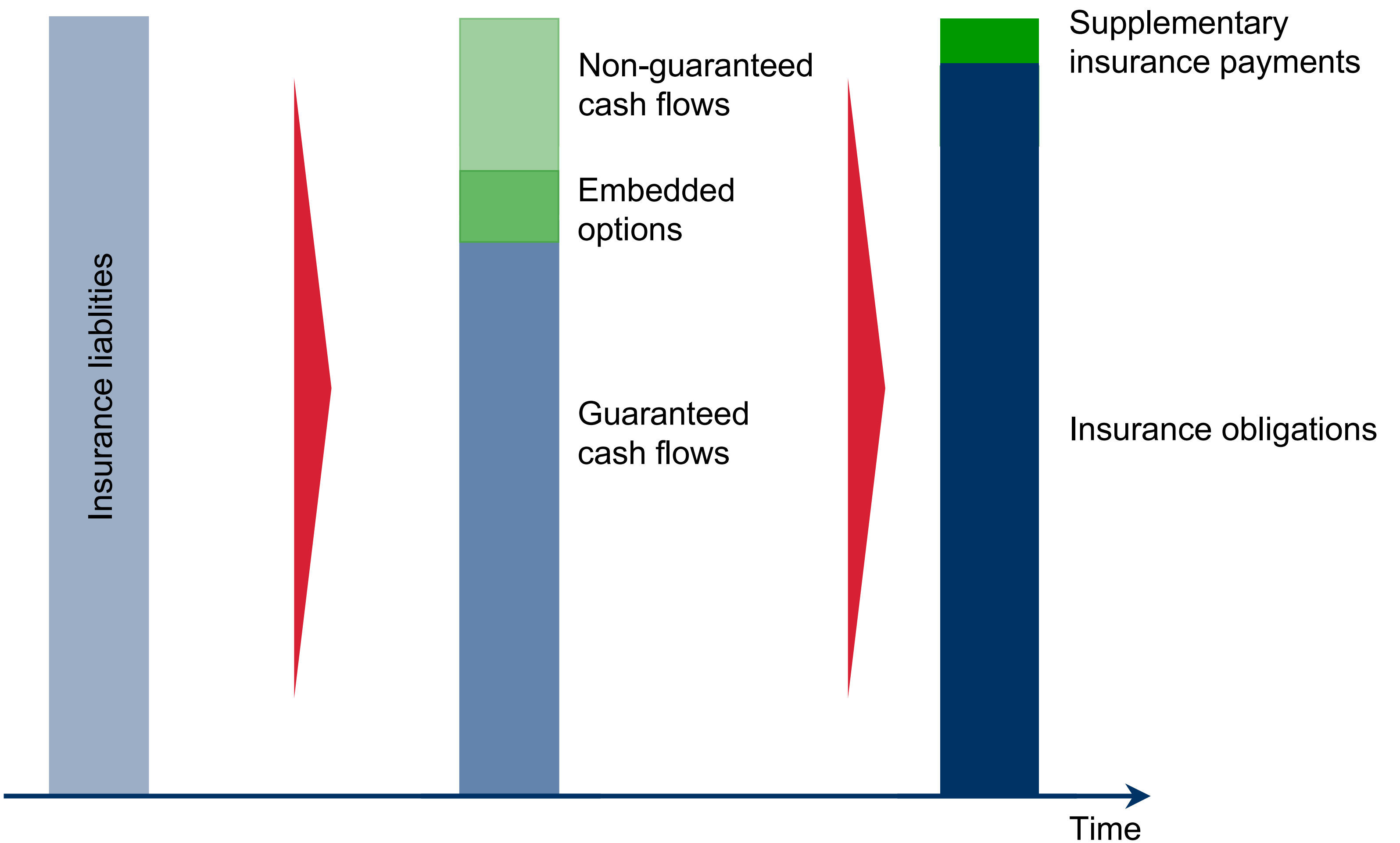
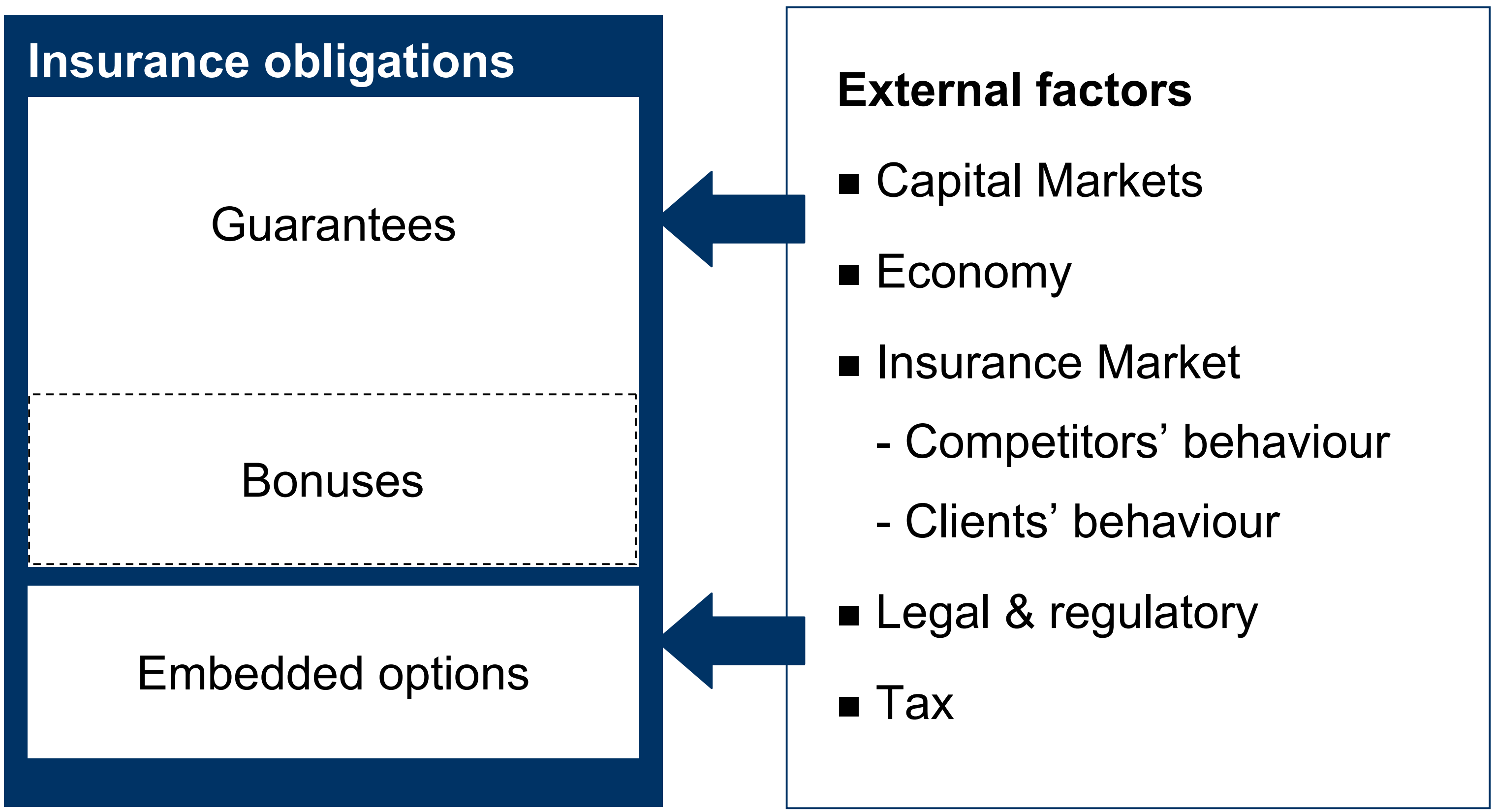
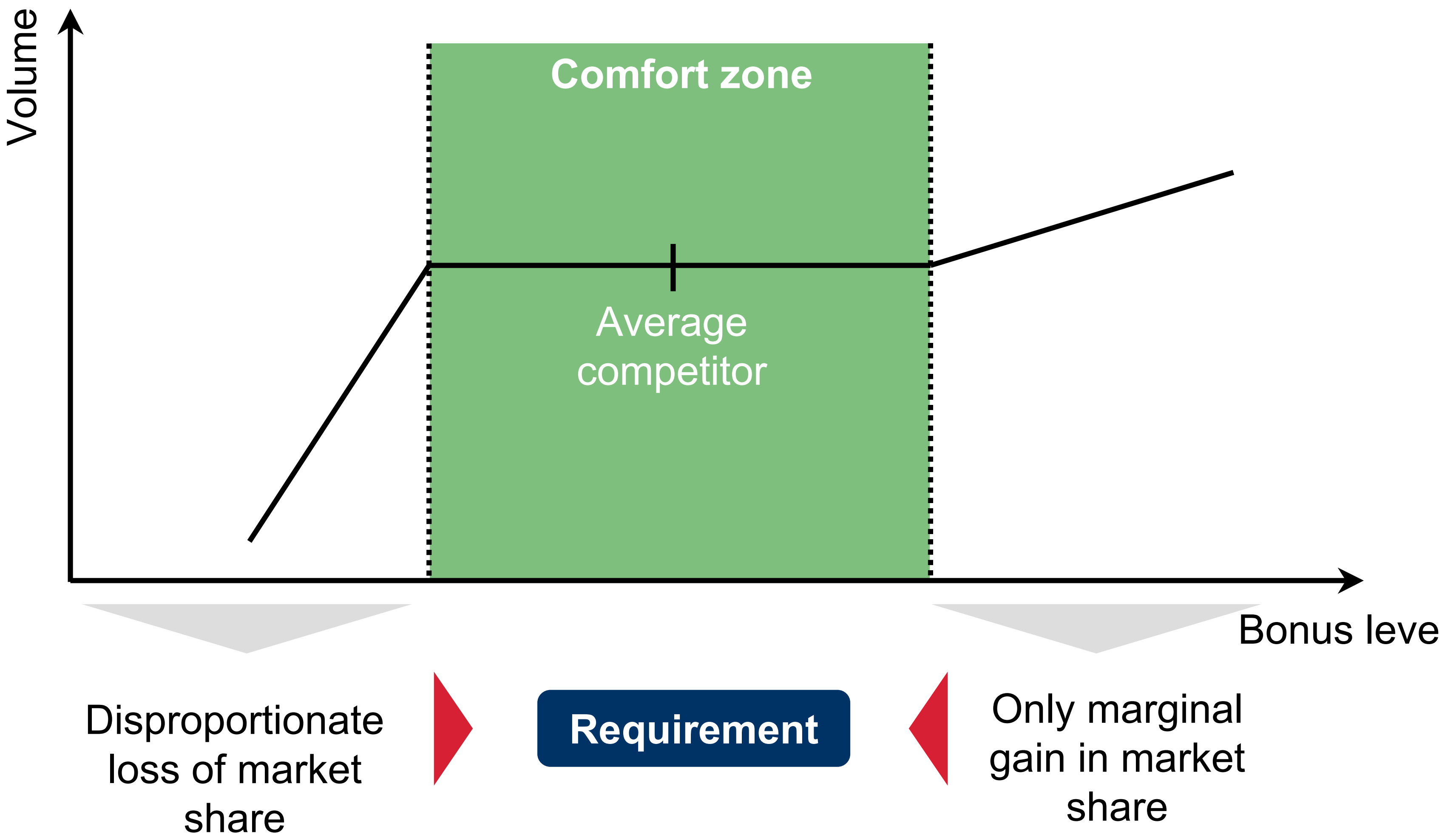
A new liability notation is used



Insurance obligations are our primary product and affected by external factors

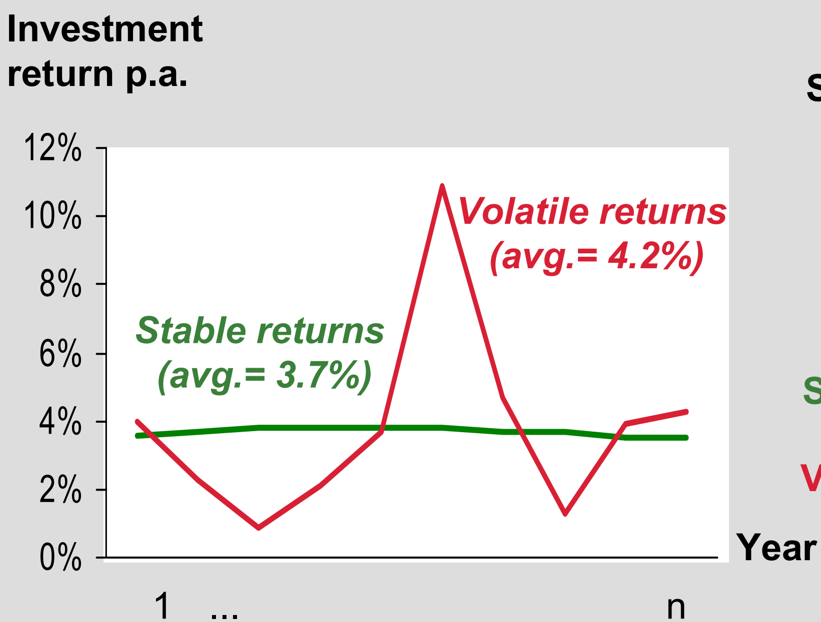


Crediting policy looks at competitors' behaviour, risk capacity and asset allocation



High investment return volatility reduces value compared to stable (yet lower) returns

Illustrative, in CHF million



Sensitivity analysis

	New business p.a.	Average lapse rate	NPV
Stable returns	500	2%	1 400
Volatile returns	400	4%	1 000

Volatile investment returns therefore cause lower average new business, higher lapse rate and lower valuation

Note: All values based on business cycle macro-economic environment

Embedded options are rights for the policyholder to change the existing policy

Examples of significant options:

- Right to surrender the contract at a predefined minimum value
- Right to cancel future premiums
- Right to get capital instead of annuities

Room to manoeuvre:

- Delayed bonus payments (e.g. terminal bonus)
- Penalty
- Values dependent on market interest rates

Embedded options - valuation techniques

Basis for embedded options' valuation

	Financially rational policyholder behaviour	Observed policyholder behaviour
Application	Mainly used for product design	Mainly used for valuation of existing policies
Goals	■ Understanding of – Mechanism of the various options – Options' inherent risk ■ Getting an upper bound for the values (worst case) ■ Improving the product design ■ Providing verification for other methods	■ Calculating fair value ■ Capturing entire behaviour pattern, based on best estimates (not just financial) ■ Calculating a market-consistent value ■ Using values for – SST – Embedded Values under EEV[1] Principles

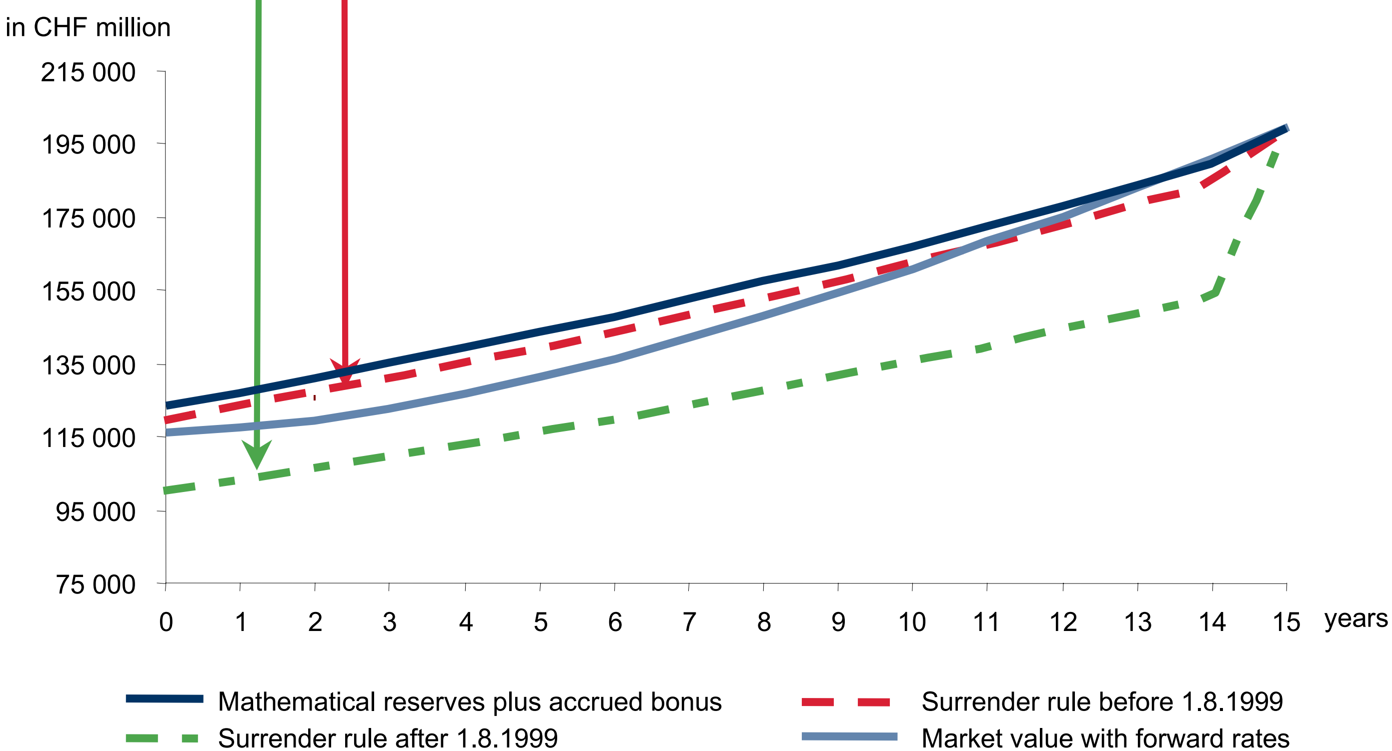
1) European Embedded Value

Example: Surrender option on single premium endowment contract

Rational financial behaviour of policyholder assumed!

Two different guaranteed surrender value rules:

- 1) Contracts before 1.8.1999: mathematical reserves plus accrued bonus less a penalty (about 3% of mathematical reserves)
- 2) Contracts after 1.8.1999: 80% of mathematical reserves plus accrued bonus

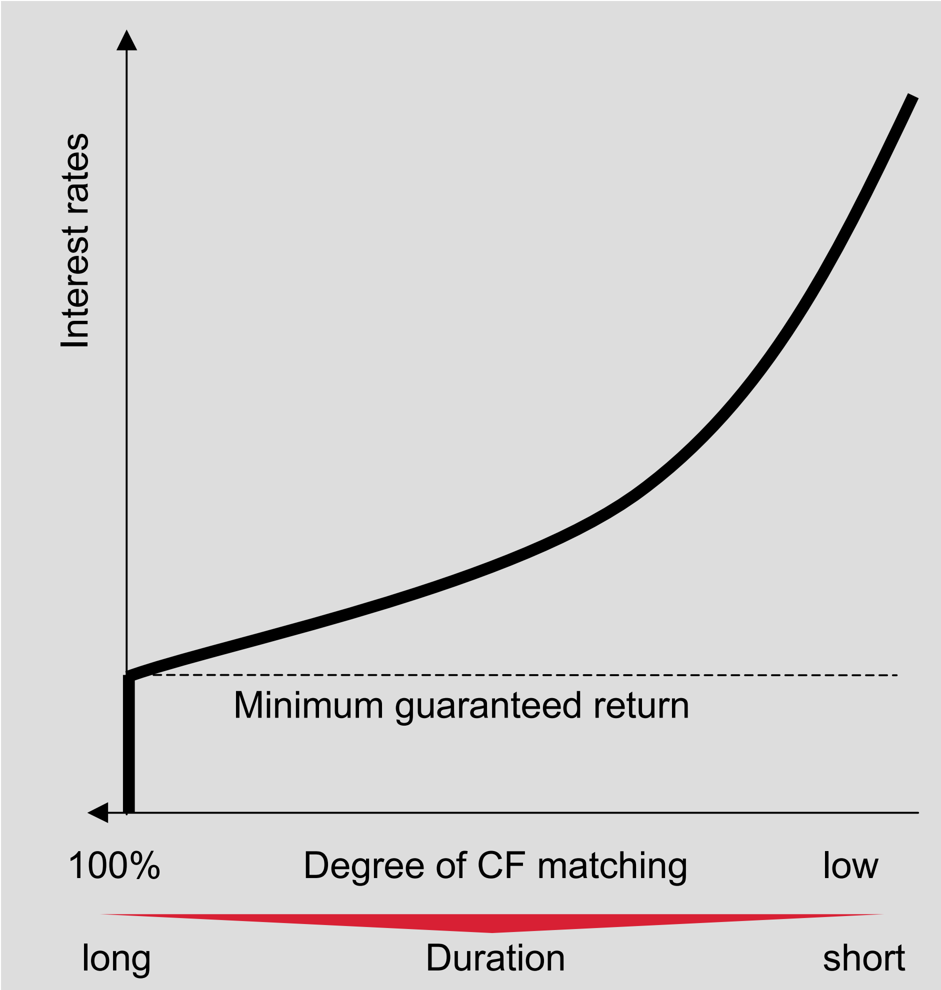


Option value in percentage of policyholder's reserve:

1) 5.6%

2) 0.8%

Liability cash flows are complex in reality and vary with market returns



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Embedded values, a widely used standard with some teething troubles

Traditional definition

- Valuation of business in force
- Embedded Value = ANAV (Adjusted Net Asset Value)

  + PVFP (Present Value of Future Profits)

  - Lock-in Costs (Opportunity cost of holding solvency capital)

Pros	Cons
■ Relatively easy to explain and well understood ■ Widely applied ■ Used in market transactions ■ Basic idea in line with valuation systems for other industries	■ Various mutually inconsistent methodologies for economic assumptions ■ No explicit allowance for costs of guarantees and embedded options ■ Lack of transparency

The CFO Forum agreed to strengthen the embedded value rules: European Embedded Value Principles

Most significant improvements to traditional principles:

- **Direct influence of options' and guarantees' values**
  - Allow for time value of options and guarantees explicitly
  - Use stochastic techniques for the valuation of options and guarantees
- **Restrictions to degrees of freedom**
  - Economic assumptions for operations in mature markets must be based on observable, reliable market data
  - Participating business assumptions to be consistent with projection assumptions, established company and market practice (includes modelling of client and management behaviour)
- **Disclosure rules**
  - New disclosure rules will lead to higher transparency and comparability

Note: The European Embedded Value Principles are accessible at www.cfoforum.nl

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Internal and external risk processes go in the same direction

Analytical model
(expected shortfall as risk measure)

Market risks

Insurance risks

Scenario aggregation

e.g.
- Pandemic
- Stock market crash
- Financial distress
- Reinsurance defaults

Weighted average of scenarios with results from analytical model

+

Credit risk charge

+

Risk margin

=

Target capital

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Swiss Life prepared to implement accounting changes

- IFRS 4 insurance contracts
- IAS 32/39 financial instruments (revised)
- Other revised/new IAS/IFRS standards

⇨ Restatement of 2004 figures in process

⇨ Restatement impact will be communicated prior to release of 2005 half-year figures

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A holistic risk management approach allows better risk steering

as per 01.10.2004

CRO

Product controlling

Risk Methods
- Quantitative Methods
- Asset Modelling
- Market & Risk Data

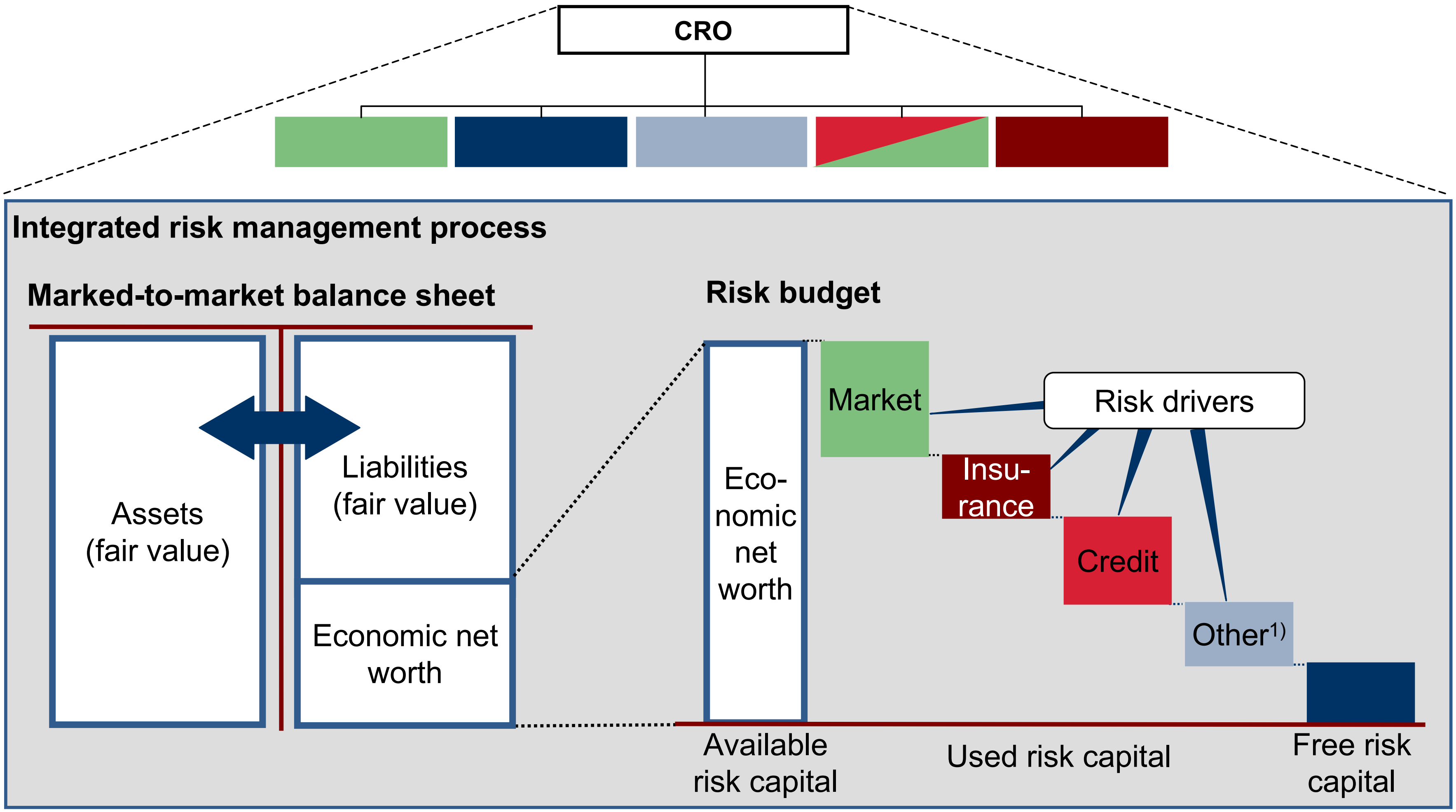
ALM
- Asset Allocation
- Crediting Policy
- Product Principles
- Risk Budgeting Support

Risk Assessment & Operational Risk
- Risk Assessment Coordination
- Risk Reporting
- Risk Policies
- Data Management Coordination
- Operational Risk
- Business Continuity Management

Financial Risk
- Limit Controlling
- Risk Compliance
- Collateral
- Derivatives & Alternatives
- Credit Risk

Insurance Risk
- Liability Modelling
- Embedded Options
- Swiss Solvency Test
- Market-Consistent Embedded Value
- Projection tools

All risk drivers are now covered in Group Risk Management department

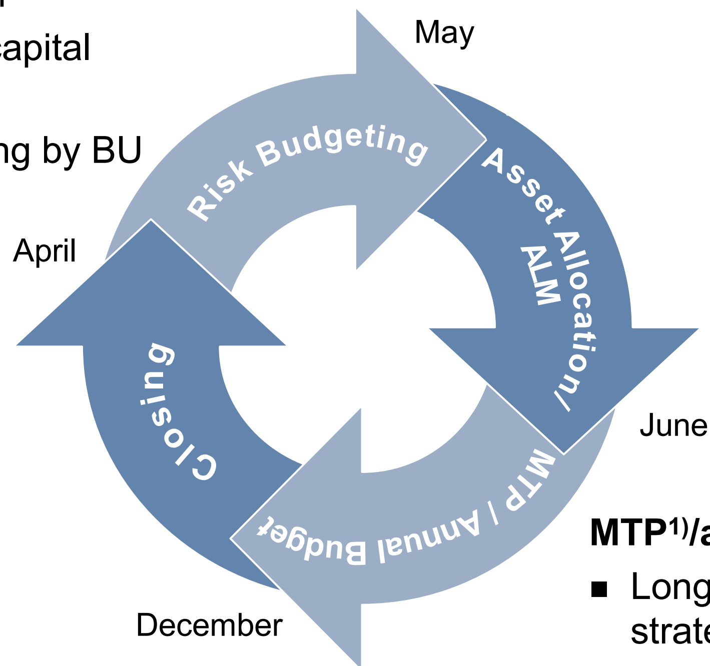


1) Operational, business and strategic risk
Note: Simplified illustration since diversification between assets and liabilities excluded

The risk management processes are embedded in the Group-wide planning process

Risk budgeting
- Available risk capital determination
- Current risk capital consumption
- Risk Budgeting by BU

ALM process
- Allocation of risk capital
- Determination of risk and capital limits
- Determination of strategic asset allocation



Closing
- Annual Closing
- Embedded Value
- Media/Analyst communication

MTP[1)]/annual budget
- Long-term objectives and strategic business priorities per core life market unit
- Functional objectives and strategies
- Definition, monitoring and review of financial and functional KPI targets

1) Medium-term planning

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Further developments

- Active exchange of knowledge throughout the group to:
  - Strengthen knowledge on risk
  - Ensure common understanding
- Integrated risk function in order to:
  - Increase risk awareness in other departments
  - Develop risk management capabilities in other functional units
- Swiss Life proactively supports and welcomes the new developments of SST/Solvency II

SwissLife

Prepared for the future.

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