

# TURNING RISK INTO SUSTAINABLE VALUE

Analysts' Conference 2011

London, 11 March 2011

Munich RE 

## Agenda

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## Financial highlights 2010

## Sound financial development allows increased dividend and continuation of share buy-back

## Munich Re (Group)

**Net result of €2.43bn beats original target for 2010**

RoRaC of 13.5%

Proposed dividend of €6.25 per share for 2010, an increase of almost 9% (prev. €5.75)

**Shareholders' equity further strengthened to €23.0bn**Current share buy-back programme almost completed<sup>1</sup> – will be continued with €500m**High investment result**

RoI of 4.5% in 2010 based on high disposal gains – portfolio and duration management proved beneficial

**Reinsurance****Despite significant claims, remains the foundation of earnings power**

High claims burden in p-c leading to combined ratio of 100.5%

**Primary insurance****Positive trend confirmed**

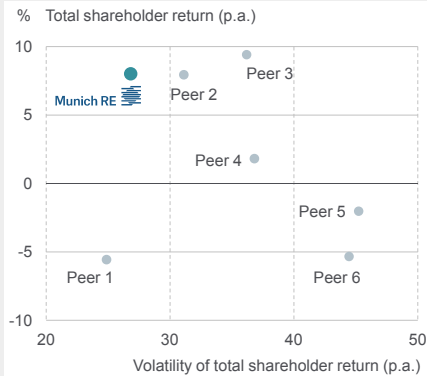
ERGO net income at €355m more than doubled (prev. €173m)

**Munich Health****Consolidation process well on track**

Strong premium growth and resilient operating result

<sup>1</sup> As at 28 February 2011; €849m completed since AGM in April 2010.

## Munich Re generates solid shareholder returns

Attractive risk-reward<sup>1</sup> ...

## ... result of our steering philosophy

- 1 Managing insurance risks as main source of value creation
- 2 Deeply-embedded risk management
- 3 Disciplined asset-liability management
- 4 Efficient capital management
- 5 Well-balanced business portfolio

## Munich Re managing for value – Stringent execution of strategy delivering reliable earnings

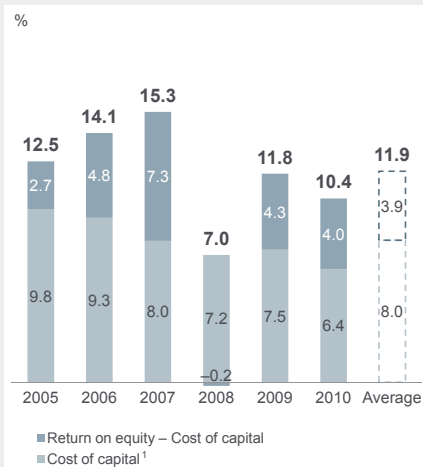
<sup>1</sup> Annualised total shareholder return defined as price performance plus dividend yields over a 6-year period (01.01.2005–31.12.2010); based on Datastream total return indices in local currency; volatility calculation with 250 trading days per year. Peers: Allianz, Axa, Generali, Hannover Re, Swiss Re, Zurich Financial Services.

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## 1 Liability-driven business model

## Sustainable value generation

## RoE in excess of cost of capital



## High persistency in strategic execution

- Low interest-rates a drag on RoE with decreasing running yield and increasing capital base ...
- ... while Munich Re keeps excess of RoE above cost of capital at relatively stable levels – average spread ~50%
- Low cost of capital as a consequence of liability-driven business model and well-diversified investment portfolio – beta reduced to 0.69 as at end of 2010
- Attractive book value growth

<sup>1</sup> Calculation using CAPM with ten-year German government bonds, 5% market risk premium and one-year raw beta to DJ Stoxx600, daily basis. Source: Bloomberg

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## 2 Risk management

## Capturing major events in Munich Re's risk management framework



## Risk management topics in 2010

## Sovereign debt crisis – Increased volatility

Spread  
peripheral  
countriesRisk-free  
interest-  
ratesFX volatility,  
especially  
USD

## Natural catastrophes – Severe events in 2010

Earthquake  
ChileEarthquake  
New ZealandFlood  
Australia

## Solvency II – Current status

Conduct  
of QIS5Implementing  
measures  
draftedPre-  
application  
process

## Impact on Munich Re's risk management

- Duration lengthening to reduce asset-liability mismatch risk in primary life
- Focus on German and US government bonds with digestible exposure in peripheral countries

Enhancement of well-established credit risk framework by introducing sovereign risk limits

- Chile represents about 1-in-250-year loss event
- Events well-captured in Munich Re risk model

Case by case evaluation if new insights from major events could further refine our models

- Further progress in the pre-application process
- First Solvency II triggered business already part of 2011 renewals

Munich Re well positioned

Risk-bearing capacity remains strong and controlled

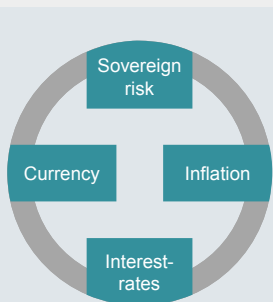
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## 3 Disciplined asset-liability management

## Strategic decision to maintain a moderate risk profile for the investment portfolio



## Investment topics 2011

Considering a variety of  
possible capital market  
scenarios

## Risk management impulses

- Assessing sensitivity of global macro-economic drivers simultaneously on the asset and liability side
- Market risk: Low interest-rates remaining the main challenge for primary life business with policyholder guarantees
- Credit risk: Setting counterparty and sovereign risk limits

Holistic risk assessment with  
strict setting of risk limits

## Investment decisions

- Slight duration decrease in reinsurance while keeping the asset-liability-mismatch tight
- Continuation of swaption programme in primary life
- Moderate re-risking also seen as a mitigating factor in an inflation scenario
- Further diversification of sovereign exposure

Good track record of solid  
returns within tight risk  
framework

Broad diversification remains key as Munich Re is well-prepared for different capital market scenarios

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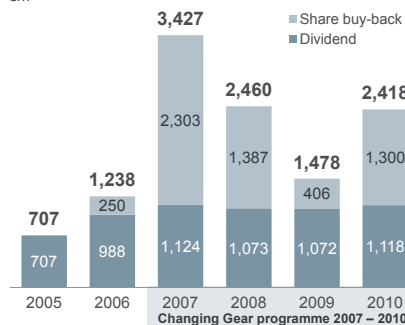
## 4 Efficient capital management

## Capital repatriation: We have delivered on our promise

Active capital management<sup>1</sup> ...Cash yield<sup>2</sup> (%)

3.3 4.7 11.8 10.4 7.3 11.5

€m



## ... integral part of our financial strategy

- Capital repatriation of more than €10bn<sup>3</sup> since 2007 via dividends and share buy-backs, delivering on our promise of the Changing Gear programme
- Safeguarding an efficient use of capital, still allowing for growth and risk appetite
- Sustaining high underwriting discipline – capital management and cycle management go hand in hand
- Dividend is our strong commitment, whereas share buy-backs are considered a flexible tool
- Proposed dividend of €6.25 per share for 2010, an increase of almost 9%. Share buy-back to be continued with €500m

## High cash payout to remain a cornerstone of Munich Re's active capital management

<sup>1</sup> Dividend refers to calendar year, actual cash flow is in the subsequent year. In 2010, dividend payout estimate based on €6.25 dividend per share and assuming completed share-buy-back until AGM 2011. <sup>2</sup> Total payout (dividend and buy-back) divided by average market capitalisation. <sup>3</sup> Incl. assumed €350m outstanding share buy-back until AGM 2011.

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## 5 Well-balanced business portfolio

## Striking the balance between capital generation and redeployment



## Portfolio of complementary profiles providing strategic flexibility

## Strong bottom-line focus ...

## High earnings stability

P-C reinsurance business – diversification and innovation at work

Primary p-c business – strong contributor to ERGO's overall performance

## Performance improvement

Re-positioning of primary life business in Germany

## ... enabling profitable growth

## Business development

Life reinsurance – leveraging our know-how in attractive target markets

Munich Health – seizing opportunities as integrated health risk manager

ERGO International – cautious expansion in CEE and Asia

Generating sustainable returns remains the foundation of capital repatriation

Focus on organic growth while considering bolt-on acquisitions

## Munich Re running a well-balanced business portfolio allowing development of long-term growth opportunities

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## 5 Well-balanced business portfolio

## Liability-driven strategy facilitating diversification and predictable results



## Providing the best solution for each risk category

Risk capacity and know-how

Distribution power and process efficiency

## Reinsurance

- Shaping diverging market trends with sharpened value proposition
- Strict cycle and portfolio management in commodity business ...
- ... while leveraging underwriting expertise and customer proximity in know-how intensive business
- Continued growth in life based on biometric expertise and structuring competence

Well-set to perform in any market conditions

## Munich Health

- Global health markets growing above GDP providing ample opportunities for a specialised risk manager
- MH making good progress on consolidation path in 2010 ...
- ... pursuing a transition towards managed care in the US by acquiring Windsor Health
- Flexible use of primary and reinsurance facilitates growth

Flexible business model covering health risk value chain

## Primary insurance

- Introduction of new ERGO brand creating momentum
- While the profitability of the domestic p-c business keeps outperforming competitors ...
- ... life performs below ambitions but ERGO is consistently addressing the challenges of the business
- International expansion with strong focus on improving profitability

Emphasis on accelerating ERGO's positive earnings trend

## Munich Re offering a value-adding integrated business model

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## Outlook

## Turning risk into sustainable value



## Munich Re (Group)

## RoRAC

Target of 15% after tax over-the-cycle to stand – remains a real challenge given the low-yield environment, while well-balanced business and investment portfolio stabilises profitability

## CAPITAL REPATRIATION

Proposed dividend of €6.25 per share (prev. €5.75)  
Continuation of share buy-back programme of up to €500m<sup>1</sup>

## GROSS PREMIUMS WRITTEN

€46–48bn<sup>2</sup>

## NET INCOME

~€2.4bn

1

## RETURN ON INVESTMENT

&lt; 4.0%

## Reinsurance

## COMBINED RATIO P-C

~97% over-the-cycle

1

## Primary insurance

## COMBINED RATIO P-C

&lt; 95%

## Munich Health

Positive earnings contribution while concluding consolidation phase

1

Against the backdrop of major claims burdens in the first two months of 2011 only achievable, if random large losses remain below our expectation over the rest of the year.

<sup>1</sup> Full execution remains subject to developments in the capital markets and the general economic environment.

<sup>2</sup> Thereof €24–25bn in reinsurance, €17–18bn in primary insurance and ~€6bn in Munich Health (all on basis of segmental figures).

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## Agenda

Turning risk into sustainable value

Nikolaus von Bomhard

### Financial highlights 2010

Jörg Schneider

Risk management

Joachim Oechslin

Non-life reinsurance

Torsten Jeworrek

Life reinsurance

Joachim Wenning











Primary insurance

Torsten Oletzky

Backup

Overview – Financial highlights 2010

## Resilient earnings based on prudent business and financial management

GROUP Gross premiums written	GROUP Operating result	GROUP Consolidated result
€m	€m	€m
Q1–4 2009 41,423 	Q1–4 2009 4,721 	Q1–4 2009 2,564 
<b>Q1–4 2010 45,541 </b>	<b>Q1–4 2010 3,978 </b>	<b>Q1–4 2010 2,430 </b>
Organic growth in addition to positive FX effects	High investment result mitigates impact of claims activity	Almost emulating the strong prior year result
REINSURANCE Consolidated result	PRIMARY INSURANCE Consolidated result	MUNICH HEALTH Consolidated result
€m	€m	€m
Q1–4 2009 2,576 	Q1–4 2009 367 	Q1–4 2009 27
<b>Q1–4 2010 2,099 </b>	<b>Q1–4 2010 656 </b>	<b>Q1–4 2010 63  </b>
Above-average nat cat claims, reserve strengthening in life re	All segments with increased net income – ERGO result €355m	Good progress – 2009 burdened by Sterling goodwill impairment

Munich Re (Group) – Capitalisation

## Increase in shareholders' equity despite more than €2.3bn capital repatriation

Munich RE

€m	Q1–4	Change Q4
Equity 31.12.2009	22,278	–
Consolidated result	2,430	475
<b>Changes</b>		
Dividend	–1,072	–
Unrealised gains/losses <sup>1</sup>	130	–1,497
Exchange rates	645	240
Share buy-backs	–1,268	–258
Other	–115	–68
<b>Equity 31.12.2010</b>	<b>23,028</b>	<b>–1,108</b>

### Unrealised gains/losses

High unrealised gains in Q1–3 2010 absorbed by sharp yield increase in Q4

### Share buy-backs

Until 28 February 2011, shares for further €200m were repurchased

### Exchange rates

Positive FX development (mainly US\$, Can\$, A\$)

<sup>1</sup> On other securities: Q1–4 2010, thereof –€206m from afs fixed-interest securities, €326m from afs non-fixed-interest securities; Q4 2010, thereof –€1,725m from afs fixed-interest securities, €216m from afs non-fixed-interest securities.

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Munich Re (Group) – Capitalisation

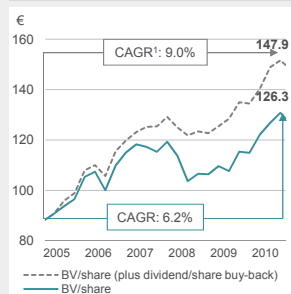
## Strong capital base maintained

Munich RE

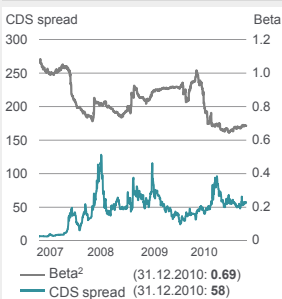
### Munich Re (Group)

**Sound capitalisation according to all capital measures (regulatory, rating, internal model)**

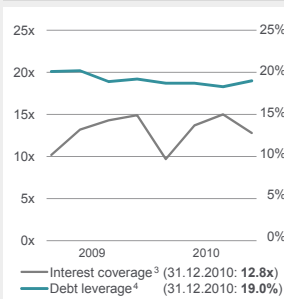
### Book value per share – Substantial growth



### Financial solidity – External evidence



### Financial strength – High security



<sup>1</sup> 31.12.2004 – 31.12.2010.

<sup>2</sup> Raw beta to DJ Stoxx 600, total return, daily basis, 1-year.

<sup>3</sup> Earnings before interest expenses, tax and depreciation divided by finance costs.

<sup>4</sup> Strategic debt divided by total capital (= sum of strategic debt + shareholders' equity).

All subordinated bonds treated as strategic debt.

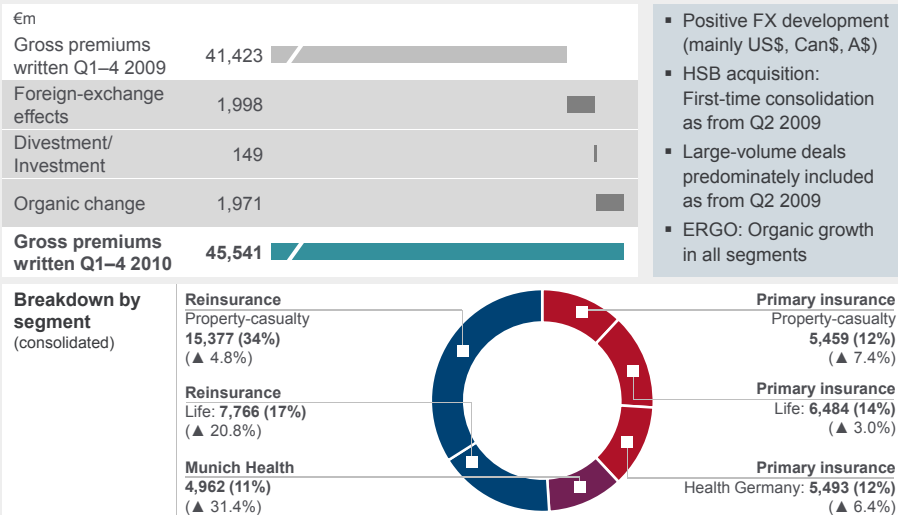
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Munich Re (Group) – Premium development

## Strong organic growth in life reinsurance and Munich Health in addition to positive FX contribution

Munich RE

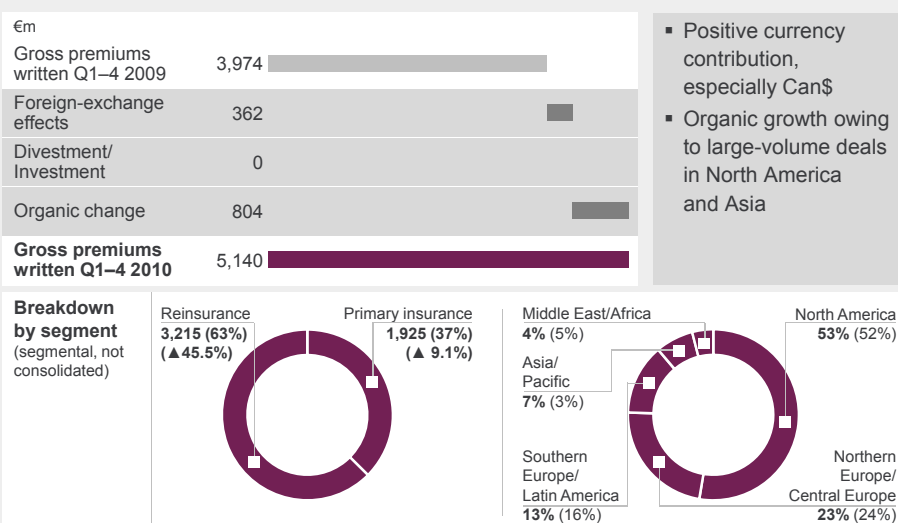


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Munich Re (Group) – Munich Health – Premium development

## Large-volume deals in addition to favourable FX driving significant premium increase

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Munich Health – Financial overview

## Resilient result based on improved business development

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€m	Q1-4 2010	Q1-4 2009
Gross premiums written	5,140	3,974
Income from technical interest	88	83
Net expenses for claims and benefits	3,998	3,129
Net operating expenses	1,068	726
Technical result	69	54
Investment result	142	151
Non-technical result	62	79
Operating result	131	133
Consolidated result	63	27

Reinsurance, see separate presentation

- Large-volume deals with overall positive bottom-line effect
- Increase of technical result due to better combined ratio of the entire US business and overall result improvement of European primary insurers
- Investment result still on a high level due to disposal gains; previous year influenced by one-off effect (sale of equities mainly in the second half of 2009)
- Previous year's consolidated result strained by Sterling goodwill impairment

Primary insurance, see separate presentation

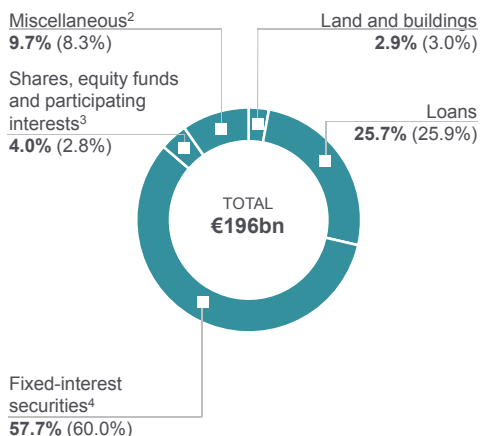
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Munich Re (Group) – Investments – Total portfolio

## Active asset management on the basis of a well-diversified investment portfolio

Munich RE 

### Investment portfolio<sup>1</sup>



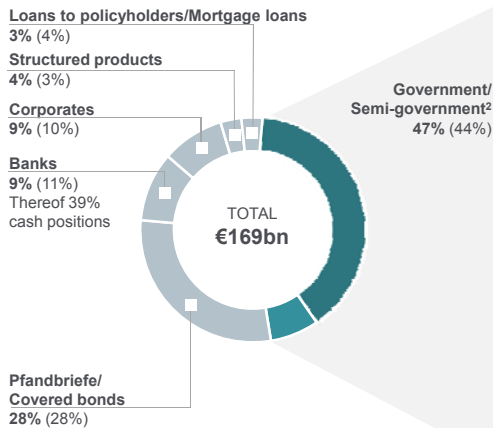
### Active portfolio management in 2010

- Slight duration lengthening
- Reducing corporate and bank bonds
- Further improving geographic diversification
- Increase of economic equity exposure to 4.4%
- Increase in "Miscellaneous" mainly resulting from higher cash deposits

<sup>1</sup> Fair values as at 31.12.2010 (31.12.2009). <sup>2</sup> Deposits retained on assumed reinsurance, investments for unit-linked life, deposits with banks, investment funds (bond, property) and derivatives held for trading with non-fixed-interest underlying. <sup>3</sup> Exposure including derivatives: 4.4% (2.8%). <sup>4</sup> Categories "available for sale", "held to maturity" and "at fair value".

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## Emphasis on highly rated securities

Fixed-income portfolio<sup>1</sup>Governments per country<sup>2</sup>

%	Without P/H <sup>4</sup> participation	With P/H <sup>4</sup> participation	Total
Germany	7	24	31
USA	16	0	16
Canada	7	0	7
UK	5	1	6
France	4	2	6
Austria	1	2	3
Other	11	6	17
<b>Total<sup>3</sup></b>	<b>51%</b>	<b>35%</b>	<b>86%</b>

%	Without P/H <sup>4</sup> participation	With P/H <sup>4</sup> participation	Total
Italy	5	2	7
Greece	0	1	1
Spain	1	2	3
Ireland	1	1	2
Portugal	0	1	1
<b>Total<sup>3</sup></b>	<b>7%</b>	<b>7%</b>	<b>14%</b>

<sup>1</sup> Incl. loans, parts of other securities, other investments and cash positions. Fair values as at 31.12.2010 (31.12.2009). <sup>2</sup> Thereof 9% inflation-linked bonds. <sup>3</sup> Differences between totals possible due to rounding. <sup>4</sup> P/H = policyholder. Economic view – not fully comparable with IFRS figures. As at 31 December 2010.

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## Substantially increased investment result driven by beneficial investment decisions

## Investment result

	€m	Q1–4 2010	Return <sup>1</sup>	€m	Q1–4 2009	Return <sup>1</sup>
Regular income	7,749		4.0%	7,629		4.2%
Write-ups/write-downs of investments	–403		–0.2%	–1,122		–0.6%
Gains/losses on the disposal of investments	1,649		0.9%	1,612		0.9%
Other income/expenses	–353		–0.2%	–236		–0.2%
<b>Investment result</b>	<b>8,642</b>		<b>4.5%</b>	<b>7,883</b>		<b>4.3%</b>

## Regular income

Higher asset base as well as cautious investment in credit-exposed fixed-interest securities and better result from associated companies

## Write-ups/write-downs

Strongly improved result from derivatives, mainly due to swaptions and lower impairments of non-fixed-interest securities – previous year impacted by high write-downs of fixed-interest securities

## Gains on disposal

High level sustained as a result of the sale of corporate and government bonds, gains from equities

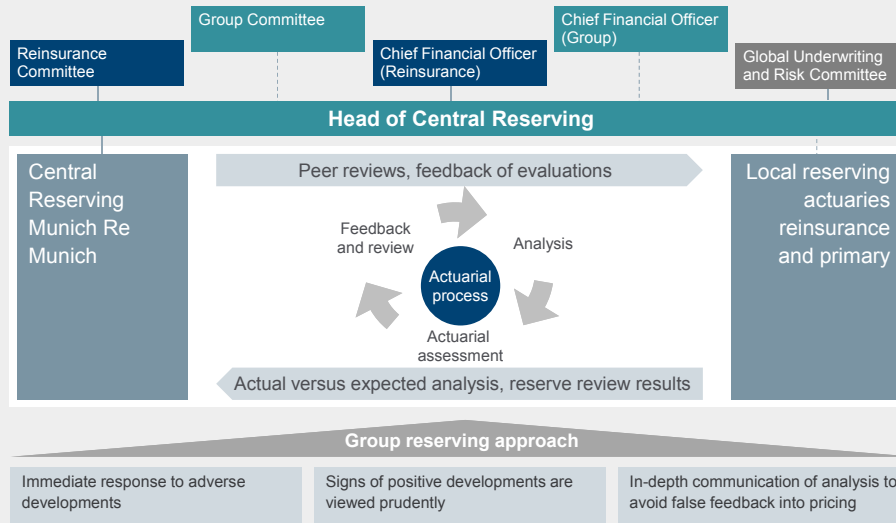
<sup>1</sup> Return on quarterly weighted investments (market values) in % p.a.

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Reserves – Reinsurance property-casualty

## Our set-up for reserving responsibility has proved successful

Munich RE



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Reserves – Reinsurance property-casualty

## Actual versus expected comparison – An important input to the actuarial analysis

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### Comparison of incremental expected losses with actual losses reported by clients in CY 2010

#### Reinsurance per exposure year<sup>1</sup>



#### Reinsurance per line of business<sup>1</sup>



**Actual loss development in CY 2010 was consistently below actuarial expectations across all years and lines of business**

<sup>1</sup> Munich Re reinsurance Group losses as per Q4 2010, not including parts of Munich Re Risk Solutions, special liabilities and major losses (i.e. events over €10m or \$15m for Munich Re share). The statistics cover more than 80% of total calendar-year reported losses.

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## Prudent reserving approach protects solid balance sheet

## Indications of reserve review

- Consistently better than expected claims emergence in all main classes of business
- Continuation of elevated claims reporting activity in US asbestos and environmental claims

## Response to these indications in line with our prudent reserving approach



Response to the claims emergence in asbestos and environmental: Reserve strengthening for accident years 2000 and prior



Cautious response to the favourable indications from accident years 2001–2003, as these mostly relate to long-tail lines of business



Release of reserves for the shorter-tail lines in accident years 2004–2006 due to strong positive indications



Due to the immaturity of accident years 2007–2009, reserving levels were broadly maintained despite favourable run-off indications

**Further strengthening of confidence level to absorb potential future volatility – Reserve review leads to moderately positive run-off result**

## Prior-year ultimate losses developed favourably in 2010

All figures in €m (adjusted to exchange rates as at 31.12.2010)				Accident year									
Date	≤2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total	
31.12.2000	29,167												
31.12.2001	30,386	11,377											
31.12.2002	32,301	12,556	13,340										
31.12.2003	33,034	13,120	12,746	12,293									
31.12.2004	33,645	13,040	13,006	11,891	11,514								
31.12.2005	35,753	13,253	11,772	11,140	11,561	12,504							
31.12.2006	36,161	13,329	11,688	11,024	11,548	12,491	10,811						
31.12.2007	36,986	13,246	11,678	10,703	11,402	12,533	10,663	11,900					
31.12.2008	37,316	13,307	11,680	10,544	11,012	12,250	10,542	12,162	12,903				
31.12.2009	37,478	13,124	11,682	10,476	10,700	12,230	10,404	12,038	13,172	12,874			
31.12.2010	37,967	13,098	11,660	10,462	10,431	11,800	10,147	12,018	13,148	12,836	13,375		
CY 2010 run-off € change	−489	26	22	13	268	429	257	20	24	38	n/a	610	
CY 2010 run-off % change <sup>2</sup>	−1.3	0.2	0.2	0.1	2.5	3.5	2.5	0.2	0.2	0.3	n/a	0.4	

Ultimate reduction of €610m in calendar year 2010 (including –€81m workers compensation accretion) corresponds to 1.6% of prior year's p-c reserves (Munich Re Group)

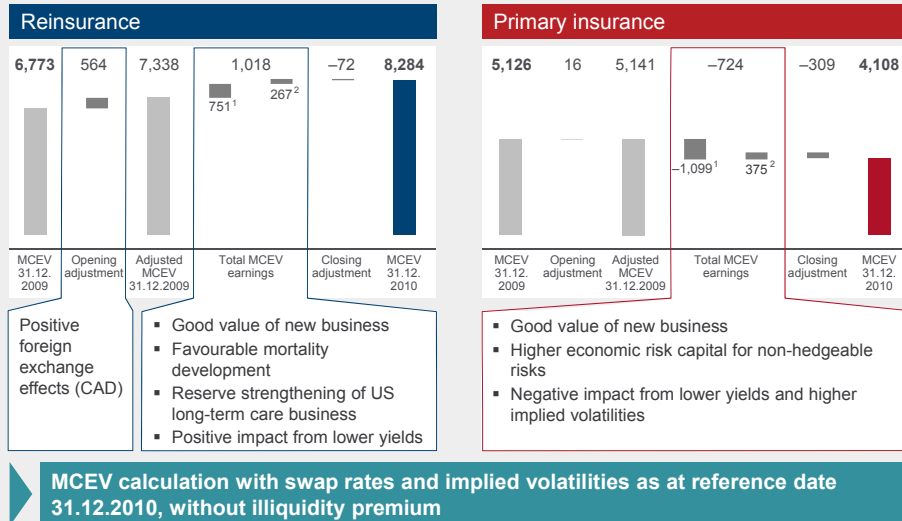
Split of €610m run-off result: reinsurance €389m and primary insurance €221m

<sup>1</sup> Incl. –€81m of workers' compensation accretion.

<sup>2</sup> Compared to estimated ultimate losses at 31.12.2009.

Market Consistent Embedded Value 2010

## MCEV result reflecting strong growth in reinsurance and impact of low yields on primary insurance

Munich RE <sup>1</sup> Operating MCEV earnings.<sup>2</sup> Economic and other non-operating variances.

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Summary

## Solid financial result 2010 in a challenging environment

Munich RE 

### Key takeaways

Resilient earnings in 2010 based on prudent financial management

Strong capital base maintained according to all capital measures

Well-diversified investment portfolio with absorbable exposure to peripheral countries

Prudent reserving approach protects solid balance sheet

Opposing MCEV impact of low yields in primary and reinsurance

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## Agenda

Turning risk into sustainable value Nikolaus von Bomhard

Financial highlights 2010 Jörg Schneider

**Risk management** Joachim Oechslin

Non-life reinsurance Torsten Jeworrek

Life reinsurance Joachim Wenning

Primary insurance Torsten Oletzky

Backup

Risk management – Overview on changes of risk profile

## Major developments at Group level

Effect on risk profile

Effect on risk profile					
	P-C	Life and health	Market	Credit	Operational
<b>Increase</b>	Weaker euro	Portfolio growth in reinsurance	Careful re-risking in equities (equity-backing ratio after derivatives up to 4.4% from 2.8%)	Higher credit risk due to increase of market-implied default risk	
<b>Neutral</b>	Increased nat cat exposures and decreased retrocessions	Currency effects and decreased interest-rates	Offsetting interest-rate position at Group level maintained		
<b>Decrease</b>	Strengthening of reserve position and positive run-off results		Refined modelling of currency risk, reflecting currency steering		Enhanced operat. risk management through roll out of ICS <sup>1</sup> in large parts of the Group
Increased diversification as a result of increases in risk exposures and lower tail dependencies					

**Enhanced utilisation of Munich Re's risk-bearing capacity to seize business opportunities**

<sup>1</sup> Internal control system.

Risk management – Major achievements in Munich Re's ERM

## Major achievements in Munich Re's ERM



## Organisational upgrade

- New ERGO CFO with proven track record in risk management along with an enhanced organisational set-up
- Further strengthening of local risk management hubs notably for North American p-c and life business and London-based entities
- Strengthening of risk controls for credit and variable annuity business

## Solvency II pre-application

- Process for pre-application of internal model was started early in 2009
- Thorough on-site visits from BaFin ("Örtliche Prüfung") have been made by experienced teams in 2009 and 2010 and will continue in 2011
- Supervisory college involved in pre-application process

## Internal control system

- Comprehensive internal control framework for Munich Re Group adopted in 2008
- Framework implemented and operationalised in ~80% of our business at year-end 2010
- Considerable improvement of Munich Re's internal risk control landscape and further strengthening of our risk culture

Progress complements Munich Re's Enterprise Risk Management at a high level

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Risk management – Risk management at work

## Business-enabling and improving the risk/return profile



## Business opportunities

- New oil spill cover  
Deepwater Horizon case expected to lead to demand for additional liability cover with attractive margin
- Munich Re able to use competitive advantage to offer complex structured reinsurance solutions, especially in life reinsurance
- 2011 renewals include Solvency II-triggered business for the first time (more than €50m premium volume)

## Risk management involvement

- Comprehensive risk assessment by Corporate Underwriting
- In-depth cooperation with business units
- Complementing risk strategy with an explicit risk appetite for oil spill liability risks
- Comprehensive risk assessment
- In-depth assessment at Board level
- Structuring of transactions reflective of original risk concerns
- Close cooperation with client management and underwriting
- Identification of solutions optimising clients' risk capital relief under Solvency II
- External and internal training and seminars

Business-enabling using expertise from deeply embedded risk management

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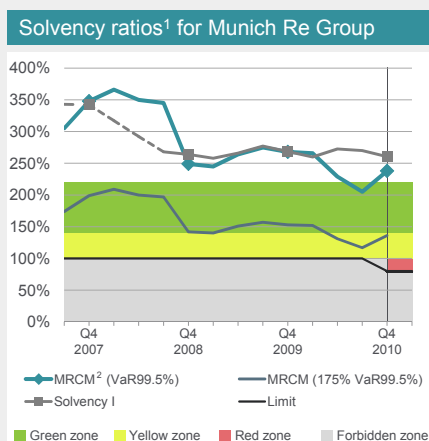


## Changes in Munich Re's risk strategy in 2010

Category	Changes
<b>Whole portfolio criteria</b>	Change of financial strength limit to manage risk of pro-cyclicality: Limit at 80%, trigger at 100%, and early warning at 140% of ERC
<b>Supplementary criteria</b>	<ul style="list-style-type: none"> <li>Existing limit and trigger system amended: <ul style="list-style-type: none"> <li>New financial sector limit as % of the AFR</li> <li>New longevity limit in as of the AFR</li> <li>Further harmonisation concerning ALM risk criteria for primary and reinsurance p-c</li> </ul> </li> </ul> <p>All supplementary risk limits now have an associated early-warning system protecting the limit, with clear responsibilities:</p> <ul style="list-style-type: none"> <li>Yellow zone: business segment</li> <li>Red zone: Group Committee must be involved and decides on measures to be taken</li> </ul>
<b>Other criteria</b>	<ul style="list-style-type: none"> <li>Existing limit and trigger system amended: <ul style="list-style-type: none"> <li>Country limits now extended to all AA-rated and AAA-rated countries</li> <li>New US\$ 2bn limit for liability risk for oil platforms</li> </ul> </li> </ul> <p>Limit changes and breaches require involvement of the Audit Committee of the Supervisory Board</p>

Modest modifications to proven risk strategy, limits and triggers

## Volatility of solvency ratios under economic valuation



## Key observations

- QIS 5 demonstrated higher volatility of solvency ratios under Solvency II compared to Solvency I
  - Impact of market consistent valuation
- Munich Re Group's internal model solvency ratios<sup>3</sup> also more volatile than under Solvency I
- Yet volatility of Munich Re Group's internal model solvency ratios successfully managed on the basis of economic steering approach
  - Liability-driven investment strategy (ALM)
  - Risk strategy based on market-consistent valuation
  - Value-based management
- Munich Re Group's internal capital requirement (ERC) 175% of Solvency II standard; new intervention threshold at 80% of ERC, i.e. 140% of Solvency II standard

Solvency II leading to more volatile coverage ratios for the industry – Munich Re's focus on economic steering has proven effective to manage volatility

<sup>1</sup> Solvency ratio defined as Available Financial Resources (AFR) over capital requirement; AFR after announced dividend for 2010 of ~€1.1bn to be paid in April 2011 and €0.4bn outstanding share buy-back.

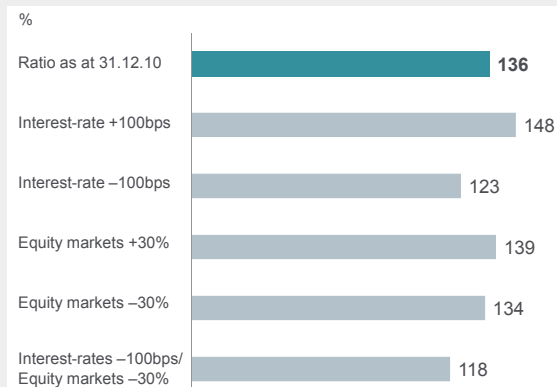
<sup>2</sup> Munich Re Capital Model. <sup>3</sup> Munich Re Capital Model recalibrated to Solvency II level of confidence.

Risk management – Risk disclosure 31.12.2010

## Sensitivities of Munich Re Group's economic solvency ratio

Munich RE 

### Economic solvency ratio<sup>1</sup> – Sensitivity



### Key observations

- Opposite interest-rate sensitivities in reinsurance and primary insurance mitigate sensitivity at Group level
- Moderate equity exposure leads to low sensitivity
- Economic solvency ratio after impact of combined interest-rate and equity market stress still high

### Munich Re's economic solvency ratio resilient to major capital market movements

<sup>1</sup> Solvency ratio defined as Available Financial Resources (AFR) over capital requirement; AFR after announced dividend for 2010 of ~€1.1bn to be paid in April 2011 and €0.4bn outstanding share buy-back.

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Risk management – Risk disclosure 31.12.2010

## Breakdown of Group required economic risk capital (ERC)

Risk category¹ Year end	Group		RI	PI	MH	Div.	Explanation
	2009	2010	2010	2010	2010	2010	
€bn							
Property-casualty²	7.6	8.9	8.8	0.6	0.0	−0.5	Slightly higher exposure in natural catastrophes scenarios, weaker euro, change of external protection
Life and health	3.7	5.1	3.9	1.3	0.7	−0.8	Weaker euro (mainly affecting reinsurance portfolio) and lower interest-rates
Market	6.8	9.9	5.5	7.9	0.0	−3.5	Strong increase due to higher equity positions and increased interest-rate risk
Credit³	3.1	4.5	3.4	1.2	0.0	−0.1	Spreads still above average, lower yield curves, downgrades of counterparties
Operational risk	1.5	1.6	1.3	0.5	0.1	−0.3	Low increase due to higher exposure
Simple sum	22.7	30.0	22.9	11.5	0.8	−5.2	
Diversification effect⁴	−5.3	−9.3	−8.1	−2.0	0.0	—	Higher diversification due to increases in risk exposures and lower tail dependencies
Total ERC	17.4	20.7	14.8	9.5	0.8	−4.4	

### Market environment main driver of ERC increase

<sup>1</sup> Risk categories broadly based on refined "Fischer II" risk categories recommended for standardised industry disclosures.

<sup>2</sup> Credit (re)insurance included. <sup>3</sup> Default and migration risk.

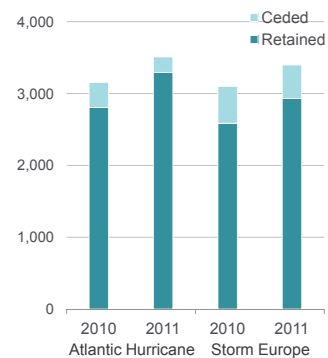
<sup>4</sup> The measured diversification effect depends on the risk categories considered and the explicit modelling of fungibility constraints.

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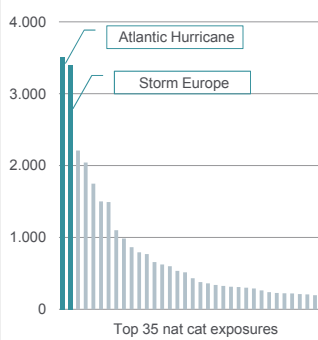
## Natural catastrophe exposure

### Munich Re Group's nat cat exposures

AggVaR (return period 200 years)  
€m (pre-tax)



AggVaR (return period 200 years)  
€m (pre-tax, gross)



### Highlights

Superior diversification within nat cat due to

- global geographical diversification of nat cat-business,
- strong diversification between perils (storm, earthquake, flood)
- peak risk management

Munich Re benefits from major diversification of natural catastrophe risks

<sup>1</sup> Exposures relate to the full year, e.g. 2011 relates to the period from 1.1.2011 to 31.12.2011

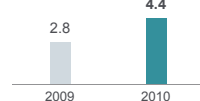
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## Breakdown of Group required ERC for market risk

Risk category	Group		RI	PI	Div.	Explanation
Year end	2009	2010	2010	2010	2010	
€bn						
Equity	3.8	5.5	3.8	1.8	−0.1	Increase due to higher equity-backing ratio
General interest-rate	4.0	5.6	4.0	6.3	−4.7	Lower interest-rates leading to increased duration-mismatch
Credit spread	2.2	3.6	1.8	2.6	−0.8	Refined spread risk modelling in the MCEV
Real estate	1.8	2.0	1.1	1.0	−0.1	No material change
Currency	2.3	0.6	0.6	0.2	−0.2	Refined modelling of currency risk regarding free surplus
Simple sum	14.1	17.3	11.3	11.9	−5.9	
Diversification	−7.3	−7.4	−5.8	−4.0	−	
Sum ERC	6.8	9.9	5.5	7.9	−3.5	

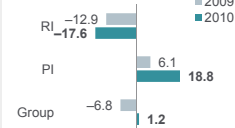
### Equity

Equity-backing ratio  
incl. derivatives %

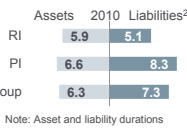


### Interest-rate

Net DV01 in €m



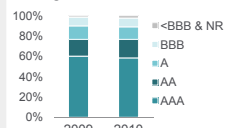
### Duration



Note: Asset and liability durations apply to different underlying volumes

### Credit spread

Rating classification<sup>1</sup> %



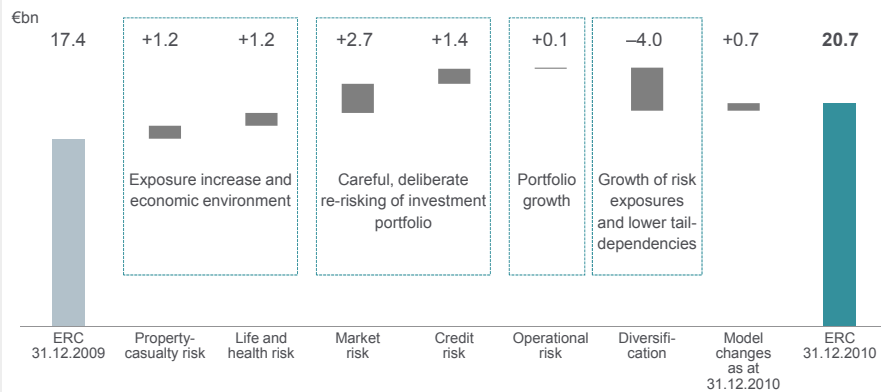
<sup>1</sup> Fixed-Income portfolio.

<sup>2</sup> Based on replicating portfolio of liabilities.

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Risk management – Risk disclosure 31.12.2010

## Development of Group ERC in 2010

Munich RE Development of Group ERC in 2010<sup>1</sup>

## Strong diversification benefit balances ERC increase

<sup>1</sup> Differences to the changes of capital requirements per risk category shown on slide "Breakdown of Group required economic risk capital (ERC)" are due to column "model changes".

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Risk management – Capital position 31.12.2010

## Summary of economic capital disclosure

Munich RE 

## Position as at 31 December 2010

€bn		31.12.2010	31.12.2009
Available financial resources (AFR)	29.6	29.6	28.4
Economic risk capital <sup>1</sup>	11.8 (Solvency II capital) + 8.9 (Hybrid capital)	20.7	17.4
Economic capital buffer	4.1 (Solvency II capital) + 4.8 (Hybrid capital)	8.9	11.0
Economic capital buffer after share buy-back and dividends <sup>2</sup>	2.6 (Solvency II capital) + 4.8 (Hybrid capital)	7.4	9.3

■ Solvency II capital ■ Hybrid capital

## Capital strength maintained, despite higher risk exposures

<sup>1</sup> Solvency II capital based on VaR 99.5%, Munich Re internal risk model based on 175% of Solvency II capital.

<sup>2</sup> After announced dividend payout of ~€1.1bn for 2010 to be paid in April 2011 and €0.4bn outstanding share buy-back.

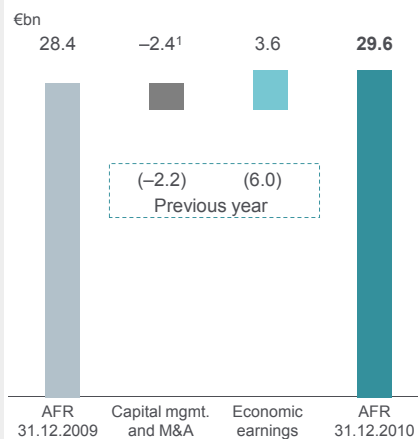
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Risk management – Capital position 31.12.2010

## Available financial resources – Change and relation to economic earnings

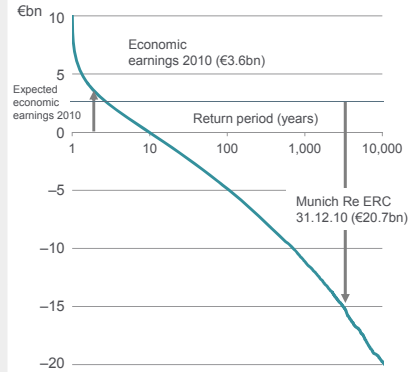
Munich Re

### AFR development in 2010


<sup>1</sup> Dividends (-€1.1bn) and share buy-back (-€1.3bn).

<sup>2</sup> Munich Re Capital Model.

### Relation to probability distribution of MRCM<sup>2</sup>



Higher than expected economic earnings lead to AFR increase despite considerable capital repatriation

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Risk management – Capital position 31.12.2010

## Available financial resources – Components of change

Munich Re

Risk category	ERC 1.1.	ERC 31.12.	ΔAFR <sup>1</sup> 2010	Explanation
€bn				
Equity	3.8	5.5	+0.6	Equity investments
Credit	3.1	4.5	-0.1	No material defaults
Interest-rate	4.4	6.9	-0.9	In particular, losses in primary insurance MCEV
Currency	2.3	0.6	+0.4	Profits in CAN\$ and US\$
Technical result and new business			+1.1	
AFR roll forward <sup>2</sup> , other			+2.5	
<b>Economic earnings</b>			<b>+3.6</b>	

Note: This table illustrates the impact of various risk factors on AFR (column ΔAFR), and compares this to the respective ERC, which gives an indication of what an extreme impact could have been.

### Remarks

#### Market and credit risk

Solid performance of Munich Re's investment portfolio

- Gains on equity holdings
- Gains in bond portfolio from declining general risk free interest-rates, but more than offset by impact on MCEV of primary insurance
- Specific interest-rate (credit spread) performance positive in reinsurance (mostly USA), but losses in primary insurance (mostly Europe)

#### Insurance risk

Satisfactory technical results although p-c affected by high nat cat losses

Satisfactory technical results and favourable capital market experience

<sup>1</sup> Rough estimates, after tax and policyholder participation.

<sup>2</sup> Investment return on AFR.

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## Investment strategy – Market expectations and strategy

### Market expectations of MEAG

#### "Boom"

- Considerable rise in interest-rate level; higher but still manageable inflation
- Significant equity performance

~15%  
Probability

#### "Muddling through"

- Interest-rates rise moderately, but stay low, and so does inflation
- Equities perform moderately

~70%  
Probability

#### "Deeper and longer turmoils"

- Interest-rates fall below the lowest level we have seen, low inflation
- Equities drop sharply



~15%  
Probability

### General investment strategy

- Strategy dominated by "Muddling through" scenario
- Limits for market and credit risk provided by risk strategy are to be utilised: Moderate re-risking
  - Limits not utilised at year-end 2009
  - Limits already substantially utilised at year-end 2010
- Moderate re-risking also seen as a mitigating factor in an inflation scenario
- Maintain focus on underwriting risk, with investment risk being an important but not dominant element in the risk profile of Munich Re

Investment strategy reflects market expectations

## Investment strategy – Per asset class

Asset class	Investment strategy
Fixed income 	<ul style="list-style-type: none"> <li>▪ Further optimising diversification of counterparts</li> <li>▪ Slight reduction of sovereign debt, partly realising gains on highly rated sovereign bonds, and increase of non-financial corporate bonds. Reduce exposure to financial institutions</li> <li>▪ Still seek duration in primary life for ALM purposes, while reducing duration in p-c reinsurance in anticipation of slightly higher interest-rates</li> <li>▪ Restructuring of interest-rate hedges in primary life (partly already realised), triggered by restructuring of life business in 2010, with the aim of better matching liability profile and reducing IFRS earnings volatility</li> </ul>
Equities 	<ul style="list-style-type: none"> <li>▪ Cautious increase, already largely realised</li> <li>▪ Further portfolio diversification</li> </ul>
Alternative assets 	<ul style="list-style-type: none"> <li>▪ Further enhance position in renewable energies through private and public equity as well as debt instruments</li> <li>▪ Consider infrastructure investments and commodities</li> </ul>
Real estate 	<ul style="list-style-type: none"> <li>▪ No material exposure changes planned</li> </ul>

## Key takeaways

Continuity in terms of risk profile – Cycle management at work

Strong capital position maintained despite challenging market environment

Higher than expected economic earnings lead to AFR increase despite considerable capital repatriation

Disciplined liability-driven business approach to be maintained

Gearing up for Solvency II – In the midst of the pre-application process; first business opportunities already realised

## Agenda

Turning risk into sustainable value Nikolaus von Bomhard

Financial highlights 2010 Jörg Schneider

Risk management Joachim Oechslein

**Non-life reinsurance** Torsten Jeworrek

Life reinsurance Joachim Wenning

Primary insurance Torsten Oletzky

Backup

## Reinsurance – Highlights

## Result burdened by higher losses in property-casualty and reserve strengthening in life reinsurance



Gross premiums written		Technical result	
€m		€m	
Q1–4 2009	21,783	Q1–4 2009	1,940
Q1–4 2010	23,602	Q1–4 2010	1,302
Favourable FX contribution as main driver for premium growth		High claims activity in property-casualty and reserve strengthening of long-term care business	
Investment result		Operating result	
€m		€m	
Q1–4 2009	3,796	Q1–4 2009	4,099
Q1–4 2010	3,436	Q1–4 2010	2,943
Investment result again at a high level due to disposal gains		Good investment result partly mitigating lower technical result	

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## Reinsurance – Premium development

## Favourable FX contribution as main driver of premium growth



€m		<ul style="list-style-type: none"> <li>Substantial FX contribution (mainly Can\$, US\$, A\$)</li> <li>Premium growth through acquisition of HSB</li> <li>Organic growth mainly from large-volume deals in life reinsurance</li> </ul>	
Gross premiums written Q1–4 2009	21,783		
Foreign-exchange effects	1,493		
Divestment/Investment	149		
Organic change	177		
Gross premiums written Q1–4 2010	23,602		
Breakdown by segment (segmental, not consolidated)		<div> <div>Property-casualty</div> <div>15,701 (67%)</div> <div>(▲ 4.8%)</div> </div> <div> <div>Life</div> <div>7,901 (33%)</div> <div>(▲ 16.3%)</div> </div>	

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Non-life reinsurance – Financial results

## Result strongly impacted by high nat cat losses

Munich RE

€m	Q1–4 2010	Q1–4 2009
Gross premiums written	15,701	14,987
Income from technical interest	1,371	1,058
Net expenses for claims and benefits	9,904	9,243
Net operating expenses	4,437	4,125
Technical result	1,223	1,658
Investment result	2,563	2,714
Non-technical result	1,286	1,723
Operating result	2,509	3,381
Consolidated result	1,806	2,111

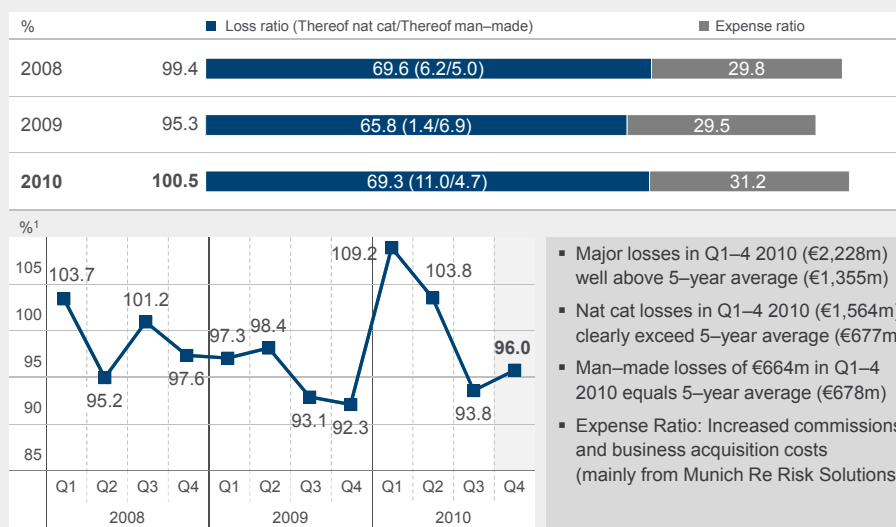
- Strict cycle management and recession-related premium decrease in original business; countervailing increase from currency development and first-time consolidation of HSB (€149m)
- Technical result burdened by exceptionally high nat cat losses (earthquakes in Chile and Christchurch, flood in Australia as main events); lower man-made losses despite Deepwater Horizon (high recession-related losses in 2009)
- Moderate reserve releases while further strengthening confidence level
- Sound underlying combined ratio (after adjusting for major losses)
- Growing share of Munich Re Risk Solutions with structurally higher cost but lower loss ratios
- Investment result again at a high level due to sale of fixed-interest securities; previous year positively influenced by sale of hedged equities

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Non-life reinsurance – Combined ratio

## Combined ratio reflects exceptionally high nat cat losses Q1–4 2010

Munich RE

<sup>1</sup> Incl. credit and overhead costs

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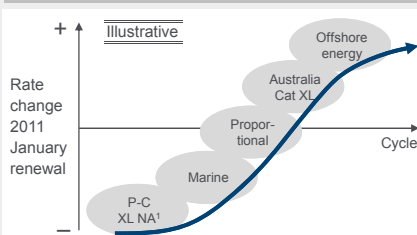
Non-life reinsurance – January renewals 2011

## Overall challenging market environment due to record levels of capital of primary and reinsurance industry

Munich RE

### Market conditions

#### Cycle



- Overall, cycle is a global phenomenon
- However, price trends diverge across regions and segments especially after major loss events, e.g.
  - Offshore energy post Deepwater Horizon
  - Chile and Australia post nat cat events

¹ P-C XL NA: Property and Casualty XL business North America.

#### Competitive environment



Increased **capitalisation** of the insurance industry: recovery from the financial crisis (higher retained earnings and IFRS capital) strengthens (re)insurers balance sheets



Lower **prices**, on average, as softening trend of recent years continues in spite of low interest-rate environment. However, profitability levels differ across regions and market segments

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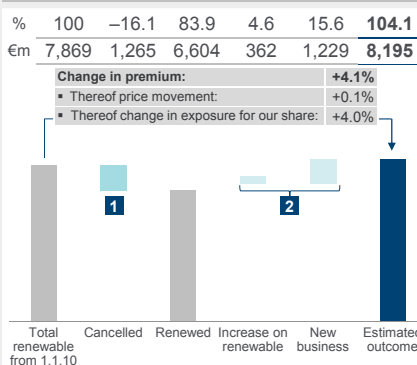
Non-life reinsurance – January renewals 2011

## Munich Re's strategy allowed profitable growth in January renewals – Despite challenging market conditions

Munich RE

### January renewals – Munich Re's strategy

#### Munich Re's portfolio



Emphasis on sound profitability in p-c core business

#### 1 Active portfolio management

Commodity segment requires active management to ensure profitability



#### 2 Premium positioning

##### Growth and know-how partner

Premium service provider supporting clients along their entire value chain

##### Value optimiser

Know-how to structure tailor-made (capital management) solutions

##### Complex risk taker

Expertise to model and appetite to cover complex risks

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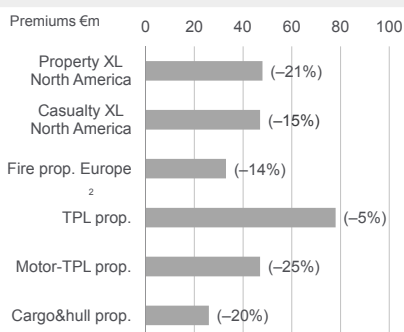
Non-life reinsurance – January Renewal 2011

## We keep our promise not to compromise bottom-line for the sake of top-line growth



### 1 January renewals – Active portfolio management

#### Cancellations in selected (commodity) segments<sup>1</sup>



#### Emphasis on risk-adequate prices drives cancellations

- Property XL North America: Mainly driven by reductions of US nat cat business as prices declined
- Casualty XL North America: Due to difficult market environment cancellation of treaties below profitability threshold, mainly in third-party liability but also in workers' comp
- Fire prop. Europe: Overall, soft market environment
- TPL prop.: Still pressure on prices and restructuring of reinsurance programmes
- Motor TPL prop: Considerable quality improvement due to cancellation of unprofitable treaties
- Cargo & hull prop.: Selected client relationships terminated due to insufficient profitability

**Execution of strict cycle management facilitating maintenance of the reinsurance portfolio's technical profitability in a soft market environment**

<sup>1</sup> Excluding bulk deals.  
<sup>2</sup> Third-party liability.

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Non-life reinsurance – Strategic outlook

## We support our clients in expanding and optimising their operations globally – with capacity and risk expertise



### 2 Premium positioning – Growth and know-how partner (examples)

#### Agro

- Fostering insurability of agricultural production risks through public-private partnerships (PPPs)
- Providing cover for yield and market risk, mainly USA
- Rapid Eye technology partnership

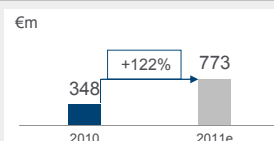
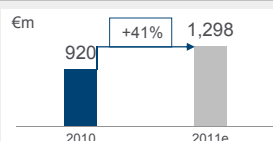
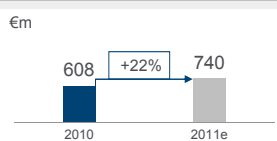
#### Selected partnerships

- Prominent market position enables us to see (all) new opportunities and business models at a very early stage
- Expertise and appetite for comprehensive relationships with strategic partners
- Capacity to underwrite multi-year global reinsurance treaties

#### Greater China / SEA

- Unique support of ambitious growth path of key clients in emerging markets that only a leading reinsurer can provide
- Risk transfer through tailor-made solutions
- Transfer of underwriting concepts from mature to developing markets

#### Renewal – Expected premium income

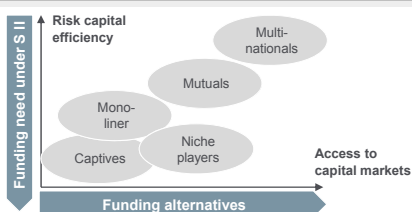


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## ERM trends trigger new challenges for the industry – we develop tailor-made solutions for our clients

### 2 Premium positioning – Value optimiser (examples)

#### Client clusters



#### Munich Re insights

- Munich Re developed an internal capital model more than a decade ago and fully integrated the model output into all steering aspects of our organisation
- We have considerable experience in capital modeling and profit-oriented allocation which we put at the disposal of our clients

#### Capital management expertise

Dedicated Solvency II consulting unit, advising on optimising risk capital relief, ERM and risk modeling, IT tools and providing training

#### Financial strength/rating

Strong capital base is a competitive edge under Solvency II with reinsurer's rating as the decisive factor

#### Technical and structuring expertise

Client management teams support our clients in analysing and optimally structuring their individual reinsurance needs and programme

#### Capacity

Increase in demand for proportional cover expected under Solvency II standard model

## Our technical expertise allows us to insure complex risks today and tomorrow

### 2 Premium positioning – Complex risk taker

#### Nat cat: World Map of Natural Hazards



- Munich Re continues to commit substantial capacity to nat cat business based on modeling expertise
- High geographical diversification of worldwide large, medium and small scenarios in Munich Re's portfolio is key as diversification reduces earnings volatility by mitigating dependence on top scenarios
- In the long-term view, property CAT XL business produces a substantial economic profit even before external retrocession
- Despite recent claims experience nat cat remains one of Munich Re's most profitable business lines

#### SOSCover (Sudden Oil Spill Cover)



- Munich Re developed the initial concept for this innovative liability product
- AON Benfield, Guy Carpenter and Willis Re act as consortium managers and placement advisers. They bring together insurers and reinsurers as capacity providers to the consortium
- This consortium will deliver a new meaningful limit on a per-well basis to protect oil companies' balance sheets in case of a large oil spill
- With this on-top product, all covers of the marine, energy and liability market remain in place

## Key takeaways

### Reinsurance segment

After normalisation of major losses, 2010 showed satisfactory business development in p-c reinsurance segment

Positive January renewal results achieved in a challenging environment due to strict cycle management of commodity business with deliberate top-line reduction in case of inadequate price levels

Leveraging Munich Re's competitive advantage as technically sophisticated solution provider, price-driven premium reduction could be more than compensated for strategic business expansion in premium segment

**Munich Re's sharpened value proposition of partnering our clients according to their needs has proved its worth**

## Agenda

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Backup

## Munich Re's global key strategic focus in life

## Life reinsurance – Strategic positioning



## Strong organic growth driven by large capital relief deals; result suffers from reserve strengthening in the US

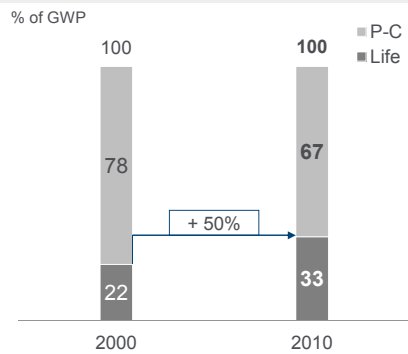
€m	Q1–4 2010	Q1–4 2009
Gross premiums written	7,901	6,796
Income from technical interest	556	656
Net expenses for claims and benefits	5,803	4,817
Net operating expenses	2,233	2,048
Technical result	79	282
Investment result	873	1,082
Non-technical result	355	436
Operating result	434	718
Consolidated result	293	465

- Premium growth owing to large-volume deals (majority of deals included as from Q2 2009) and positive development of foreign-exchange (mainly Can\$)
- Corresponding positive effect of large-volume deals on technical and operating result
- Decreasing technical result reflects reserve strengthening and DAC write-down for US long term care business in 2010 (€315m); apart from that, pleasing business development; 2009 influenced by de-risking of investment portfolio
- Decrease of investment result due to reduced interest on deposits (clean-cut of Group-internal quota share agreement), but still good result on disposals; previous year positively influenced by sale of ERV<sup>1</sup> to ERGO

<sup>1</sup> Europäische Reiseversicherung.

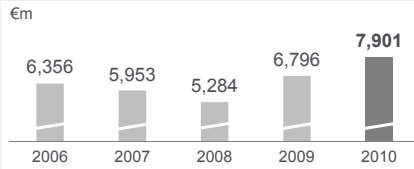
## Life reinsurance

## Life reinsurance essential and increasingly important pillar within Munich Re Group

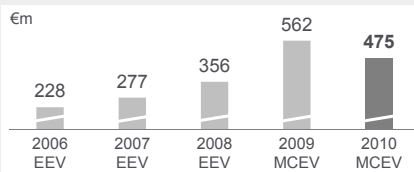

Share of life business within reinsurance segment<sup>1</sup>


Life reinsurance share continuously increased

## Gross written premium (GWP)



## Value of new business (VNB)

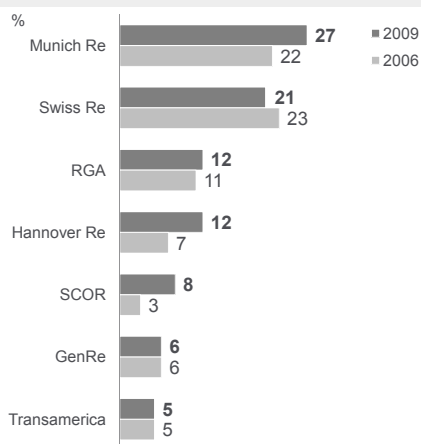


Solid growth in life reinsurance

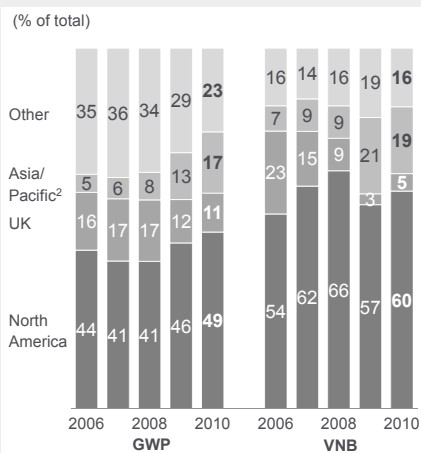
<sup>1</sup> Segmental share of gross written premium (health reinsurance excluded).

## Life reinsurance

## Global leading position strengthened by large-volume deals and growth in Asia


Global life and health market share<sup>1</sup>


## Portfolio split by region 2010 – Gross written premiums vs. VNB



<sup>1</sup> Source: Munich Re Economic Research. Estimates based on life and health net earned premiums as reported in company reports.

<sup>2</sup> Asia, Australia, New Zealand.

## MCEV result 2010

<sup>1</sup> Long-term care.

Mortality core pillar of life reinsurance business complemented by living benefits covers

- Mortality and morbidity reliably contribute to result and value creation
- LTC<sup>2</sup> is small niche product; one-off effect in 2010 in US portfolio
- Category "Other" includes small amounts of longevity business as well as asset protection products; we approach these risks very cautiously
- Large-volume deals show moderate premium margin of ~2%, but above-average IRR<sup>3</sup> and RoRaC spreads
- Overall, very satisfactory portfolio profitability in 2010 in terms of new business relative to total funds invested and economic risk capital employed

<sup>1</sup> Product-specific cost allocation.  
<sup>2</sup> Long-term care.  
<sup>3</sup> Internal rate of return.



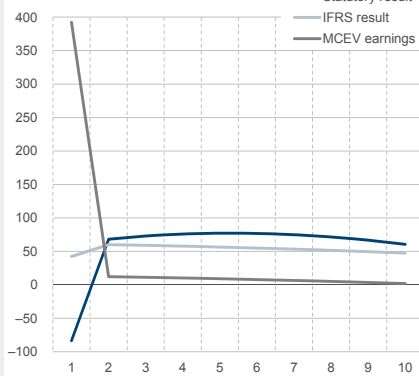
Life reinsurance

## Life reinsurance business under different accounting regimes

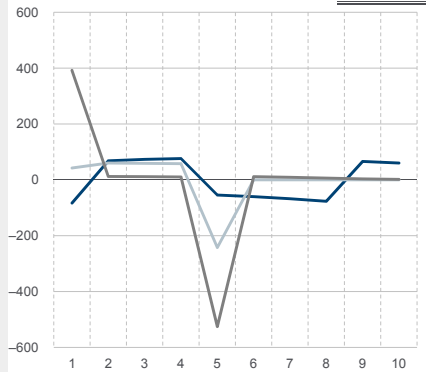
Munich RE

10-year level-premium term insurance<sup>1</sup>

Best-estimate mortality



75% extra mortality from year 5 to year 8 Illustrative



MCEV provides for most comprehensive earnings disclosure

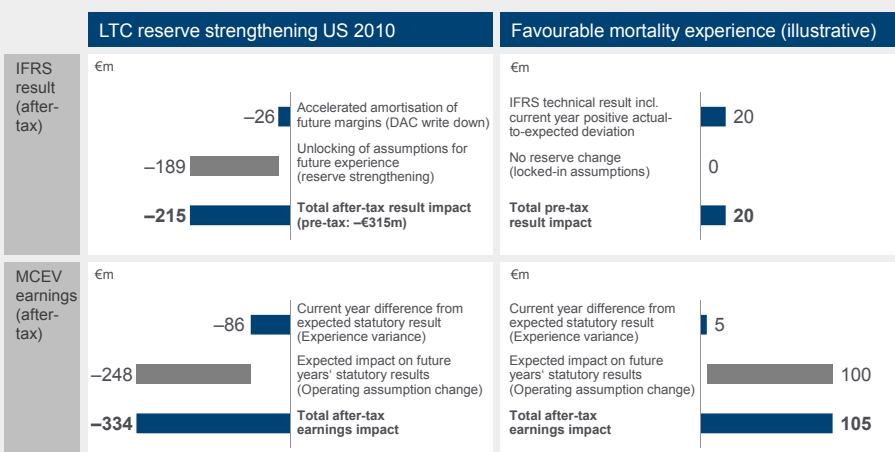
<sup>1</sup> Mortality business; annual level premium payments over 10-years of policy duration.

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Life reinsurance

## Different impacts on IFRS and MCEV basis

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MCEV: Full and immediate recognition of positive or negative impacts

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Life reinsurance

## Generic reconciliation between MCEV earnings and IFRS operating result

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### Major building blocks for transition from MCEV Earnings to IFRS operating result

#### Total MCEV Earnings

- **VIF component of total EV earnings**
- +/- Difference in market value and statutory accounting value of assets
- +/- Other differences between statutory and EV accounting
- + Statutory tax

#### Statutory result pre tax

- +/- Change in IFRS DAC
- +/- Statutory/IFRS differences (benefit reserves, investment result, administration expenses)
- +/- Other differences between statutory and IFRS accounting

#### IFRS operating result

**Over time convergence of MCEV earnings and IFRS result – year-by-year major differences may occur**

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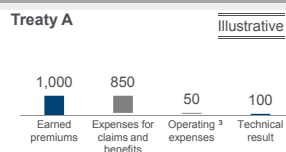
Life reinsurance

## Different treaty structures with different impact on P&L – Munich Re steers according to economic value creation

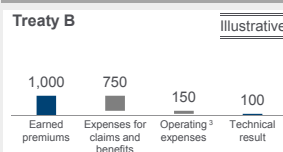
Munich RE 

### Life reinsurance – IFRS: P&L view

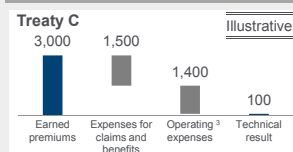
Standard risk premium business without profit sharing<sup>1</sup>



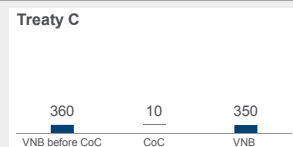
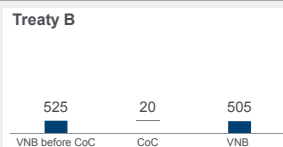
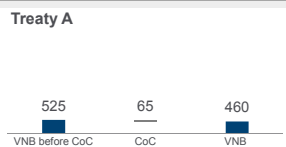
Standard risk premium business with profit sharing<sup>1</sup>



Surplus relief treaty with high profit sharing<sup>2</sup>



### Life reinsurance – MCEV: Economic value contribution



**P&L impact dependent on particular structure of transaction – Economic value creation most appropriately reflected in MCEV metrics**

<sup>1</sup> Portfolio duration assumed to be 10 years.

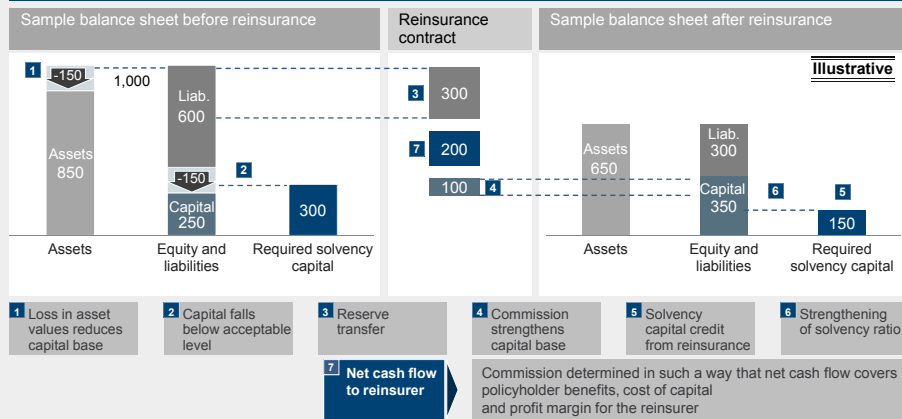
<sup>2</sup> Portfolio duration assumed to be 5 years.

<sup>3</sup> Including commissions/profit commissions.

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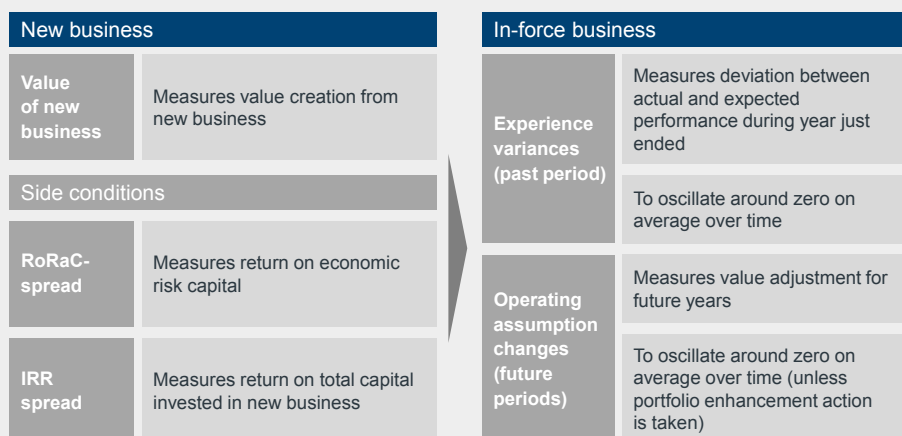
## Typical large-volume deal structure (solvency relief)

## Simplified structure of a solvency relief block deal in life reinsurance



**Effective balance sheet management tool for our clients utilising in-force portfolios with limited experience volatility**

## Life reinsurance steering parameters



**MCEV allows for reflection of cash and free capital generation**

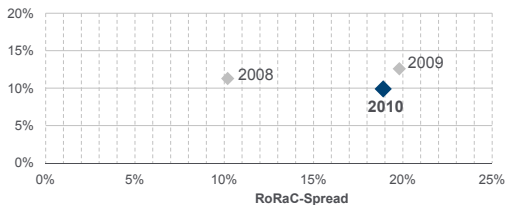
Life reinsurance

## Relative profitability of new business in line with corporate requirements under all relevant metrics

Munich RE

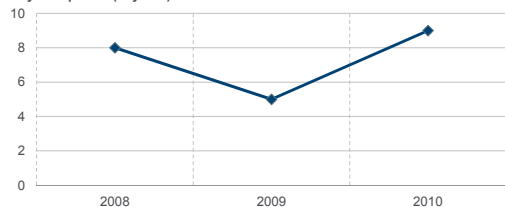
### RoRaC-/IRR-spread<sup>1</sup> and payback period<sup>2</sup> in new business

IRR-Spread



- Very satisfactory profitability levels, both relative to economic risk capital employed (RoRaC) and total investment (IRR) in new business
- 2009 new business heavily influenced by highly profitable large-volume deals; effect in 2010 slightly less pronounced

Payback period (in years)



- Payback period of 2009 reflects shorter duration of most of the large-volume deals
- Large-volume deals impact reduced in 2010

<sup>1</sup> Spread in addition to reference rate (weighted-average swap yield curves).<sup>2</sup> Number of years it takes to amortise the total investment in new business through future shareholder cash flows (discounted with risk free reference rates).

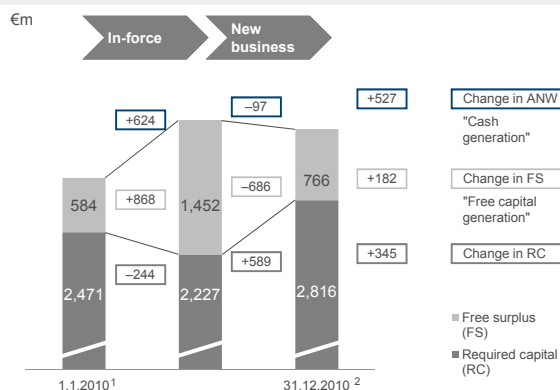
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Life reinsurance

## In-force portfolio generates ample free surplus for funding attractive new business

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### Adjusted net worth (ANW) development



- In-force generated €624m in cash, representing (extraordinarily high) 15% of value of in-force at beginning of the year
- Roughly 10% of initial required capital released through run-off
- 79% of free capital generated from in-force (€686m) invested in new business at attractive terms
- Thereof only 11% (€97m) cash invested in new business
- Beyond this investment in new business, free capital of €182 has been generated

**Despite large new business volumes – Strong capital and margin release from in-force makes life reinsurance an important source of capital and cash generation**

<sup>1</sup> After opening adjustments (FX adjustments).<sup>2</sup> Before closing adjustments (FX adjustments and capital movements). For details please refer to Slide 107.

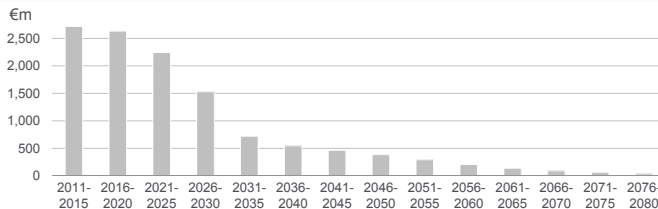
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Life reinsurance

## Sustainably high paybacks from in-force business secure capital generation going forward

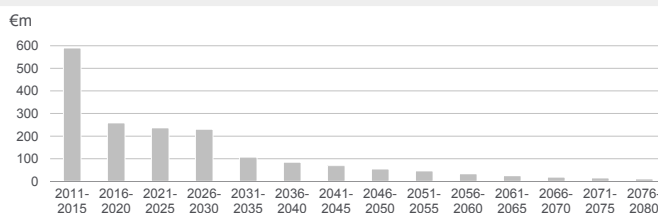
Munich RE

### Free capital generation from in-force portfolio as of 31 Dec. 2010



- In 5 years: 22%
- In 10 years: 44%
- In 15 years: 63%
- In 20 years: 75%

### Free capital generation from new business written in 2010



- In 5 years: 33%
- In 10 years: 47%
- In 15 years: 61%
- In 20 years: 73%

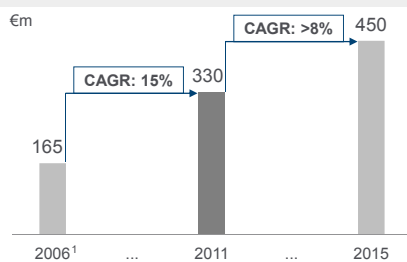
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Life reinsurance – Outlook

## Future value generation – Ambition levels increased

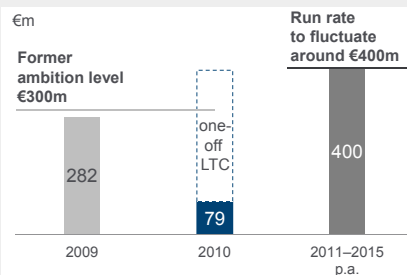
Munich RE

### VNB: Communicated ambition achieved/maintained



Driven by large-volume deals exceptionally high VNB in 2009 (€562m) and 2010 (€475m) above original target for 2011

### IFRS technical result: Ambition increased



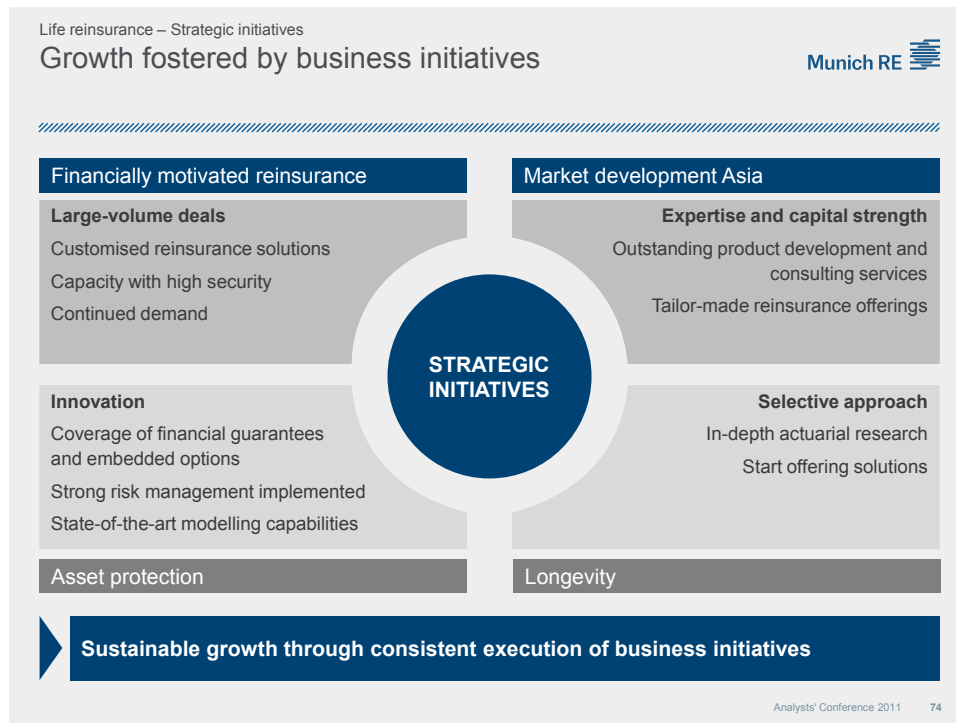
One-off impact in 2010 (US long term care); medium-term expectation in the order of ~€400m<sup>2</sup>

Life reinsurance segment well prepared to maintain growth momentum

<sup>1</sup> Reconciled from EEV to MCEV.

<sup>2</sup> Based on best estimate assumptions and not taking into account major interest or currency movements.

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## Agenda

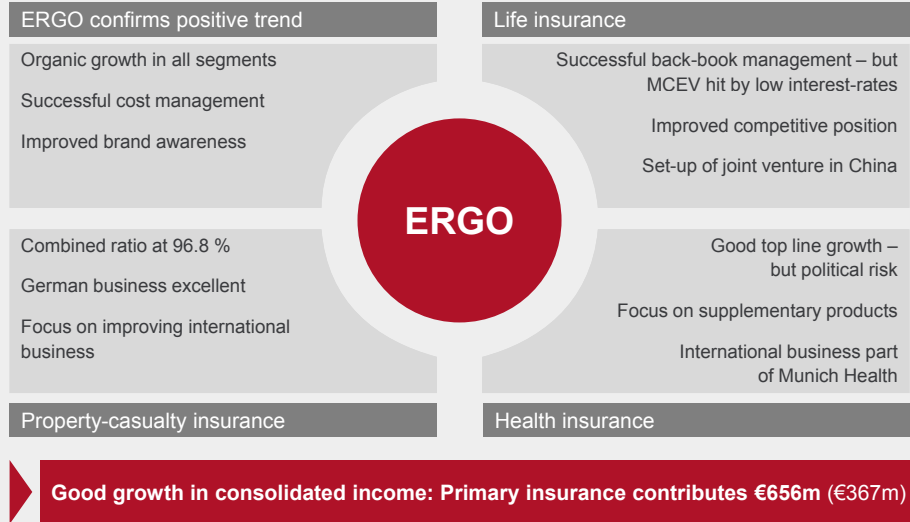
Munich RE

Turning risk into sustainable value	Nikolaus von Bomhard
Financial highlights 2010	Jörg Schneider
Risk management	Joachim Oechsli
Non-life reinsurance	Torsten Jeworrek
Life reinsurance	Joachim Wenning
<b>Primary insurance</b>	<b>Torsten Oletzky</b>
Backup	

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## Primary insurance – Highlights

## ERGO well positioned in all segments



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## Primary insurance – Highlights

## ERGO confirms positive trend



Gross premiums written	Technical result
€m	€m
Q1–4 2009 16,596	Q1–4 2009 814
Q1–4 2010 17,481	Q1–4 2010 648
Growth across all segments – overall +5.3%, mostly organic	Higher claims in international p-c business and increased policyholder participation in life/health
Investment result <sup>1</sup>	Operating result
€m	€m
Q1–4 2009 4,615	Q1–4 2009 908
Q1–4 2010 5,575	Q1–4 2010 1,269
Significant improvement – lower write-downs, positive effect from swaptions	Substantial increase in operating result – all segments contribute

<sup>1</sup> Investment result incl. unrealised gains/losses from investments in unit-linked life insurance; thereof unit-linked business: €271m in Q1–4 2010 (€441m in Q1–4 2009).

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Primary insurance – Market Consistent Embedded Value 2010

## MCEV result

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€m		
<b>MCEV 31.12.2009</b>	<b>5,126</b>	
Opening adjustments	16	
<b>Adjusted MCEV 31.12.2009</b>	<b>5,141</b>	
<b>1</b> Value of new business	141	
Expected return	160	
Experience variances	27	
Assumption changes	-198	
Other operating variance	244	
<b>Operating MCEV earnings 2010</b>	<b>375</b>	
<b>2</b> Economic variances	-1,099	
Other non-operating variance	0	
<b>Total MCEV earnings 2010</b>	<b>-724</b>	
Closing adjustments	-309	
<b>MCEV 31.12.2010</b>	<b>4,108</b>	

**1** Value of new business increased to €141m (€132m). VNB up in life, but down in health

**2** Change in MCEV stems mostly from interest-rate and credit spread development:

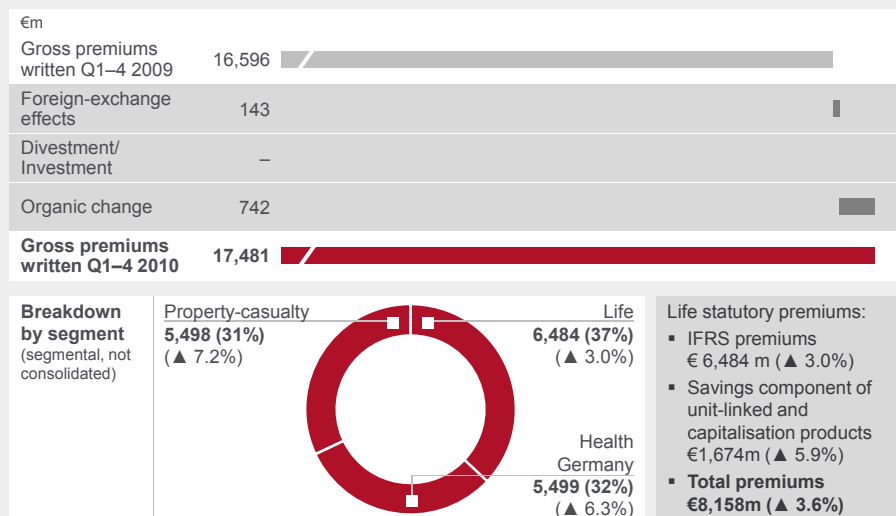
- Effect is largest for German life (guarantees) ...
- ... while only small decrease for international life (less guarantees) and health business

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Primary insurance – Premium development

## Growth from all business segments

Munich RE



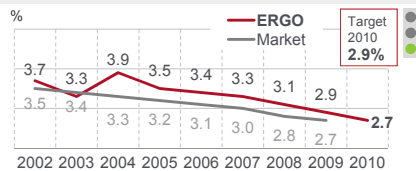
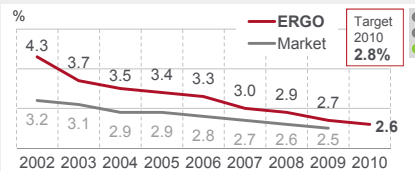
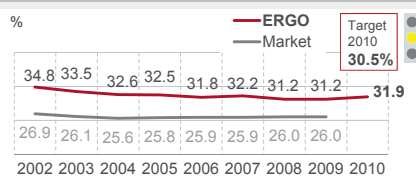
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Primary insurance – Expenses

## Cost targets mostly achieved

Munich RE

Administrative expense ratio – Life<sup>1</sup>Administrative expense ratio – Health<sup>1</sup>Operating expense ratio – Non-life<sup>1</sup>

- Reduction of 1,800 in FTEs accomplished
- Cost target in life insurance achieved – despite premium growth 2007 vs. 2010 lower than expected
- Health target clearly overachieved
- Non-life target not fully met: portfolio mix change, costs of new brand strategy. However, strong combined ratio in Germany (89.8%)

Reduction of expense ratios very successful overall

<sup>1</sup> Germany, gross figures German GAAP (HGB).

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Primary insurance – Life

## Better consolidated result – Small positive effect from swaptions

Munich RE

€m	Q1–4 2010	Q1–4 2009
Gross premiums written	6,484	6,294
Income from technical interest	3,052	2,874
Net expenses for claims and benefits	8,170	7,461
Net operating expenses	1,090	1,065
Technical result	–6	93
Investment result	3,485	3,086
Non-technical result	361	125
Operating result	355	218
Consolidated result	172	27

- Rise in premiums mainly driven by higher volume of new business with single premiums
- Increased income from technical interest esp. due to higher policyholder participation on account of higher investment result
- Higher net expenses for claims and benefits owing to higher allocation to provision for premium refunds (RfB) and higher allocation to provision for future policy benefits in line with premium growth
- Improved investment result driven by swaption result, allowing for higher policyholder participation
- Previous year impacted by goodwill impairments of €47m (mainly BACAV)
- Swaption impact on consolidated result amounts to €19m in Q1–4 2010 (Q1–4 2009: –€70m)

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Primary insurance – Life – New business

## New business life insurance (statutory premiums) – International business: healthy growth

Munich RE

Total				
€m	Total	Regular premiums	Single premiums	APE <sup>1</sup>
Q1–4 2009	2,503	505	1,998	705
Q1–4 2010	2,920	511	2,409	752
Δ	16.7%	1.2%	20.6%	6.7%

Germany				
€m	Total	Regular premiums	Single premiums	APE <sup>1</sup>
Q1–4 2009	1,600	340	1,260	466
Q1–4 2010	1,940	331	1,609	492
Δ	21.3%	–2.6%	27.7%	5.6%

### Comments

#### Germany

- Strong growth in traditional single premium annuity business
- Only small decrease in regular premium business – Mostly in line with market

#### International

- Strong growth in Poland (especially bancassurance)
- Austrian new business (APE) 15.1% below excellent previous year's figures, as expected

### International

€m	Total	Regular premiums	Single premiums	APE <sup>1</sup>
Q1–4 2009	903	165	738	239
Q1–4 2010	980	180	800	260
Δ	8.5%	9.1%	8.4%	8.8%

<sup>1</sup> Annual premium equivalent (APE = regular premiums + 10% single premiums).

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Primary insurance – Life

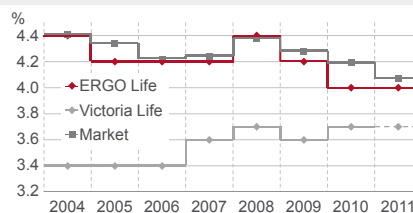
## German business facing well-known challenges with an improved competitive position

Munich RE

### Challenges in 2011

- Make use of improved competitive position
  - Market has followed ERGO in lowering bonus rates to more reasonable levels
  - Former Victoria salesforce now with competitive products
- Continued focus on back-book management: hedging and duration management
- Introduction of "Zinszusatzreserve" a positive factor
  - Strengthening of reserves in reaction to lower interest-rates
  - Should result in more market discipline with regard to policyholders' bonus participation
- Reduction of technical interest-rate to 1.75% as of 1 January 2012 – Lowered guarantee increases manoeuvring room for life insurers, but decreases relative product attractiveness
- Increase share of new product types

### Policyholder bonuses: ERGO vs. Market



### Victoria life closed for new business

- Corporate pension business transferred to ERGO life: >€400m in premiums and >€6bn in provisions/assets
- Adjustment of asset allocation to the aspects of a closed book
- Joint administration with ERGO Life – No deterioration of cost result

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Primary insurance – Life

## Successful expansion of bancassurance activities

Munich RE

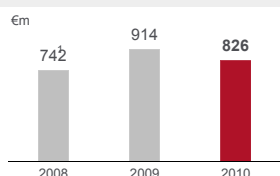
## Austria

- As expected, lower premiums in 2010 (-9.6%); 2009 was extraordinary year with high single-premium business
- #3 in Austrian life market
- PMI of Bank Austria Creditanstalt Insurance (BACAV) completed
- Sophisticated product development know-how (innovator in unit-linked and index-linked products)
- ERGO's International Bancassurance Centre of Competence located in Vienna; co-operation with UniCredit in Romania and with DnB Nord in Latvia and Lithuania started in 2010
- Hub approach (Vienna) to leverage synergies in CEE

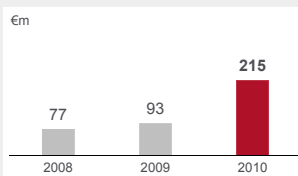
## Poland

- Strong premium growth (+116%)<sup>2</sup> in 2010; market growth of 4.3%<sup>3</sup>
- #11 in Polish life market; significant increase in market share
- Successful expansion of bancassurance activities with UniCredit Group in Poland
- Focus on index-linked and unit-linked products

## Total premiums life



## Total premiums life

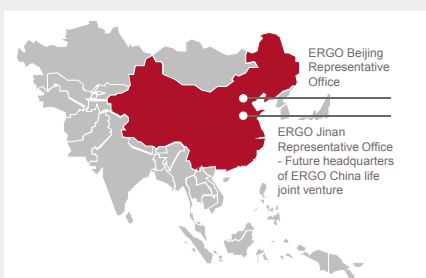
<sup>1</sup> 2008 as-if figure; acquisition of majority in BACAV in 2009.<sup>2</sup> ERGO growth in local currency IFRS.<sup>3</sup> Market growth Q3 2010 in local GAAP.

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Primary insurance – Life

## Market entry in China: Joint venture signed in January 2011

Munich RE



## Shandong facts &amp; figures

- Population of 94 million
- GDP: €380bn in 2009 – Second-largest province in China
- Insurance market: €9.9bn in 2009 – Third-largest insurance market in China
- Premium income has risen by an average of 24% over the past five years

## Highlights

- ERGO sets up a greenfield joint venture for life insurance together with Shandong State-owned Assets Investment Holding Company (SSAIH)
- JV agreement signed in January 2011
- ERGO and SSAIH each hold a 50% share
- The financial investor SSAIH is an investment vehicle for the provincial government of Shandong
  - Founded in 2005
  - Managed capital funds equivalent to approx. €2bn in 2010
  - Employs more than 8,000 people
  - Steered and managed by Shandong SASAC
- Operations will commence when regulatory approval has been obtained – Licensing process expected to take about two years
- Primary target group: private customers, leveraging government-related business

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Primary insurance – Health

## Very satisfactory consolidated result

Munich RE 

€m	Q1–4 2010	Q1–4 2009
Gross premiums written	5,499	5,171
Income from technical interest	1,431	1,172
Net expenses for claims and benefits	5,674	5,085
Net operating expenses	600	654
Technical result	418	361
Investment result	1,317	1,058
Non-technical result	–182	–145
Operating result	236	216
<b>Consolidated result</b>	<b>165</b>	<b>83</b>

- Premium increase mainly owing to premium adjustments in Germany
- Higher income from technical interest mainly driven by higher policyholder participation on account of higher investment result
- Rise in net expenses for claims and benefits attributable to increased policyholder participation and higher claims payments
- Reduced net operating expenses due to lower DAC amortisation and higher reinsurance commissions received
- Investment result increased due to higher regular income, improved result from write-ups/write-downs and higher result from disposals
- Positive effect from tax refunds

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Primary insurance – Health

## Growth initiatives for supplementary business

Munich RE 

New business total <sup>1</sup>			
€m	Total	Compre- hensive	Supple- mentary
Q1–4 2009	247	158	89
<b>Q1–4 2010</b>	<b>299</b>	<b>205</b>	<b>94</b>
<b>Δ</b>	<b>21.1%</b>	<b>29.7%</b>	<b>5.6%</b>

## Comprehensive health insurance

- Good growth in 2010 also due to large Group insurance contract acquired in 2009
- Short-term: favourable political climate, e.g. abolition of 3-year waiting period
- Mid-term: possibility of less favourable political climate requires preparation. Stabilisation of comprehensive health insurance and enhancement of underwriting

## Supplementary health insurance

- Spur growth in supplementary health insurance with optimised new product portfolio
- Introduction of innovative after-the-event-product "instant dental cover" in April 2011 at ERGO Direct; limited budget for 2011 (50,000 policies)
- ERGO Direct with focus on internet as sales channel – long-term target to increase share of new business from 10% (2010) to 50% (2015)

## Travel insurance

- Acquire more cooperation partners and reduce dependency on small number of larger partners
- Focus on increasing share of all-year cover (in contrast to single-holiday cover)
- Improve operations, implement best practices and exchange knowledge internationally

<sup>1</sup> Without travel business which is short-term business only.

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Primary insurance – Property-casualty

## Improved consolidated result despite higher claims and goodwill impairment losses

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€m	Q1-4 2010	Q1-4 2009
Gross premiums written	5,498	5,131
Income from technical interest	174	150
Net expenses for claims and benefits	3,130	2,856
Net operating expenses	1,621	1,502
Technical result	236	360
Investment result	773	471
Non-technical result	442	114
Operating result	678	474
<b>Consolidated result</b>	<b>319</b>	<b>257</b>

- Premium increase in all lines of business esp. driven by strengthening of distribution channels in international business as well as positive foreign currency exchange effects (esp. Poland)
- Increased claims expenses driven by major claims in Germany and international business (storms, floods and strong winter) as well as competitive motor markets
- Increase in net operating expenses owing to higher acquisition costs from bank distribution
- Improved investment result attributable to higher regular income and improved result from disposals
- Goodwill impairment losses in Q2 2010: ERGO Isvicre Sigorta €109m

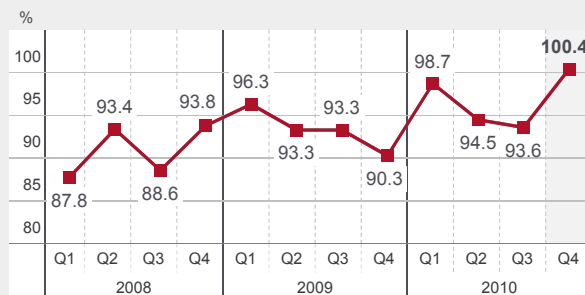
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Primary insurance – Property-casualty – Combined ratio

## High claims activity in Germany and international business

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%	Loss ratio	Expense ratio
2008	90.9	58.4
2009	93.2	60.3
<b>2010</b>	<b>96.8</b>	<b>63.1</b>



- Germany: Continued low combined ratio (89.8%) despite Xynthia, floods and tornados
- ERGO International: Combined ratio (107.8%) affected by floods and hard winter in Poland; intense competition in Turkey and Korea
- Expense ratio higher – Strong business growth in international business

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Primary insurance – Property-casualty

## Different situation for German and international business

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Germany		
€m	2010	2009
Gross premiums written	3,173	3,160
Technical result	347	396
Non-technical result	270	124
Operating result	617	520
<b>Consolidated result</b>	<b>414</b>	<b>308</b>

- German business grows only slightly (+0.4%)
- Good combined ratio at 89.8% (87.9%)
- Rise in expenses mainly due to new brand strategy
- P&L includes ERGO corporate centre

International		
€m	2010	2009
Gross premiums written	2,325	1,971
Technical result	-111	-36
Non-technical result	172	-10
Operating result	61	-46
<b>Consolidated result</b>	<b>-95</b>	<b>-51</b>

- International business with strong growth (+18.0%), mainly in Poland, Turkey, Greece
- Deterioration of combined ratio, 107.8% (102.5%)
- Goodwill impairment of €109m in Turkey

Analysts' Conference 2011 90

Primary insurance – Property-casualty

## Polish activities hurt by floods, winter and soft motor market

Munich RE

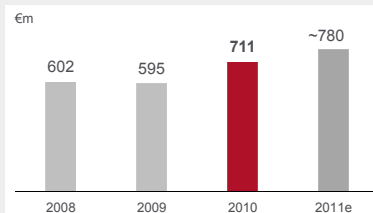
## Highlights

- No. 2 in Polish p-c market; market share of 12.7% (Q3 2010)
- Above market average premium growth<sup>1</sup>
- Two-brand strategy: ERGO Hestia and MTU
- Diversified distribution approach

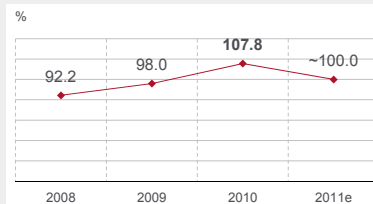
## Combined ratio development

- Increased combined ratio in 2010:
  - Floods and harsh winter
  - Challenges in Polish motor market
- Measures taken in order to return to combined ratio below 100%:
  - Revised tariffs in MTPL and own damage cover (price increase of 10%–20%)
  - Higher efficiency in claims management
  - Active portfolio steering: share of motor reduced from 63% (2008) to 55% (2010)
  - New structure of nat cat products
  - Ongoing improvement of underwriting practice (esp. motor and property after winter/flood events 2010)

## Gross written premiums P-C



## Combined ratio (net)

<sup>1</sup> P-C market growth 5.5% as at Q3 2010, ERGO 10.6% (local currency IFRS).

Analysts' Conference 2011 91

Primary insurance – Property-casualty

## Measures taken for turnaround of Turkish activities

Munich RE

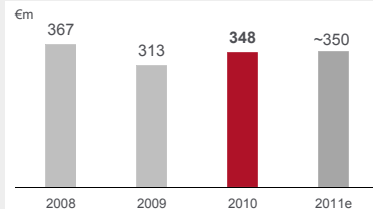
## Highlights

- No. 6 in Turkish p-c market; 6.5% market share
- Premium growth of 11% in 2010

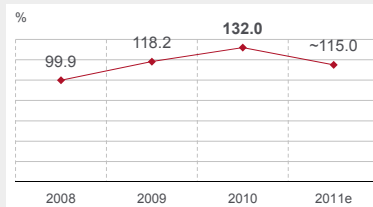
## Combined ratio development

- Increased combined ratio in 2010:
  - Financial crisis in 2009 intensified competition especially in motor (market combined ratio above 100% in almost all business lines)
  - Reserve strengthening due to new regulation
  - Investments especially in staff, rebranding and in IT in order to improve operational efficiency
- Measures taken in order to return to combined ratio below 100%:
  - Increase in rates in MTPL by more than 15% in 2010 and decrease in number of policies
  - Improvement of claims management and operational efficiency
  - Active portfolio steering: share of motor reduced from 66% (2009) to 59% (2010)

## Gross written premiums P-C



## Combined ratio (net)

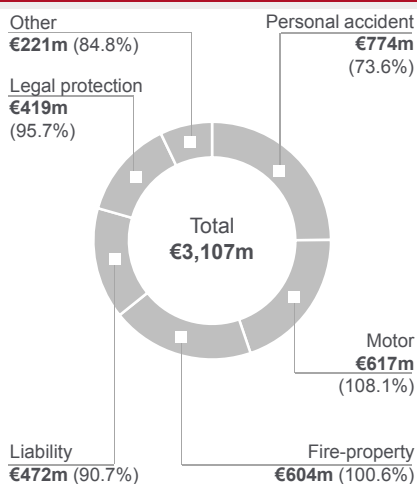


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Primary insurance – Property-casualty

German business – Excellent performance overall;  
Focus on improving unprofitable lines ...

Munich RE

Portfolio split and combined ratios 2010<sup>1</sup>

## Motor business to be improved



- Whole German market experiences negative trend
- ERGO's performance broadly in line with market, but ERGO's share in motor business lower than market average
- To return to positive results, ERGO
  - increased new business rates by ~5% (new TPL tariff introduced January 2011)
  - increases portfolio rates where possible
  - increases rates also for fleet business

<sup>1</sup> German GAAP figures. (In Brackets: Combined ratio).

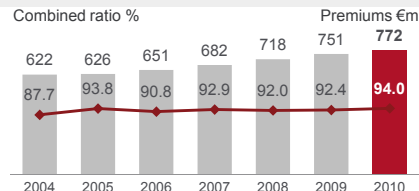
Analysts' Conference 2011 93

Primary insurance – Property-casualty

... and growing in profitable lines



### Commercial / industrial business driver for profitable growth



- Growth above market average for years
- Two thirds of top 100 German companies are ERGO customers
- Growth initiative for 2011/12:
  - ERGO one of the leading insurers for renewable energy
  - Becoming leading insurer in marine hull
  - Expand out of Germany with activities in Netherlands, Austria and UK

### Personal accident business

- Leading position in pure-risk accident insurance (nearly 90% of portfolio)
- Focus on target-group-oriented assistance packages together with well-known partners, e.g.
  - Rehab packages in cooperation with "Fitness First" and Professional Associations' Hospitals
  - More than 450,000 assistance packages sold

### Private fire and property

- Homeowners' difficult business regarding profitability after deregulation
- ERGO with rate increases of 9.2% in 2011
- Sales initiative to improve portfolio

### Legal protection business

- Growth activities for commercial customers
- New product "affordable justice for all" (legal advice, mediation)

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Primary insurance – New brand strategy

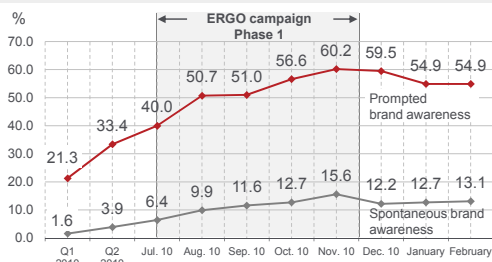
Successful groundwork in 2010 provides good starting point for activities 2011



### Legal milestones in 2010

- **Renamings:**  
ERGO Direkt, ERGO Life, ERGO P-C
- **Mergers:**  
ERGO P-C, DKV, D.A.S.
- **Portfolio transfer:**  
Corporate pensions from Victoria Life to ERGO Life

### Pleasing increase in brand awareness in 2010



### Strategic activities in 2011 focused on

#### Clarity of communication

- Complete rebrush of all letters to customers
- Revision of terms of contracts for private customer products

#### Customer participation

- Implementation of customer advocate
- Implementation of customer panel

#### Products and services

- Expanding claims management services
- Develop easy-to-understand products

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## Takeaways

**2010 was a good year for ERGO – Pleasing growth of premiums and results**

**In Germany, delivery on brand promises is top priority for 2011**

**International business: Focus on improvement of bottom-line result in non-life**

## Agenda

Turning risk into sustainable value	Nikolaus von Bomhard
Financial highlights 2010	Jörg Schneider
Risk management	Joachim Oechslein
Non-life reinsurance	Torsten Jeworrek
Life reinsurance	Joachim Wenning
Primary insurance	Torsten Oletzky

**Backup**

## Agenda – Backup

<b>Additional highlights Q1–4 2010</b>	<b>98</b>
<b>Risk management</b>	<b>102</b>
<b>Life reinsurance</b>	<b>105</b>
<b>Investments</b>	<b>108</b>
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<b>Market Consistent Embedded Value 2010</b>	<b>143</b>
<b>Shareholder information</b>	<b>153</b>

Backup: Additional highlights Q1–4 2010

Group: Continuously strong operating performance –  
reduction only due to major losses

As reported (€m)	Q1–4 2010	Q1–4 2009	As-if calculation (€m)	Q1–4 2010	Q1–4 2009
Regular income on investments	7,749	7,629	Adjusted regular income on investm. <sup>1</sup>	7,044	6,873
Write-ups/write-downs and gains/ losses on the disposal of investments	1,246	490	Policyholder participation in primary insurance life and health from write- ups/write-downs on investments <sup>2</sup> and gains/losses on disposals	524	12
Other investment income/expenses	–353	–236	Shareholder participation in write- ups/write-downs and gains/losses on disposal of investments <sup>3</sup>	1,074	998
<b>Investment result</b>	<b>8,642</b>	<b>7,883</b>	<b>Investment result</b>	<b>8,642</b>	<b>7,883</b>
Deduction of income from technical interest	–6,587	–5,794	Deduction of income from technical interest	–6,587	–5,794
			Shareholder participation in write- ups/write-downs and gains/losses on disposal of investments <sup>3</sup>	–1,074	–998
Other operating result	–42	–115	Other operating result	–42	–115
<b>Non-technical result</b>	<b>2,013</b>	<b>1,974</b>	<b>Adjusted non-technical result</b>	<b>939</b>	<b>976</b>
<b>Technical result</b>	<b>1,965</b>	<b>2,747</b>	<b>Technical result</b>	<b>1,965</b>	<b>2,747</b>
<b>Operating result</b>	<b>3,978</b>	<b>4,721</b>	<b>Adjusted operating result</b>	<b>2,904</b>	<b>3,723</b>

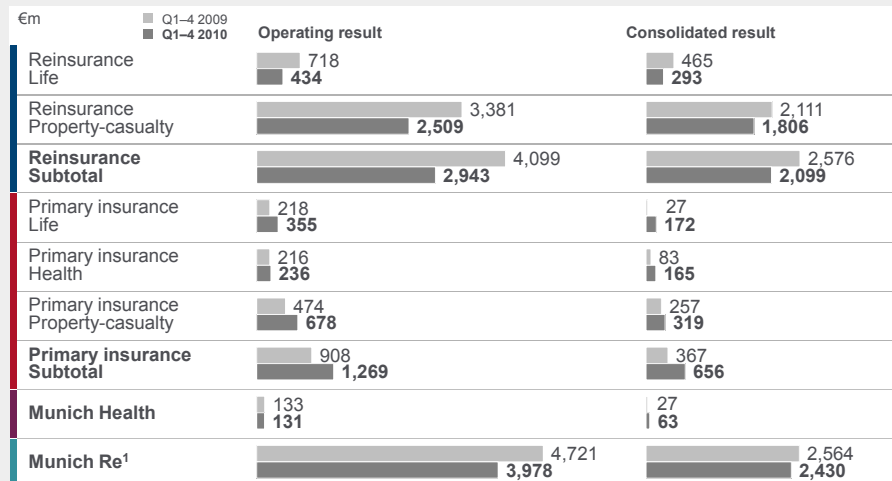
<sup>1</sup> Regular income on investments less planned amortisation of investment property plus other income/expenses on investments (excl. unrealised gains/losses on unit-linked life insurance).

<sup>2</sup> Incl. unrealised gains/losses from unit-linked life insurance.

<sup>3</sup> In life and health primary insurance only shareholders' share of 10%.

Backup: Additional highlights Q1–4 2010

## Increased contribution of primary insurance to Group earnings

Munich RE 

<sup>1</sup> Operating result Q1–4 2010 including asset management (€75m, Q1–4 2009 €52m) and consolidation (–€440m, Q1–4 2009 –€471m). Consolidated result Q1–4 2010 including asset management (€37m, Q1–4 2009 €19m) and consolidation (–€425m, Q1–4 2009 –€425m). The consolidation figure in Q1–4 2009 includes the elimination of the intercompany sale of Europäische Reiseversicherung from Munich Reinsurance Company to ERGO AG amounting to €139m.

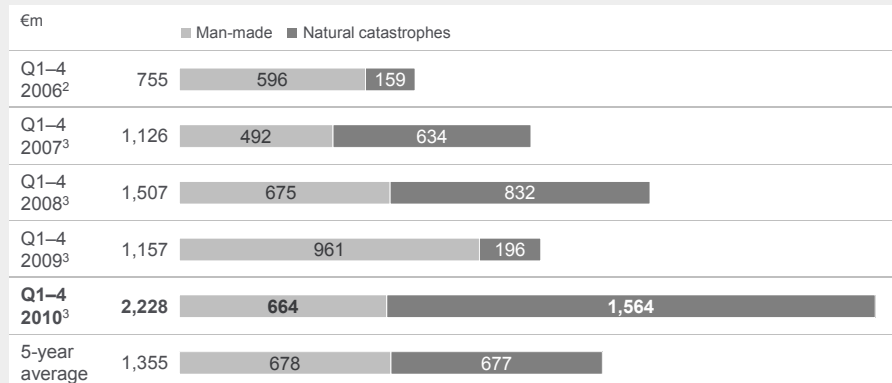
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Backup: Additional highlights Q1–4 2010

## Major losses: Above-average nat cat claims, man-made losses equal 5-year average

Munich RE 

### Reinsurance segment: Major losses<sup>1</sup> over €10m each

<sup>1</sup> Incl. claims in life.<sup>2</sup> Major losses over €5m each; Q1–4 2006 incl. run-off profits.<sup>3</sup> Incl. run-off profits.

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## Agenda – Backup

Additional highlights Q1–4 2010

### Risk management

Life reinsurance

Investments

Reserves

Market Consistent Embedded Value 2010

Shareholder information

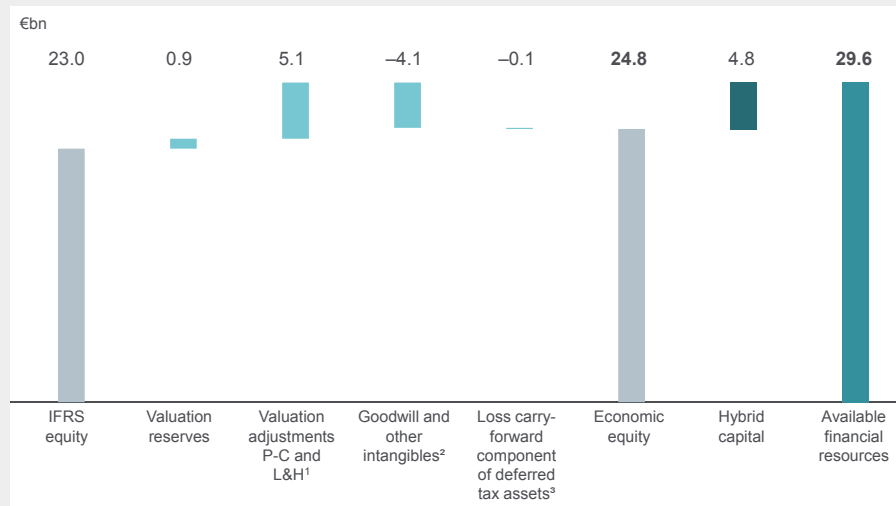
Backup: Risk management – Major developments in Munich Re's risk strategy

## Set-up of Munich Re's risk strategy

Category	Risk criteria	Measure	Criteria's objective	ERM objective addressed
Whole portfolio criteria	Financial strength	<ul style="list-style-type: none"> <li>ERC</li> <li>Rating</li> <li>Solvency</li> </ul>	Safeguarding sufficient excess capital and limiting frequency of negative economic results of Munich Re's <b>entire risk portfolio</b> .	Maintaining Munich Re's financial strength, thereby ensuring that all liabilities to our clients can be met
	Avoiding financial distress	Negative economic earnings tolerated every 10 years		
Supplementary criteria	<ul style="list-style-type: none"> <li><b>Peak risk management</b> <ul style="list-style-type: none"> <li>Individual nat cat perils</li> <li>Longevity</li> <li>Financial sector limit</li> </ul> </li> <li>Terrorism</li> <li>Pandemic</li> <li><b>ALM limits</b></li> <li><b>Liquidity</b></li> </ul>	VaR limits as % of AFR or limit for maximum exposure	Limiting losses from <b>individual risks</b> or <b>accumulation exposure</b> and <b>liquidity risks</b> that could endanger Munich Re's survival capability.	Protecting and increasing the value of our shareholders' investment
Other criteria	E.g.: <ul style="list-style-type: none"> <li>Counterparty-credit risk</li> <li>Single risks</li> <li>Alternative investments</li> <li>Non-investment-grade investments</li> </ul>	Individual risk limits in absolute value	Limiting risks that could sustainably damage the <b>trust of stakeholders in Munich Re</b>	Safeguarding Munich Re's reputation, thus perpetuating future business potential

Backup: Risk management – Capital position 31.12.2010

## Reconciliation of AFR with IFRS equity – Economic equity now at €24.8bn

Munich RE <sup>1</sup> Includes discount of reserves and embedded value not recognised in IFRS equity.<sup>2</sup> Deduction net of tax effects.<sup>3</sup> Deduction only of the amount not covered by excess of deferred tax liabilities on solo-entity level.

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## Agenda – Backup

Munich RE 

Additional highlights Q1–4 2010

Risk management

Life reinsurance

Investments

Reserves

Market Consistent Embedded Value 2010

Shareholder information

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Backup: Life reinsurance

## IFRS and MCEV methodology comparison of key characteristics

Munich RE 

	MCEV	IFRS
Profit recognition	Immediate (present value)	Deferred – in annual tranches
Experience recognition (past period)	Yes – Variances between last year's assumption and actual experience	Yes – Difference in assumption included in reserve and actual experience
Assumption changes (future periods)	Yes – Immediate recognition of full impact of gains/losses (present value)	Recognised only if PV of profit margins and PADs <sup>1</sup> insufficient to buffer loss („Lock-in“)
Asset valuation	Marked to market	Fair value and amortized costs
Cost of capital	Reflected with respect to entire capital consumption	Not reflected
Options and guarantees	Stochastically valued	Only partially valued (fair value of VA guarantees)
Reserving	Statutory rules (relevant for shareholder cash flows)	IFRS/US GAAP rules
Annual earnings	VNB (value of new business) plus variances and assumption changes (value changes on in-force) plus expected return (unwind of discount)	Sum of current year annual result contributions of all still relevant new business generations

Present value of future profits available to shareholder	<ul style="list-style-type: none"> <li>Present value of future after-tax regulatory profits</li> <li>Time value of financial options and guarantees</li> </ul>	MCEV
– Adjustments for risks of cash flows	<ul style="list-style-type: none"> <li>Cost of non-hedgeable risks</li> <li>Cost of double taxation and cost of asset management related to assets backing required capital</li> </ul>	
+ Adjusted net worth	<ul style="list-style-type: none"> <li>Required capital</li> <li>Free surplus</li> </ul>	

<sup>1</sup> Provision for adverse deviation.

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Backup: Life reinsurance

## Free capital and cash generation

Munich RE 

				Total
				Free surplus 1.1.10
				564
				Opening adjustments <sup>3</sup>
				20
				Adjusted free surplus
				584
Change in ANW <sup>1</sup>	Cash generation	624	–97	527
	Expected investment income on ANW	35		
	Transfer from VIF to ANW	331		
	Variances and assumption changes with impact on ANW	258		
Change in RC	Release (+)/Strain (–) from required capital	244	–589	–345
	Expected investment income on RC	–18		
	Release of RC from in-force	182		
	Variances and assumption changes with impact on RC	80		
Change in FS <sup>2</sup>	Free capital generation	868	–686	182
				Free surplus 31.12.10
				766
				Closing adjustments <sup>4</sup> (incl. capital movements)
				–240
				Closing free surplus 31.12.10
				526

<sup>1</sup> ANW impact of total MCEV earnings.<sup>2</sup> FS impact of total MCEV earnings.<sup>3</sup> FX rate adjustment beginning of year to average of year.<sup>4</sup> FX rate adjustment average of year to end of year.

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## Agenda – Backup

Additional highlights Q1–4 2010

Risk management

Life reinsurance

### Investments

Reserves

Market Consistent Embedded Value 2010

Shareholder information

Backup: Investments and investment result – Investment result – Regular income

## Increased asset base and shift into loans as main driver for increasing regular income

Investment result – Regular income (€m)	Q1–4 2010	Q1–4 2009	Change
Afs fixed-interest	4,415	4,448	–33
Afs non-fixed-interest	271	278	–7
Derivatives	244	258	–14
Loans	2,123	1,952	171
Real estate	340	340	–
Deposits retained on assumed reinsurance and other investments	273	353	–80
Other	83	–	83
<b>Total regular income</b>	<b>7,749</b>	<b>7,629</b>	<b>120</b>

### Main effects in Q1–4 2010

- Increased asset base as well as cautious investment in credit-exposed fixed-interest investments
- Afs fixed-interest investments are influenced by new investments at lower interest-rates and currency volatility
- Shift into loans and increased asset base more than compensating for lower interest-rates
- "Other" mainly affected by higher income from affiliated and associated companies, whereas income from deposits decreased

Backup: Investments and investment result – Investment result – Write-ups/write-downs

## Higher write-ups of interest derivatives and significantly lower write-downs of equities

Munich RE 

Investment result – write-ups/write-downs (€m)	Q1–4 2010	Q1–4 2009	Change
Afs fixed-interest	17	–112	129
Afs non-fixed-interest	–270	–314	44
Derivatives	–39	–414	375
Loans	–4	–74	70
Real estate	–101	–122	21
Other	–6	–86	80
<b>Total net write-ups/write-downs</b>	<b>–403</b>	<b>–1,122</b>	<b>719</b>

### Main effects in Q1–4 2010

- Previous year impacted by high write-downs of afs fixed-interest securities (structured products, loss-bearing bonds)
- Lower impairments of afs non-fixed-interest securities as stock markets were at their lowest point at the end of March 2009 and, in general, at a lower level in 2009 compared to 2010
- Strongly improved result from derivatives mainly due to swaptions as a result of decreasing interest-rate environment; by contrast, higher write-downs on bond futures

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Backup: Investments and investment result – Investment result – Net result from disposal of investments

## Gains on fixed-interest securities and equities more than compensate for impact from derivatives

Munich RE 

Investment result – Net result from disposal of investments (€m)	Q1–4 2010	Q1–4 2009	Change
Afs fixed-interest	1,067	782	285
Afs non-fixed-interest	634	943	–309
Derivatives	–198	–270	72
Loans	31	106	–75
Real estate	100	35	65
Other	15	16	–1
<b>Total net realised gains</b>	<b>1,649</b>	<b>1,612</b>	<b>37</b>

### Main effects in Q1–4 2010

- Afs fixed-interest: Disposal of corporate and government bonds at low interest-rate levels and reduced credit spreads realising investment gains; in 2009 we profited from our cautious shift from government bonds and structured products into corporate bonds
- Afs non-fixed-interest: Lower disposal gains from equities in second half of 2010 as previous year profited from high realised gains
- Derivatives: Gains on our bond futures (low interest-rate environment), whereas losses on our hedging products occurred

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Backup: Investments and investment result – Investment result

## Return on investment by asset class

Munich RE 

% <sup>1</sup>	Regular income	Write-ups/ write-downs	Gains/ losses on disposal	Other income/ expenses	Total Rol	Average market value in €m
Afs fixed-interest	3.9	0.0	1.0	0.0	4.9	112,036
Afs non-fixed-interest	3.3	-3.3	7.7	0.0	7.7	8,234
Derivatives	23.3	-3.7	-18.9	0.0	0.7	1,049
Loans	4.2	0.0	0.1	0.0	4.3	50,551
Real estate	6.1	-1.8	1.8	0.0	6.0	5,617
Other <sup>2</sup>	2.1	0.0	0.1	-2.1	0.1	16,714
<b>Total</b>	<b>4.0</b>	<b>-0.2</b>	<b>0.8</b>	<b>-0.2</b>	<b>4.5</b>	<b>194,201<sup>3</sup></b>
Reinsurance	3.8	-0.4	1.6	-0.4	4.6	72,734
Primary insurance	4.1	-0.1	0.4	0.0	4.4	118,085
Munich Health	3.7	0.0	0.3	-0.1	3.8	2,656

## Main effects in Q1–4 2010

- Reinsurance: High Rol driven by gains on disposals of fixed-interest securities; in addition, sale of Helvetia shares leading to a net gain of approx. €90m
- Primary insurance: As compared to reinsurance, higher running yield (longer investment duration) but lower disposal gains; write-downs on swaptions in Q4
- Total return decreases to 4.2% (2009: 5.7%); negative impact on total return resulting from decreased valuation reserves (Δ -€531m) mainly driven by afs fixed-interest securities as a result of increasing yields in peripheral sovereign debt

<sup>1</sup> Annualised. <sup>2</sup> Incl. management expenses. <sup>3</sup> Reinsurance, primary insurance and Munich Health do not add up to total amount; difference relates to the segment "asset management".

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Backup: Investments and investment result – Total investment portfolio

## Maintenance of moderate investment risk profile

Munich RE 

## Investment structure by asset class (market values)

	Land and buildings	Loans	Fixed-interest securities <sup>1</sup>	Shares, equity funds and participating interests	Miscellaneous <sup>2</sup>
	€bn	%			
31.12.2006	179	3.6	16.4	54.9	14.6
31.12.2007	177	3.1	19.4	54.0	13.7
31.12.2008	177	3.0	23.2	61.7	3.5
31.12.2009	185	3.0	25.9	60.0	2.8
31.3.2010	192	2.9	25.9	58.1	3.9
30.6.2010	197	2.9	26.1	58.2	3.8
30.9.2010	200	2.5	26.5	57.7	3.9
31.12.2010	196	2.9	25.7	57.7	4.0 <sup>3</sup>
<b>31.12.2010 (€bn)</b>	<b>196</b>	<b>5.7</b>	<b>50.5</b>	<b>113.4</b>	<b>7.9</b>
					<b>18.9</b>

<sup>1</sup> Categories "available for sale", "held to maturity" and "at fair value".

<sup>2</sup> Deposits retained on assumed reinsurance, investments for unit-linked life, deposits with banks, investment funds (bond, property) and derivatives held for trading with non-fixed interest underlying.

<sup>3</sup> After taking equity derivatives into account: 4.4%.

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Backup: Investments and investment result – Fixed-income portfolio

## Continued emphasis on highly rated credit risks

Munich RE Rating classification of fixed-income portfolio<sup>1</sup>

%	AAA	AA	A	BBB	BB	B and worse	NR	Total
Government/ Semi-government	53	35	7	3	2	–	0	100
Pfandbriefe/Covered bonds	85	14	1	0	–	–	0	100
Banks	5	18	37	5	1	1	33 <sup>2</sup>	100
Corporates	2	12	38	44	3	0	1	100
Structured products	79	11	7	2	0	0	1	100
Loans to policyholders/ Mortgage loans	–	–	–	–	–	–	100	100
<b>Total</b>	<b>52</b>	<b>23</b>	<b>11</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>100</b>

<sup>1</sup> Economic view – not fully comparable with IFRS figures.<sup>2</sup> Including cash positions and shares in funds which are not rated. As at 31 December 2010.

Analysts' Conference 2011 114

Backup: Investments and investment result – Fixed-income portfolio

Approx. 76% invested in eurozone,  
digestible exposure to peripheral sovereignsMunich RE Geographic classification of fixed-income portfolio<sup>1</sup>

%	Germany	France	UK	"PIIGS"	CEE	Rest of Europe	USA	Canada	Rest of world	Total
Government/ Semi-government	31	6	6	14	3	11	16	7	6	100
Pfandbriefe/ Covered bonds	43	16	6	13	0	22	0	0	–	100
Banks	43	2	7	4	1	9	26	2	6	100
Corporates	3	7	7	5	0	16	50	5	6	100
Structured products	3	1	9	16	0	10	59	1	1	100
Loans to policyholders/ Mortgage loans	98	–	–	1	0	0	0	0	1	100
<b>Total</b>	<b>34</b>	<b>8</b>	<b>6</b>	<b>12</b>	<b>2</b>	<b>14</b>	<b>16</b>	<b>4</b>	<b>4</b>	<b>100</b>

<sup>1</sup> Economic view – not fully comparable with IFRS figures.  
As at 31 December 2010.

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Backup: Investments and investment result – Fixed-income portfolio

## Maturity structure

Munich RE

Maturity structure of fixed-income portfolio<sup>1</sup>

%	Remaining time to maturity							Total
	0–1 year	1–3 years	3–5 years	5–7 years	7–10 years	>10 years	n.a.	
Government/ Semi-government	10	13	18	12	17	30	0	100
Pfandbriefe/Covered bonds	3	11	10	15	19	42	–	100
Banks	12	9	9	12	18	6	34	100
Corporates	7	23	24	14	20	12	0	100
Structured products	20	42	24	6	7	1	0	100
Loans to policyholders/ Mortgage loans	6	15	21	16	23	17	2	100
<b>Total</b>	<b>8</b>	<b>14</b>	<b>16</b>	<b>13</b>	<b>18</b>	<b>28</b>	<b>3</b>	<b>100</b>

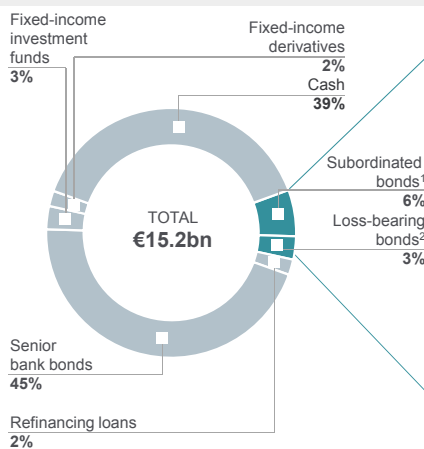
<sup>1</sup> Economic view – not fully comparable with IFRS figures.  
As at 31 December 2010.

Analysts' Conference 2011 116

Backup: Investments and investment result – Fixed-income portfolio

## Banks: Decrease of subordinated and loss-bearing exposure

Munich RE

BANKS  
Split by investment categoryBANKS  
Subordinated and loss-bearing exposure by country

Country	Market values €m (as at 31.12.2010)		
	Total	Subordinated bonds	Loss-bearing bonds
Germany	685	415	270
USA	399	351	48
Italy	49	49	0
UK	47	39	8
Austria	64	46	18
Other	131	80	51
<b>Total market values</b>	<b>1,375</b>	<b>980</b>	<b>395</b>

<sup>1</sup> Classified as lower Tier 2 and Tier 3 capital for solvency purposes.  
<sup>2</sup> Classified as Tier 1 and upper Tier 2 capital for solvency purposes.  
Economic view – not fully comparable with IFRS figures.

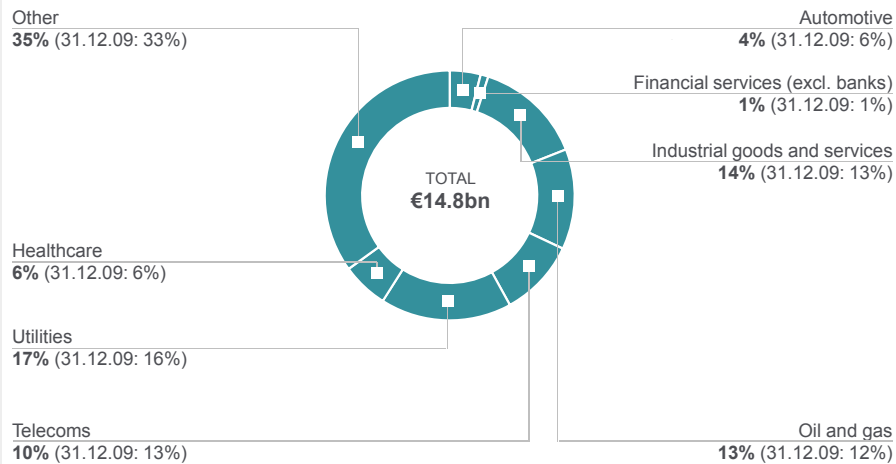
Analysts' Conference 2011 117

Backup: Investments and investment result – Fixed-income portfolio

## Corporates: Broadly diversified investment-grade portfolio

Munich RE

### Corporate bonds: Sectoral split<sup>1</sup>



<sup>1</sup> Economic view – not fully comparable with IFRS figures.  
As at 31 December 2010.

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Backup: Investments and investment result – Fixed-income portfolio

## Structured products: Substantial portion of exposure to agencies

Munich RE

### Structured products portfolio (at market values): Split by rating and region

€m		AAA	AA	A	BBB	<BBB	NR	USA + RoW	Europe	Total	Market-to-par value
ABS	Consumer-related ABS <sup>1</sup>	653	83	132	5	–	0	534	339	873	101%
	Corporate-related ABS <sup>2</sup>	225	140	44	24	4	20	1	456	457	96%
	Subprime HEL	19	6	23	–	4	–	52	–	52	97%
CDO/CLN	Subprime-related	–	–	–	–	1	0	–	1	1	1%
	Non-subprime-related	74	15	32	2	0	58	–	181	181	81%
MBS	Agency	2,203	92	–	–	–	–	2,295	–	2,295	98%
	Non-agency prime	654	92	64	43	0	–	67	786	853	97%
	Non-agency other (not subprime)	224	89	28	–	4	–	144	201	345	94%
	Commercial MBS	707	167	122	20	–	–	597	419	1,016	98%
<b>Total 31.12.2010</b>		<b>4,759</b>	<b>684</b>	<b>445</b>	<b>94</b>	<b>13</b>	<b>78</b>	<b>3,690</b>	<b>2,383</b>	<b>6,073</b>	<b>96%</b>
<b>In %</b>		<b>79%</b>	<b>11%</b>	<b>7%</b>	<b>2%</b>	<b>0%</b>	<b>1%</b>	<b>61%</b>	<b>39%</b>	<b>100%</b>	
Total 31.12.2009		4,592	315	235	20	15	85	3,993	1,269	5,262	95%

<sup>1</sup> Consumer loans, auto, credit cards, student loans.

<sup>2</sup> Asset-backed CPs, business and corporate loans, commercial equipment.

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Backup: Investments and investment result – Sensitivities to interest-rates, spreads and equity markets

## Sensitivities to interest-rates, spreads and equity markets

Munich RE 

Sensitivity to risk-free interest-rates – Basis points	–100	–50	+100	+200
Change in gross market value (€bn)	+11.5	+5.6	–10.1	–18.9
Change in on-balance-sheet reserves, net (€bn) <sup>1</sup>	+3.0	+1.5	–2.7	–5.1
Change in off-balance-sheet reserves, net (€bn) <sup>1</sup>	+0.6	+0.3	–0.6	–1.0
P&L impact (€bn) <sup>1</sup>	+0.3	+0.2	–0.3	–0.6
Sensitivity to spreads <sup>2</sup> (change of bps)			+100	+200
Change in gross market value (€bn)			–7.0	–12.9
Change in on-balance-sheet reserves, net (€bn) <sup>1</sup>			–1.4	–2.7
Change in off-balance-sheet reserves, net (€bn) <sup>1</sup>			–0.4	–0.8
P&L impact (€bn) <sup>1</sup>			–0.0	–0.0
Sensitivity to equity markets <sup>3</sup>	–30%	–10%	+10%	+30%
<b>EURO STOXX 50 (2,793 as at 31.12.2010)</b>	<b>1,955</b>	<b>2,514</b>	<b>3,072</b>	<b>3,631</b>
Change in gross market value (€bn)	–3.0	–1.0	+1.0	+3.1
Change in on-balance-sheet reserves, net (€bn) <sup>1</sup>	–0.9	–0.4	+0.7	+2.0
Change in off-balance-sheet reserves, net (€bn) <sup>1</sup>	–0.3	–0.1	+0.1	+0.3
P&L impact (€bn) <sup>1</sup>	–1.5	–0.4	+0.1	+0.5

<sup>1</sup> Rough calculation with limited reliability assuming unchanged portfolio as at 31.12.2010. After rough estimation of policyholder participation and deferred tax; linearity of relations cannot be assumed. Economic view – not fully comparable with IFRS figures.

<sup>2</sup> Sensitivities to changes of spreads are calculated for every category of fixed-interest securities, except governments with ratings AAA.

<sup>3</sup> Worst-case scenario assumed: impairment as soon as market value is below acquisition cost.

Analysts' Conference 2011 120

Backup: Investments and investment result – Investment result – On- and off-balance-sheet reserves

## Unrealised gains/losses on securities (afs) and off-balance-sheet reserves

Munich RE 

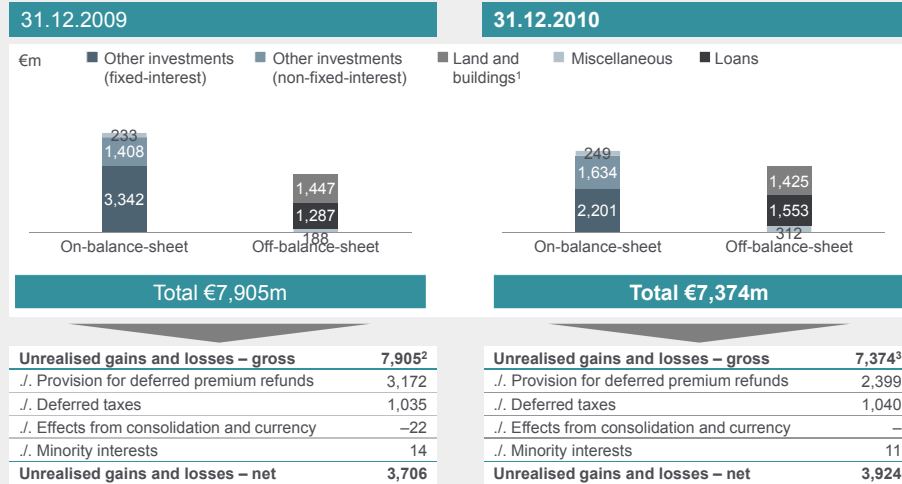
On-balance-sheet reserves on afs securities	
€m	
Gross unrealised gains and losses	3,835
Provision for deferred premium refunds	–587
Deferred taxes	–604
Minority interests	–11
Effects from consolidation and currency	3
<b>Shareholders' stake 31.12.2010</b>	<b>2,636</b>
Off-balance-sheet reserves <sup>1</sup>	
€m	
<b>Off-balance-sheet reserves 31.12.2010</b>	<b>3,290</b>
Provision for deferred premium refunds	–1,778
Deferred taxes	–436
Minority interests	–
<b>Shareholders' stake 31.12.2010</b>	<b>1,076</b>

<sup>1</sup> Excluding reserves on owner-occupied properties.

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Backup: Investments and investment result – Investment result – On- and off-balance-sheet reserves

## On- and off-balance-sheet reserves by asset class

Munich RE <sup>1</sup> Excluding reserves for owner-occupied properties.<sup>2</sup> Incl. unrealised gains/losses from valuation at equity, unconsolidated affiliated enterprises and cash flow hedging of €233m and off-balance-sheet valuation reserves of €186m for affiliated companies.<sup>3</sup> Incl. unrealised gains/losses from valuation at equity, unconsolidated affiliated enterprises and cash flow hedging of €249m and off-balance-sheet valuation reserves of €311m for affiliated companies.

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## Agenda – Backup

Munich RE 

Additional highlights Q1–4 2010

Risk management

Life reinsurance

Investments

Reserves

Market Consistent Embedded Value 2010

Shareholder information

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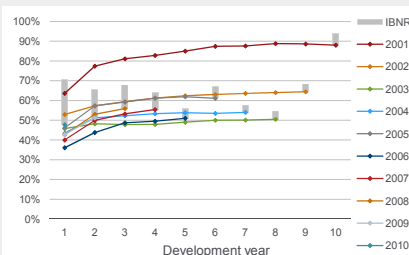
Backup: Reserves

## Munich Re Group property-casualty – Reinsurance and primary insurance

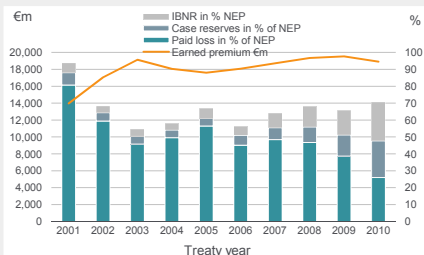
Munich RE

Treaty year	Net earned premium €m	Reported loss ratio in development year										Ultimate loss ratio	Paid loss	Case reserves	IBNR
		1	2	3	4	5	6	7	8	9	10				
2001	13,967	63.6%	77.4%	81.1%	82.8%	85.0%	87.4%	87.6%	88.8%	88.6%	88.0%	93.8%	80.7%	7.3%	5.8%
2002	17,062	52.9%	57.3%	59.4%	61.2%	62.4%	63.0%	63.6%	64.0%	64.4%		68.3%	59.4%	4.9%	4.0%
2003	19,138	45.8%	48.2%	47.8%	47.9%	49.0%	50.0%	50.1%	50.5%			54.7%	45.8%	4.7%	4.2%
2004	18,066	43.5%	51.2%	52.3%	53.3%	53.8%	53.5%	54.0%				57.7%	49.6%	4.5%	3.7%
2005	17,602	46.1%	57.3%	59.2%	61.2%	61.9%	61.1%					67.0%	56.5%	4.5%	6.0%
2006	18,075	36.1%	43.8%	48.7%	49.5%	51.0%						56.1%	45.1%	5.9%	5.1%
2007	18,721	40.0%	49.9%	53.2%	55.4%							64.2%	48.4%	7.0%	8.8%
2008	19,345	42.7%	53.0%	55.9%								68.0%	46.7%	9.2%	12.0%
2009	19,537	42.8%	51.2%									65.7%	38.7%	12.5%	14.5%
2010	18,908	47.7%										70.7%	26.0%	21.7%	23.0%

Reported loss ratio development – 2001–2010



Portfolio performance by treaty year – 2001–2010



Management view, not fully comparable with IFRS.

Analysts' Conference 2011 124

Backup: Reserves

## Property-casualty reinsurance and primary insurance Representative loss triangles

Munich RE

Data description	Figures in triangle exhibits
Legal entity	
<b>Munich Re Munich</b>	<ul style="list-style-type: none"> <li>Net business of Munich Re Munich, i.e. Munich Reinsurance Company including MR Paris, MR Madrid and business fronted by Great Lakes UK, excluding special contracts and all other branches and subsidiaries</li> <li><b>Statistical</b> figures (i.e. following cedents' view) as at 31 December 2010 before conversion to financial data (earning down, currency effects)</li> <li>Including reported amounts of large losses</li> <li>Converted into € with average exchange rates of 2009</li> </ul>
<b>Munich Re America</b>	<ul style="list-style-type: none"> <li>Net of specific retrocession and before variable quota shares and loss portfolio transfer to Munich Re Munich</li> <li><b>Financial</b> figures as at 31 December 2010</li> <li>Excluding special loss complexes, finite risk or natural catastrophe losses. Respective ultimates shown in separate column.</li> <li>Converted into € using the year-end exchange rates of 2010</li> </ul>
<b>ERGO</b>	<ul style="list-style-type: none"> <li>Net of corporate retrocession to Munich Reinsurance Company</li> <li><b>Financial</b> figures as at 31 December 2010</li> </ul>

Management view, not fully comparable with IFRS.

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Backup: Reserves

## Property-casualty reinsurance and primary insurance Representative loss triangles

Munich RE

Legal entity €m	Line of business	Case and IBNR reserves
<b>Munich Re Munich</b>	Property	5,458
	Liability	5,785
	Motor	3,609
	Personal accident / workers' comp.	504
	Marine	1,324
	<b>Subtotal</b>	<b>16,679</b>
<b>Munich Re America</b>	Property	555
	Liability	2,865
	Motor	506
	Workers' compensation	2,361
	<b>Subtotal</b>	<b>6,287</b>
<b>ERGO</b>	Property-casualty	3,854
<b>Munich Re Group</b>	Asbestos and environmental	1,917
<b>Total reserves disclosed</b>		<b>28,737</b>

Disclosure addresses more than 70% of carried net property-casualty reserves

Management view, not fully comparable with IFRS.

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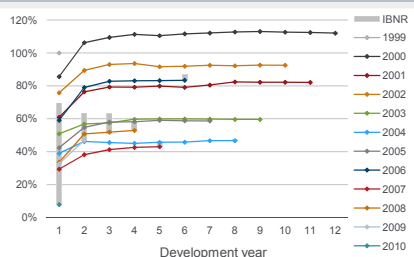
Backup: Reserves

## Munich Re Munich Property

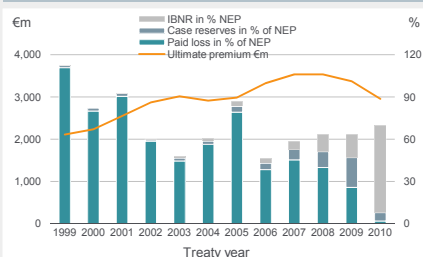
Munich RE

Treaty year	Ultimate premium €m	Development year: Loss ratio as reported												Ultimate loss ratio	Paid loss	Case reserves	IBNR
		1	2	3	4	5	6	7	8	9	10	11	12				
1999	2,111	85.6%	106.2%	109.4%	111.3%	110.5%	111.6%	112.1%	112.7%	113.0%	112.6%	112.4%	112.0%	112.5%	110.9%	1.4%	0.2%
2000	2,237	60.9%	76.4%	79.3%	79.2%	79.9%	79.1%	80.5%	82.4%	82.2%	82.2%	82.1%		82.1%	80.0%	2.1%	0.0%
2001	2,550	75.8%	89.4%	93.0%	93.6%	91.6%	91.9%	92.5%	92.2%	92.6%	92.5%			92.7%	90.5%	2.0%	0.2%
2002	2,874	50.9%	56.8%	57.5%	59.7%	59.9%	59.9%	59.8%	59.6%	59.6%				60.3%	58.7%	0.9%	0.7%
2003	3,015	39.0%	46.2%	45.6%	45.1%	45.7%	45.8%	46.7%	46.7%					47.6%	44.6%	2.1%	1.0%
2004	2,914	42.4%	54.8%	58.0%	58.2%	59.1%	58.8%	58.7%						60.4%	56.4%	2.3%	1.7%
2005	2,985	59.1%	79.0%	82.8%	83.1%	83.2%	83.4%							86.8%	79.2%	4.2%	3.5%
2006	3,328	29.4%	38.2%	41.3%	42.6%	43.0%								46.4%	38.5%	4.5%	3.4%
2007	3,536	33.6%	50.8%	51.9%	52.9%									58.6%	45.4%	7.5%	5.8%
2008	3,536	37.8%	49.2%	51.1%										63.4%	39.9%	11.3%	12.3%
2009	3,373	32.7%	46.9%											63.5%	25.8%	21.2%	16.6%
2010	2,958	7.9%												69.7%	2.0%	5.9%	61.8%

Reported loss ratio development – 1999–2010



Portfolio performance by treaty year – 1999–2010



Management view, not fully comparable with IFRS.

Analysts' Conference 2011 127



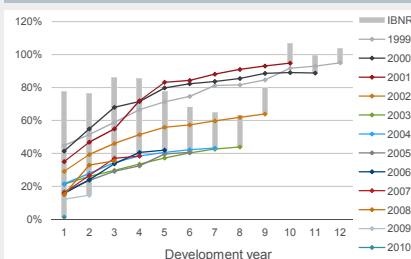
Backup: Reserves

## Munich Re Munich Liability – Proportional

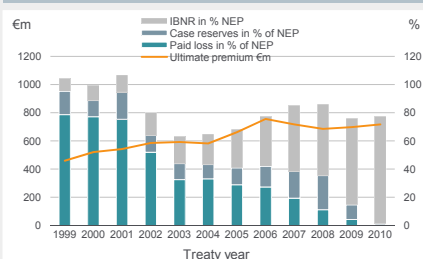
Munich RE

Treaty year	Ultimate premium €m	Development year: Loss ratio as reported												Ultimate loss ratio	Paid loss	Case reserves	IBNR
		1	2	3	4	5	6	7	8	9	10	11	12				
1999	460	44.8%	51.5%	58.9%	66.5%	71.3%	74.6%	81.2%	81.6%	84.6%	91.7%	93.0%	95.0%	104.3%	78.7%	16.6%	9.0%
2000	521	41.4%	54.9%	68.0%	71.5%	79.8%	82.3%	83.7%	85.5%	88.6%	89.1%	88.8%		99.6%	77.2%	11.5%	10.9%
2001	543	35.0%	46.8%	54.9%	72.0%	83.2%	84.3%	88.1%	91.0%	93.1%	94.8%			106.9%	75.4%	19.3%	12.2%
2002	586	29.1%	39.3%	46.0%	51.4%	55.9%	57.3%	59.7%	61.9%	63.9%				80.2%	52.0%	11.9%	16.3%
2003	593	21.3%	26.0%	29.7%	33.5%	37.2%	40.3%	42.6%	43.9%					63.1%	32.6%	11.3%	19.2%
2004	582	21.5%	27.8%	34.5%	38.5%	40.6%	42.2%	43.2%						64.9%	33.1%	10.1%	21.7%
2005	662	16.8%	23.6%	29.1%	32.4%	39.6%	40.7%							68.4%	28.9%	11.9%	27.6%
2006	756	15.7%	24.0%	33.7%	40.6%	42.0%								77.4%	27.3%	14.7%	35.4%
2007	717	16.0%	26.6%	37.0%	38.4%									85.3%	19.4%	19.0%	46.9%
2008	686	15.0%	32.9%	35.4%										86.2%	11.2%	24.2%	50.8%
2009	698	12.1%	14.6%											76.2%	4.3%	10.3%	61.6%
2010	718	1.3%												77.6%	0.4%	0.9%	76.2%

Reported loss ratio development – 1999–2010



Portfolio performance by treaty year – 1999–2010



Management view, not fully comparable with IFRS.

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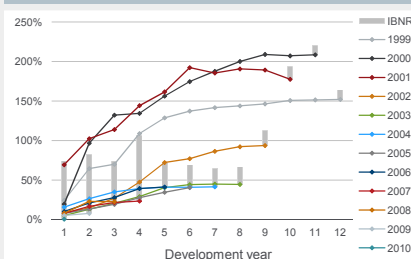
Backup: Reserves

## Munich Re Munich Liability – Non-proportional and facultative

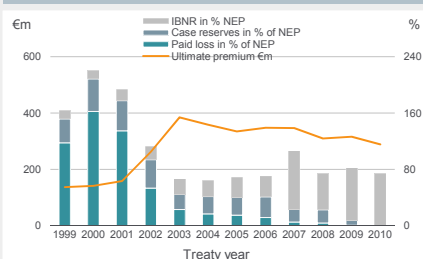
Munich RE

Treaty year	Ultimate premium €m	Development year: Loss ratio as reported												Ultimate loss ratio	Paid loss	Case reserves	IBNR
		1	2	3	4	5	6	7	8	9	10	11	12				
1999	137	24.3%	64.5%	70.0%	108.9%	128.7%	137.3%	141.7%	143.9%	146.4%	150.7%	151.5%	152.0%	164.0%	117.8%	34.0%	12.1%
2000	142	19.6%	96.7%	132.2%	134.4%	156.2%	174.6%	187.6%	200.1%	209.0%	207.2%	208.5%		220.5%	162.3%	46.2%	12.0%
2001	159	69.4%	102.4%	113.9%	144.2%	161.6%	192.3%	185.5%	190.6%	189.3%	177.5%			194.0%	134.8%	42.7%	16.5%
2002	263	8.5%	14.8%	27.1%	47.5%	72.2%	77.1%	86.4%	92.2%	93.7%				112.9%	53.6%	40.1%	19.2%
2003	385	4.9%	13.0%	20.6%	29.1%	40.4%	44.2%	44.9%	44.5%					67.0%	23.0%	21.5%	22.5%
2004	359	15.7%	26.4%	35.0%	39.3%	41.0%	40.9%	41.4%						64.7%	17.0%	24.4%	23.3%
2005	335	7.9%	13.3%	19.3%	27.7%	34.5%	40.5%							69.3%	15.1%	25.4%	28.8%
2006	348	10.2%	20.9%	27.9%	39.3%	41.2%								70.9%	11.8%	29.3%	29.7%
2007	347	7.9%	16.7%	21.5%	23.4%									106.9%	5.4%	18.0%	83.4%
2008	310	8.1%	23.0%	22.7%										74.0%	4.0%	18.7%	51.3%
2009	316	5.2%	7.8%											82.3%	0.7%	7.1%	74.5%
2010	289	0.5%												74.2%	0.0%	0.5%	73.8%

Reported loss ratio development – 1999–2010



Portfolio performance by treaty year – 1999–2010



Management view, not fully comparable with IFRS.

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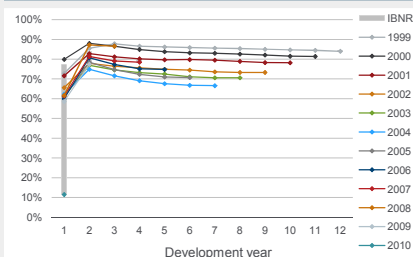
Backup: Reserves

Munich Re Munich  
Motor – Proportional

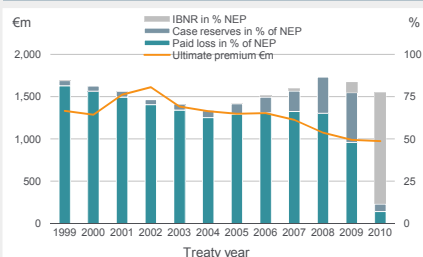
Munich RE

Treaty year	Ultimate premium €m	Development year: Loss ratio as reported												Ultimate loss ratio	Paid loss	Case reserves	IBNR
		1	2	3	4	5	6	7	8	9	10	11	12				
1999	1,333	72.8%	85.5%	87.8%	86.6%	86.2%	85.9%	85.6%	85.4%	85.0%	84.7%	84.5%	84.0%	85.1%	81.5%	3.0%	0.6%
2000	1,287	79.9%	88.0%	86.6%	84.9%	83.8%	83.2%	83.0%	82.6%	82.1%	81.5%	81.4%		81.4%	78.3%	3.0%	0.0%
2001	1,524	71.6%	82.8%	81.2%	80.2%	79.7%	79.8%	79.5%	78.9%	78.3%	78.2%			78.3%	74.8%	3.3%	0.1%
2002	1,613	65.6%	77.9%	76.4%	75.6%	74.9%	74.5%	73.6%	73.3%	73.3%				73.3%	70.3%	2.9%	0.0%
2003	1,383	61.2%	76.9%	74.6%	73.2%	72.5%	71.1%	70.6%						70.9%	67.1%	3.4%	0.3%
2004	1,329	62.3%	74.9%	71.6%	69.1%	67.6%	66.8%	66.6%						67.0%	62.6%	4.1%	0.3%
2005	1,299	60.9%	78.5%	74.7%	72.3%	71.0%	70.7%							71.2%	64.7%	6.1%	0.4%
2006	1,305	60.0%	80.7%	77.3%	75.1%	74.8%								75.6%	65.5%	9.3%	0.8%
2007	1,226	61.4%	81.4%	79.1%	78.5%									80.0%	66.2%	12.2%	1.5%
2008	1,074	61.7%	87.2%	86.6%										85.5%	65.2%	21.4%	-1.2%
2009	989	58.6%	77.4%											83.8%	48.0%	29.4%	6.4%
2010	975	11.5%												77.6%	7.1%	4.4%	66.0%

Reported loss ratio development – 1999–2010



Portfolio performance by treaty year – 1999–2010



Management view, not fully comparable with IFRS.

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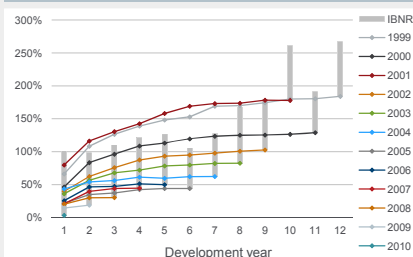
Backup: Reserves

Munich Re Munich  
Motor – Non-proportional and facultative

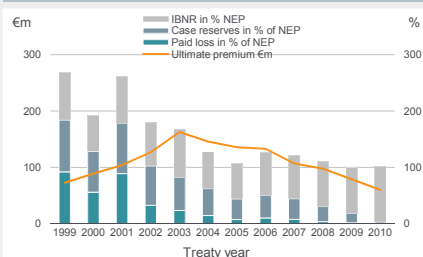
Munich RE

Treaty year	Ultimate premium €m	Development year: Loss ratio as reported												Ultimate loss ratio	Paid loss	Case reserves	IBNR
		1	2	3	4	5	6	7	8	9	10	11	12				
1999	73	66.2%	108.3%	126.4%	138.9%	148.2%	152.9%	169.1%	170.1%	174.4%	180.0%	180.4%	184.0%	267.9%	92.2%	91.9%	83.8%
2000	89	46.5%	83.4%	96.3%	108.7%	113.1%	119.4%	123.5%	125.0%	125.3%	126.4%	128.9%		191.8%	56.2%	72.7%	62.9%
2001	104	79.8%	116.2%	130.5%	142.6%	158.1%	169.1%	173.1%	173.6%	178.2%	177.9%			261.4%	89.2%	88.7%	83.5%
2002	127	39.8%	62.3%	75.8%	87.5%	93.3%	95.0%	97.8%	100.8%	102.7%				179.2%	32.7%	70.1%	76.4%
2003	163	36.1%	56.6%	67.9%	72.1%	78.4%	79.8%	82.2%	82.5%					167.9%	23.7%	58.8%	85.5%
2004	146	43.5%	54.1%	56.2%	61.4%	59.6%	62.2%	62.3%						128.0%	14.7%	47.6%	65.7%
2005	136	21.7%	34.8%	37.3%	42.5%	44.1%	44.1%							106.4%	7.5%	36.6%	62.3%
2006	133	25.6%	46.5%	47.4%	51.3%	50.0%								126.9%	10.5%	39.5%	76.9%
2007	107	20.9%	39.7%	44.1%	44.7%									121.1%	7.9%	36.7%	76.4%
2008	98	20.4%	30.1%	30.4%										110.6%	3.9%	26.5%	80.2%
2009	79	14.6%	18.8%											99.2%	1.9%	16.9%	80.4%
2010	60	3.4%												101.5%	0.0%	3.4%	98.1%

Reported loss ratio development – 1999–2010



Portfolio performance by treaty year – 1999–2010



Management view, not fully comparable with IFRS.

Analysts' Conference 2011 131

Backup: Reserves

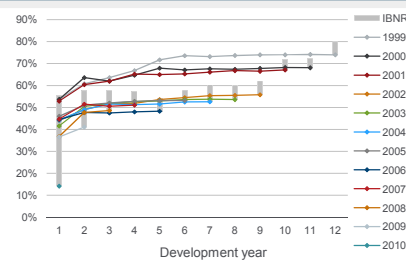
Munich Re Munich

Personal accident and workers' compensation

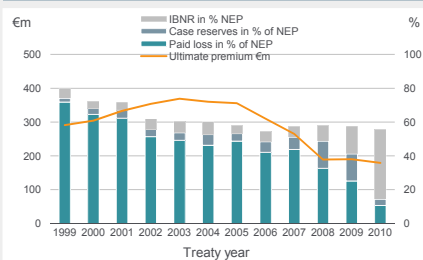
Munich RE

Treaty year	Ultimate premium €m	Development year: Loss ratio as reported												Ultimate loss ratio	Paid loss	Case reserves	IBNR
		1	2	3	4	5	6	7	8	9	10	11	12				
1999	291	53.7%	60.8%	63.6%	66.8%	71.7%	73.6%	73.2%	73.7%	74.0%	74.0%	74.2%	74.0%	80.0%	71.8%	2.3%	5.9%
2000	304	53.7%	63.6%	62.0%	64.7%	67.9%	67.1%	67.6%	67.4%	67.8%	68.2%	68.1%		72.4%	64.5%	3.6%	4.3%
2001	333	52.9%	60.4%	62.0%	65.2%	65.0%	65.3%	66.1%	66.8%	66.5%	67.1%			71.8%	62.3%	4.8%	4.7%
2002	354	44.1%	49.0%	51.7%	51.9%	53.6%	54.5%	55.4%	55.5%	55.8%				62.0%	51.4%	4.3%	6.3%
2003	369	41.6%	50.5%	51.8%	52.7%	53.0%	53.6%	53.8%	53.6%					60.3%	49.2%	4.4%	6.6%
2004	360	44.2%	49.0%	51.6%	51.3%	51.6%	52.5%	52.6%						60.3%	46.3%	6.3%	7.7%
2005	356	46.0%	51.0%	52.0%	52.8%	53.1%	53.2%							57.9%	48.7%	4.5%	4.7%
2006	310	44.5%	47.7%	47.5%	48.0%	48.3%								54.4%	42.1%	6.2%	6.0%
2007	265	44.7%	51.5%	50.6%	51.1%									57.3%	43.8%	7.3%	6.2%
2008	189	36.8%	47.7%	48.6%										57.8%	32.6%	16.1%	9.2%
2009	190	36.6%	41.1%											57.7%	25.1%	16.0%	16.5%
2010	179	14.2%												55.4%	10.7%	3.6%	41.2%

Reported loss ratio development – 1999–2010



Portfolio performance by treaty year – 1999–2010



Management view, not fully comparable with IFRS.

Analysts' Conference 2011 132

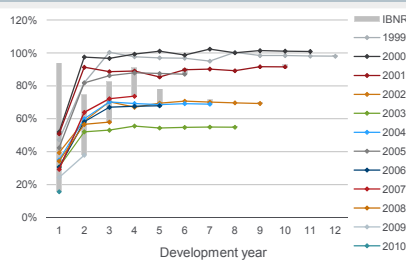
Backup: Reserves

Munich Re Munich  
Marine

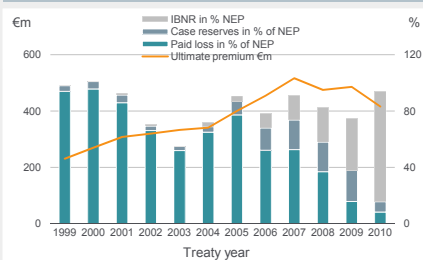
Munich RE

Treaty year	Ultimate premium €m	Development year: Loss ratio as reported												Ultimate loss ratio	Paid loss	Case reserves	IBNR
		1	2	3	4	5	6	7	8	9	10	11	12				
1999	231	47.3%	81.9%	100.4%	97.7%	97.0%	96.8%	95.0%	100.4%	98.4%	98.4%	98.1%	98.0%	98.5%	94.0%	4.0%	0.5%
2000	270	52.0%	97.5%	96.7%	99.3%	101.1%	98.7%	102.3%	100.1%	101.4%	101.1%	100.9%		101.1%	95.7%	5.3%	0.1%
2001	308	50.9%	91.3%	88.6%	89.0%	85.4%	89.8%	90.2%	89.2%	91.6%	91.5%			92.8%	86.0%	5.4%	1.4%
2002	320	39.4%	58.6%	70.3%	67.0%	69.5%	70.7%	70.1%	69.7%	69.3%				70.5%	66.2%	3.2%	1.1%
2003	333	30.8%	52.1%	53.1%	55.6%	54.4%	54.8%	55.0%	54.9%					55.2%	52.0%	2.9%	0.3%
2004	341	35.0%	60.0%	70.2%	69.3%	68.6%	69.2%	68.9%						71.9%	65.0%	3.9%	3.0%
2005	400	42.4%	81.8%	86.2%	87.9%	87.5%	87.1%							90.6%	77.3%	9.8%	3.6%
2006	455	30.7%	58.2%	67.0%	67.6%	67.9%								78.2%	52.2%	15.8%	10.3%
2007	517	29.3%	63.9%	72.2%	73.7%									91.1%	52.7%	21.0%	17.4%
2008	475	34.3%	56.6%	58.0%										82.6%	37.0%	21.0%	24.6%
2009	486	24.4%	37.9%											74.8%	15.9%	22.0%	36.9%
2010	416	15.7%												94.0%	8.3%	7.3%	78.3%

Reported loss ratio development – 1999–2010



Portfolio performance by treaty year – 1999–2010



Management view, not fully comparable with IFRS.

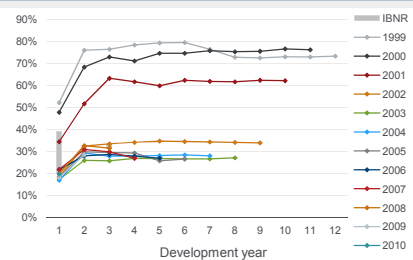
Analysts' Conference 2011 133

Backup: Reserves

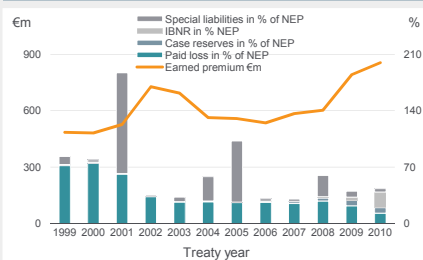
Munich Re America  
Property

Munich Re

Treaty year	Earned premium €m	Development year: Loss ratio as reported												Ultimate loss ratio	Paid loss	Case reserves	IBNR	Special liabilities
		1	2	3	4	5	6	7	8	9	10	11	12					
1999	485	52.2%	76.1%	76.5%	78.5%	79.4%	79.6%	76.5%	72.9%	72.6%	73.1%	73.0%	73.4%	82.7%	71.8%	1.5%	-0.5%	9.9%
2000	482	47.8%	68.4%	73.0%	71.2%	74.7%	74.7%	75.9%	75.4%	75.6%	76.7%	76.3%		79.0%	74.8%	1.5%	0.0%	2.7%
2001	527	34.4%	51.7%	63.3%	61.7%	59.9%	62.4%	61.9%	61.7%	62.4%	62.2%			187.2%	61.4%	0.8%	0.0%	125.0%
2002	728	18.5%	32.4%	33.4%	34.1%	34.7%	34.5%	34.3%	34.1%	33.9%				35.3%	33.4%	0.5%	0.1%	1.4%
2003	694	17.2%	25.9%	25.7%	26.8%	26.7%	26.6%	26.6%	27.1%					32.7%	26.8%	0.3%	0.1%	5.6%
2004	564	16.9%	29.3%	27.8%	27.9%	28.1%	28.4%	28.0%						58.1%	26.9%	1.1%	0.0%	30.1%
2005	559	18.3%	29.8%	29.5%	29.3%	25.7%	26.5%							102.4%	25.9%	0.6%	-0.2%	76.1%
2006	536	21.7%	28.0%	28.6%	27.8%	26.9%								30.6%	26.5%	0.5%	0.7%	3.0%
2007	585	21.8%	30.9%	29.8%	26.9%									30.4%	24.7%	2.2%	0.6%	2.8%
2008	603	19.9%	32.6%	31.5%										59.4%	28.0%	3.5%	1.8%	26.2%
2009	792	18.1%	28.5%											40.1%	22.0%	6.5%	4.3%	7.3%
2010	856	19.7%												43.3%	12.9%	6.7%	19.4%	4.2%

Reported loss ratio development<sup>1</sup> – 1999–2010

Portfolio performance by treaty year – 1999–2010

<sup>1</sup> Excl. special liabilities. Management view, not fully comparable with IFRS.

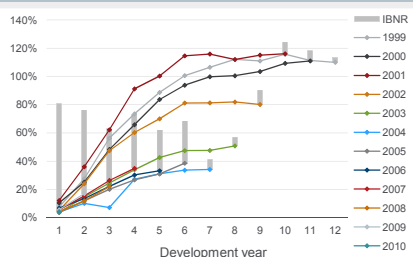
Analysts' Conference 2011 134

Backup: Reserves

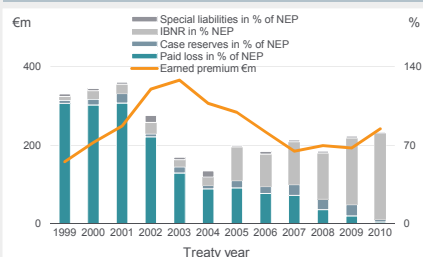
Munich Re America  
Liability – Proportional

Munich Re

Treaty year	Earned premium €m	Development year: Loss ratio as reported												Ultimate loss ratio	Paid loss	Case reserves	IBNR	Special liabilities
		1	2	3	4	5	6	7	8	9	10	11	12					
1999	158	7.4%	27.5%	56.3%	73.5%	88.7%	100.6%	106.5%	112.1%	111.0%	115.7%	111.3%	110.0%	115.8%	107.4%	2.7%	3.4%	2.3%
2000	207	10.4%	25.1%	48.3%	65.8%	83.7%	93.8%	99.8%	100.5%	103.5%	109.3%	111.0%		120.7%	105.9%	5.2%	7.6%	2.0%
2001	249	12.1%	36.0%	62.2%	91.2%	100.3%	114.6%	115.9%	112.0%	115.1%	116.1%			126.2%	107.7%	8.4%	8.4%	1.7%
2002	343	5.1%	24.0%	47.4%	60.3%	70.0%	81.2%	81.3%	81.9%	80.1%				96.7%	77.5%	2.6%	10.3%	6.2%
2003	366	3.7%	14.6%	24.4%	33.9%	42.6%	47.5%	47.6%	50.8%					59.4%	45.3%	5.5%	6.3%	2.2%
2004	307	3.9%	10.1%	7.1%	27.2%	31.0%	33.6%	34.1%						47.2%	31.2%	3.0%	7.4%	5.6%
2005	284	3.6%	11.9%	20.0%	26.7%	30.9%	38.5%							69.7%	32.0%	6.5%	30.1%	1.1%
2006	234	6.7%	13.5%	22.1%	30.2%	33.2%								64.4%	27.1%	6.1%	29.0%	2.3%
2007	185	5.4%	15.3%	26.3%	34.9%									74.7%	25.4%	9.5%	38.2%	1.6%
2008	199	4.3%	11.8%	22.1%										64.8%	12.7%	9.3%	41.2%	1.5%
2009	193	5.5%	17.1%											78.2%	7.1%	10.0%	59.4%	1.7%
2010	242	4.2%												81.9%	1.7%	2.4%	76.7%	1.1%

Reported loss ratio development<sup>1</sup> – 1999–2010

Portfolio performance by treaty year – 1999–2010

<sup>1</sup> Excl. special liabilities. Management view, not fully comparable with IFRS.

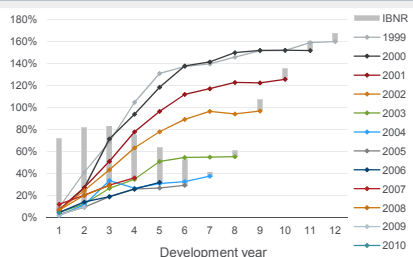
Analysts' Conference 2011 135

Backup: Reserves

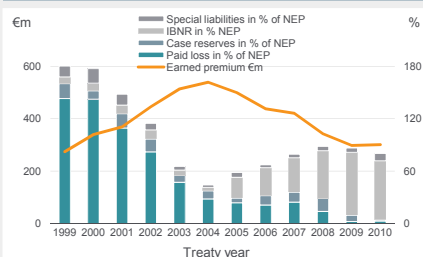
## Munich Re America Liability – Non-proportional

Munich RE

Treaty year	Earned premium €m	1	2	3	4	5	6	7	8	9	10	11	12	Ultimate loss ratio	Paid loss	Case reserves	IBNR	Special liabilities
1999	274	9.0%	40.9%	68.6%	104.7%	131.0%	137.3%	139.7%	145.9%	151.8%	151.9%	159.2%	160.1%	180.3%	143.2%	17.0%	7.8%	12.4%
2000	340	6.6%	26.8%	71.4%	93.9%	118.5%	137.9%	141.5%	150.0%	152.0%	152.2%	151.9%		177.4%	142.4%	9.6%	8.8%	16.7%
2001	369	6.8%	27.1%	51.0%	77.8%	96.5%	111.9%	117.1%	122.8%	122.4%	125.7%			148.1%	109.5%	16.2%	9.9%	12.6%
2002	446	6.7%	24.3%	43.3%	63.2%	77.9%	89.2%	96.5%	94.1%	96.8%				114.9%	82.1%	14.6%	10.5%	7.6%
2003	514	4.4%	12.0%	26.3%	34.6%	50.8%	54.5%	54.8%	55.2%					65.5%	47.2%	8.0%	6.0%	4.2%
2004	540	1.7%	11.3%	33.4%	26.5%	30.7%	32.5%	37.4%						44.1%	28.1%	9.3%	4.0%	2.7%
2005	500	2.6%	9.2%	18.7%	25.7%	26.7%	29.1%							58.4%	23.7%	5.4%	23.8%	5.5%
2006	438	4.3%	13.9%	18.8%	25.7%	31.8%								67.4%	21.2%	10.6%	32.2%	3.3%
2007	421	11.8%	20.0%	29.3%	35.9%									79.5%	24.5%	11.3%	39.6%	4.0%
2008	343	6.3%	20.1%	28.8%										88.4%	13.8%	15.0%	54.6%	5.0%
2009	298	1.9%	9.5%											86.5%	2.3%	7.2%	72.1%	4.9%
2010	301	4.1%												80.2%	2.9%	1.3%	67.7%	8.4%

Reported loss ratio development<sup>1</sup>– 1999–2010<sup>1</sup> Excl. special liabilities. Management view, not fully comparable with IFRS.

Portfolio performance by treaty year – 1999–2010



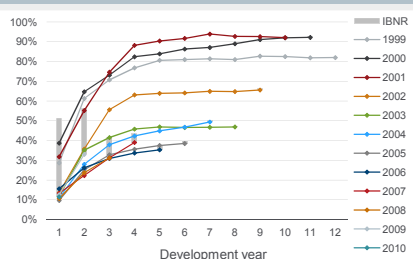
Analysts' Conference 2011 136

Backup: Reserves

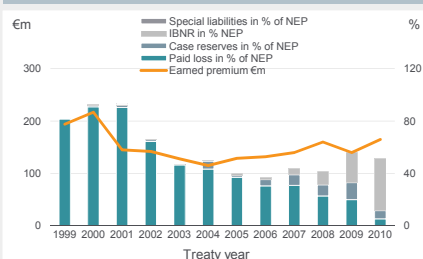
## Munich Re America Motor – Proportional

Munich RE

Treaty year	Earned premium €m	1	2	3	4	5	6	7	8	9	10	11	12	Ultimate loss ratio	Paid loss	Case reserves	IBNR	Special liabilities
1999	194	28.7%	61.3%	70.7%	76.8%	80.6%	81.0%	81.4%	81.0%	82.7%	82.5%	81.9%	82.0%	82.0%	81.6%	0.4%	0.0%	0.0%
2000	217	38.7%	64.7%	73.1%	82.4%	83.9%	86.3%	87.1%	89.0%	91.1%	92.0%	92.2%		92.9%	91.0%	1.1%	0.8%	0.0%
2001	145	31.8%	55.2%	74.6%	88.2%	90.4%	91.7%	93.9%	92.7%	92.6%	92.1%			93.0%	90.5%	1.6%	0.9%	0.1%
2002	142	13.6%	35.7%	55.6%	63.1%	63.9%	64.1%	64.9%	64.8%	65.6%				66.4%	64.4%	1.3%	0.8%	0.0%
2003	128	11.8%	35.1%	41.5%	45.8%	46.9%	46.6%	46.7%	46.9%					47.0%	46.6%	0.3%	0.1%	0.0%
2004	115	11.0%	28.0%	37.9%	42.3%	44.9%	46.8%	49.4%						50.0%	43.4%	6.0%	0.6%	0.0%
2005	129	9.7%	25.2%	32.8%	35.6%	37.5%	38.5%							39.9%	37.1%	1.4%	1.5%	0.0%
2006	132	15.6%	26.2%	30.9%	33.7%	35.3%								37.0%	30.5%	4.8%	1.8%	0.0%
2007	140	13.3%	22.3%	31.2%	39.0%									43.7%	30.9%	8.1%	4.7%	0.0%
2008	160	10.7%	23.7%	31.2%										41.8%	22.8%	8.4%	10.6%	0.0%
2009	140	12.6%	33.0%											56.3%	20.0%	13.0%	23.3%	0.0%
2010	165	11.5%												51.4%	5.3%	6.2%	39.9%	0.0%

Reported loss ratio development<sup>1</sup>– 1999–2010<sup>1</sup> Excl. special liabilities. Management view, not fully comparable with IFRS.

Portfolio performance by treaty year – 1999–2010



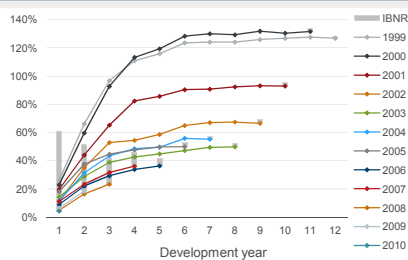
Analysts' Conference 2011 137

Backup: Reserves

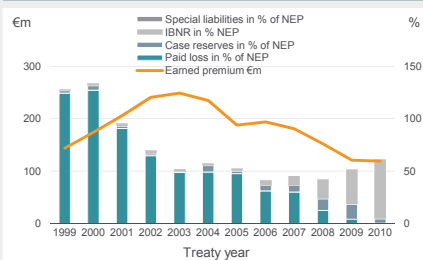
Munich Re America  
Motor – Non-proportional

Munich Re

Treaty year	Earned premium €m	1	2	3	4	5	6	7	8	9	10	11	12	Ultimate loss ratio	Paid loss	Case reserves	IBNR	Special liabilities
1999	144	26.2%	66.2%	96.8%	110.9%	115.9%	123.6%	124.1%	124.1%	125.9%	126.8%	127.6%	126.8%	128.3%	124.6%	2.2%	1.5%	0.0%
2000	174	23.0%	59.7%	92.8%	113.3%	119.4%	128.3%	130.0%	129.3%	131.8%	130.4%	131.6%		133.9%	127.3%	4.3%	2.3%	0.0%
2001	206	19.7%	44.1%	65.3%	82.4%	85.7%	90.4%	90.8%	92.4%	93.2%	93.0%			95.4%	90.8%	2.3%	2.4%	0.0%
2002	241	11.5%	35.1%	52.9%	54.5%	58.7%	65.0%	67.1%	67.4%	66.5%				69.3%	64.8%	1.7%	2.8%	0.0%
2003	249	14.3%	28.9%	38.9%	42.7%	44.9%	47.3%	49.5%	49.9%					52.0%	48.7%	1.2%	2.1%	0.0%
2004	235	11.5%	31.5%	43.5%	48.6%	49.6%	55.9%	55.3%						57.4%	49.1%	6.2%	2.1%	0.0%
2005	188	18.1%	37.6%	44.7%	47.7%	49.8%	50.0%							52.9%	47.6%	2.4%	2.9%	0.0%
2006	194	9.0%	22.2%	29.4%	33.9%	36.4%								41.6%	31.1%	5.2%	5.2%	0.0%
2007	181	11.2%	23.4%	31.7%	36.2%									45.7%	30.0%	6.3%	9.5%	0.0%
2008	152	4.9%	16.5%	23.4%										41.9%	12.5%	10.9%	18.5%	0.0%
2009	121	6.4%	18.5%											51.5%	4.1%	14.4%	33.0%	0.0%
2010	119	4.4%												61.1%	0.3%	4.1%	56.7%	0.0%

Reported loss ratio development<sup>1</sup>– 1999–2010<sup>1</sup> Excl. special liabilities. Management view, not fully comparable with IFRS.

Portfolio performance by treaty year – 1999–2010



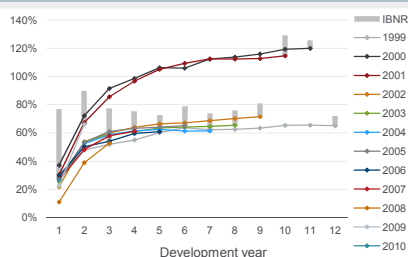
Analysts' Conference 2011 138

Backup: Reserves

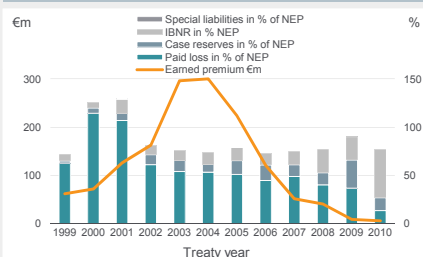
Munich Re America  
Workers' compensation – Proportional

Munich Re

Treaty year	Earned premium €m	1	2	3	4	5	6	7	8	9	10	11	12	Ultimate loss ratio	Paid loss	Case reserves	IBNR	Special liabilities
1999	62	26.0%	47.8%	51.9%	55.0%	60.2%	63.7%	62.2%	62.5%	63.4%	65.4%	65.5%	65.0%	72.1%	62.9%	2.1%	7.1%	0.0%
2000	72	37.1%	72.2%	91.5%	98.6%	106.2%	105.9%	112.3%	113.7%	115.9%	119.3%	119.9%		125.7%	114.5%	5.4%	5.8%	0.0%
2001	126	30.4%	67.3%	85.6%	96.7%	105.1%	109.3%	112.4%	112.3%	112.7%	114.6%			129.2%	107.0%	7.6%	14.5%	0.1%
2002	163	21.7%	53.6%	59.9%	63.9%	66.4%	67.1%	68.7%	70.2%	71.5%				81.1%	61.2%	10.3%	9.5%	0.0%
2003	296	25.4%	53.6%	58.8%	60.9%	63.5%	64.2%	64.6%	65.4%					76.1%	54.1%	11.4%	10.7%	0.0%
2004	300	27.2%	52.4%	58.7%	61.4%	62.4%	61.3%	61.4%						73.8%	53.5%	7.9%	12.4%	0.0%
2005	224	28.1%	53.3%	61.0%	63.2%	64.0%	65.2%							78.7%	51.1%	14.2%	13.5%	0.0%
2006	121	29.6%	50.2%	54.0%	59.6%	60.9%								72.8%	44.8%	16.1%	11.9%	0.0%
2007	52	27.1%	48.3%	57.9%	61.2%									75.2%	48.9%	12.2%	14.1%	0.0%
2008	41	11.1%	38.9%	52.8%										77.3%	40.4%	12.4%	24.5%	0.0%
2009	9	22.6%	66.0%											89.9%	36.8%	29.2%	23.9%	0.0%
2010	6	26.9%												77.0%	13.7%	13.2%	50.2%	0.0%

Reported loss ratio development<sup>1</sup>– 1999–2010<sup>1</sup> Excl. special liabilities. Management view, not fully comparable with IFRS.

Portfolio performance by treaty year – 1999–2010



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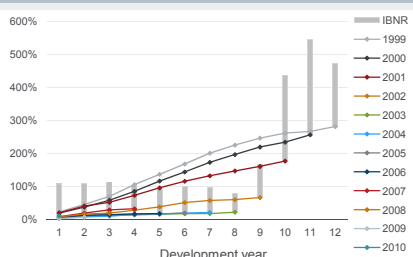
Backup: Reserves

Munich Re America

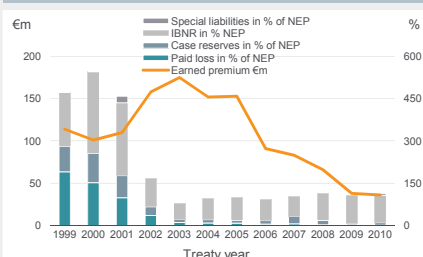
Workers' compensation – Non-proportional

Munich RE

Treaty year	Earned premium €m	Development year: Loss ratio as reported												Ultimate loss ratio	Paid loss	Case reserves	IBNR	Special liabilities
		1	2	3	4	5	6	7	8	9	10	11	12					
1999	114	22.4%	44.8%	69.2%	105.3%	136.6%	167.8%	200.6%	225.1%	246.4%	261.8%	266.5%	281.5%	472.7%	190.8%	90.7%	191.0%	0.2%
2000	101	18.6%	37.0%	57.9%	84.9%	116.2%	143.7%	172.8%	196.5%	219.3%	234.1%	256.3%		546.0%	152.0%	104.3%	289.6%	0.1%
2001	110	19.4%	40.2%	61.2%	72.7%	95.4%	115.6%	132.1%	146.8%	160.5%	176.8%			458.6%	98.6%	78.2%	258.9%	22.9%
2002	158	5.2%	10.4%	18.9%	27.4%	37.8%	50.7%	57.0%	59.5%	65.9%				168.1%	35.4%	30.6%	102.1%	0.0%
2003	175	3.0%	8.1%	11.2%	12.8%	15.3%	16.7%	17.4%	21.4%					78.3%	10.4%	10.9%	57.0%	0.0%
2004	152	3.4%	7.0%	9.7%	14.6%	15.9%	18.8%	20.6%						96.6%	8.8%	11.8%	75.9%	0.0%
2005	153	6.4%	10.8%	14.3%	15.6%	16.4%	18.7%							99.2%	8.2%	10.5%	80.5%	0.0%
2006	91	6.3%	11.9%	13.2%	16.2%	17.4%								93.3%	5.1%	12.3%	75.9%	0.0%
2007	83	7.8%	18.6%	28.4%	31.8%									103.5%	6.2%	25.7%	71.6%	0.0%
2008	66	7.2%	15.7%	18.1%										113.4%	2.8%	15.3%	95.3%	0.0%
2009	38	1.8%	6.2%											111.8%	1.2%	5.0%	102.5%	3.2%
2010	36	10.0%												113.4%	0.9%	9.1%	97.3%	6.1%

Reported loss ratio development<sup>1</sup> – 1999–2010<sup>1</sup> Excl. special liabilities. Management view, not fully comparable with IFRS.

Portfolio performance by treaty year – 1999–2010



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Backup: Reserves

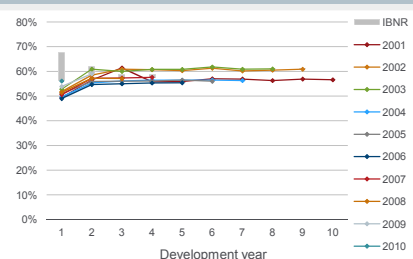
ERGO

Property and casualty

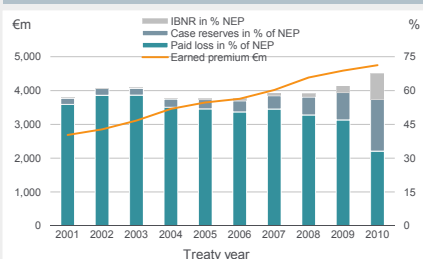
Munich RE

Treaty year	Earned premium €m	Development year: Loss ratio as reported										Ultimate loss ratio	Paid loss	Case reserves	IBNR
		1	2	3	4	5	6	7	8	9	10				
2001	2,685	49.4%	56.5%	61.4%	55.8%	55.9%	57.0%	56.9%	56.3%	56.9%	56.6%	56.9%	53.9%	2.7%	0.3%
2002	2,851	51.8%	58.5%	60.9%	60.7%	60.3%	61.3%	60.2%	60.5%	60.9%		61.2%	57.9%	3.0%	0.3%
2003	3,115	52.8%	60.9%	60.0%	60.8%	60.8%	61.8%	60.9%	61.0%			61.3%	58.0%	3.0%	0.3%
2004	3,460	49.7%	55.3%	56.1%	56.5%	56.4%	56.5%	56.3%				56.7%	52.6%	3.6%	0.4%
2005	3,650	51.0%	55.9%	56.0%	56.1%	56.5%	56.0%					56.6%	51.9%	4.1%	0.6%
2006	3,757	49.0%	54.7%	55.0%	55.3%	55.4%						56.3%	50.5%	4.9%	1.0%
2007	4,016	50.6%	57.2%	57.3%	57.6%							58.9%	51.8%	5.9%	1.3%
2008	4,388	51.5%	57.2%	57.1%								58.8%	49.2%	7.9%	1.7%
2009	4,590	53.9%	59.0%									62.1%	47.0%	12.1%	3.1%
2010	4,752	56.1%										67.7%	33.1%	23.0%	11.6%

Reported loss ratio development – 2001–2010



Portfolio performance by treaty year – 2001–2010



Management view, not fully comparable with IFRS.

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Backup: Reserves

## Asbestos and environmental

Munich RE 

## Munich Re-Group – Net definitive as at 31 December 2010

€m	Asbestos	Environmental	Total
Paid	1,695	669	2,364
Case reserves	643	107	750
IBNR	906	261	1,167
<b>Total reserves</b>	<b>1,549</b>	<b>368</b>	<b>1,917</b>
3-year average annual paid losses	122	26	148
Survival ratio 3-year average	12.7	14.0	12.9

Non-€ currencies converted at rate of exchange year-end 2010.  
Management view, not fully comparable with IFRS.

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## Agenda – Backup

Munich RE 

Additional highlights Q1–4 2010

Risk management

Life reinsurance

Investments

Reserves

## Market Consistent Embedded Value 2010

Shareholder information

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## Methods

- Since 2009, the valuation of the embedded value of Munich Re is based on Market Consistent Embedded Value Principles®.
- The Market Consistent Embedded Value (MCEV) is a measure of the consolidated value of shareholders' interests in covered business. The covered business encompasses business written in life reinsurance entities, excluding medical reinsurance business and business written in all major primary life and German health entities.
- The required capital reflects the level of solvency capital at which the supervisor is empowered to take action as well as internal objectives (e.g. rating, internal capital model).
- The approach for CRNHR in the MCEV framework is based on a cost-of-capital method. The underlying risk capital for non-hedgeable risks is determined using our internal economic capital model at a 99.5% confidence level. The cost of residual non-hedgeable risks is calculated as the present value of a 7% margin over the risk-free rate on the projected risk capital.

## Sensitivities of MCEV

€m	Reinsurance			Primary insurance		
	MCEV	Change in €m	Change in %	MCEV	Change in €m	Change in %
<b>Base case</b>	<b>8,284</b>			<b>4,108</b>		
Interest-rates –100bp	8,545	260	3.1	2,477	–1,632	–39.7
Interest-rates +100bp	7,990	–294	–3.6	5,207	1,099	26.7
Equity/property values –10%	8,284	0	0.0	3,965	–143	–3.5
Equity/property implied volatilities +25%	8,267	–17	–0.2	3,923	–186	–4.5
Swaption implied volatilities +25%	8,280	–4	–0.1	4,001	–107	–2.6
Liquidity premium 10bp	8,327	43	0.5	4,445	336	8.2
Maintenance expenses –10%	8,370	86	1.0	4,176	67	1.6
Lapse rates –10%	8,134	–150	–1.8	4,095	–13	–0.3
Lapse rates +10%	8,274	–10	–0.1	4,122	14	0.3
Mortality/morbidity (life business) –5%	10,026	1,742	21.0	4,181	73	1.8
Mortality (annuity business) –5%	8,250	–34	–0.4	4,050	–58	–1.4
No mortality improvements (life business)	4,829	–3,455	–41.7	4,108	0	0.0
Peer comparison sensitivity <sup>1</sup>	8,382	98	1.2	5,061	953	23.2

<sup>1</sup> Comparable assumptions regarding the amount and the term structure of illiquidity premium with major European peers.

Backup: Market Consistent Embedded Value 2010

## Sensitivities of new business value

Munich RE

€m	Reinsurance			Primary insurance		
	VNB	Change in €m	Change in %	VNB	Change in €m	Change in %
<b>Base case</b>	<b>475</b>			<b>141</b>		
interest-rates –100bp	519	44	9.3	–9	–150	–106.3
interest-rates +100bp	440	–35	–7.4	178	37	26.2
Equity/property values –10%	477	3	0.6	137	–4	–3.0
Equity/property implied volatilities +25%	474	–1	–0.3	133	–8	–5.7
Swaption implied volatilities +25%	475	0	–0.1	110	–31	–21.9
Liquidity premium 10bp	475	0	0.0	158	17	12.2
Maintenance expenses –10%	485	10	2.2	146	5	3.4
Lapse rates –10%	477	2	0.4	146	5	3.5
Lapse rates +10%	453	–21	–4.5	133	–8	–6.0
Mortality/morbidity (life business) –5%	594	120	25.2	147	6	4.1
Mortality (annuity business) –5%	474	0	–0.1	136	–5	–3.8
No mortality improvements (life business)	223	–252	–53.1	141	0	0.0
Peer comparison sensitivity <sup>1</sup>	468	–7	–1.5	189	48	34.1

<sup>1</sup> Comparable assumptions regarding the amount and the term structure of illiquidity premium with major European peers.

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Backup: Market Consistent Embedded Value 2010

## IFRS uplift

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Reinsurance		Primary insurance	
31.12.2009		31.12.2009	
€m	<div> <div>IFRS equity</div> <div>Value not recognised in IFRS equity (IFRS uplift)</div> </div>	€m	<div> <div>IFRS equity</div> <div>Value not recognised in IFRS equity (IFRS uplift)</div> </div>
IFRS equity	4,202	IFRS equity	3,660
EEV	6,773	EEV	5,126
	2,571		1,466
31.12.2010		31.12.2010	
€m		€m	
IFRS equity	4,772	IFRS equity	3,773
MCEV	8,284	MCEV	4,108
	3,512		336

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Backup: Market Consistent Embedded Value 2010

## Primary insurance – German primary life

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





€m		
<b>MCEV 31.12.2009</b>	<b>1,717</b>	
Opening adjustments	4	
<b>Adjusted MCEV 31.12.2009</b>	<b>1,720</b>	
New business value	56	
Expected return	85	
Experience variances	-14	
Assumption changes	-109	
Other operating variance	88	
<b>Operating MCEV earnings 2010</b>	<b>104</b>	
Economic variances	-746	
Other non-operating variance	0	
<b>Total MCEV earnings 2010</b>	<b>-642</b>	
Closing adjustments	-69	
<b>MCEV 31.12.2010</b>	<b>1,010</b>	

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Backup: Market Consistent Embedded Value 2010

## Primary insurance – International primary life

Munich RE 














€m		
<b>MCEV 31.12.2009</b>	<b>1,438</b>	
Opening adjustments	7	
<b>Adjusted MCEV 31.12.2009</b>	<b>1,444</b>	
New business value	58	
Expected return	29	
Experience variances	6	
Assumption changes	89	
Other operating variance	31	
<b>Operating MCEV earnings 2010</b>	<b>212</b>	
Economic variances	-173	
Other non-operating variance	0	
<b>Total MCEV earnings 2010</b>	<b>39</b>	
Closing adjustments	-118	
<b>MCEV 31.12.2010</b>	<b>1,365</b>	

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Backup: Market Consistent Embedded Value 2010

## Primary insurance – German primary health

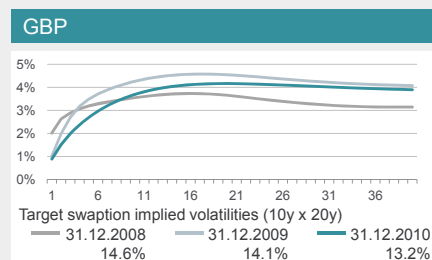
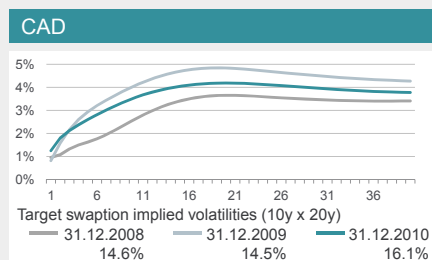
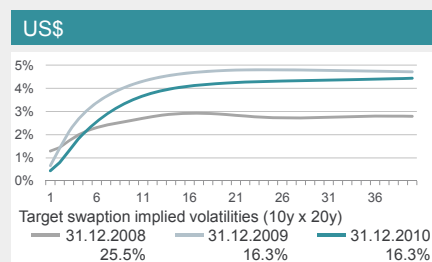
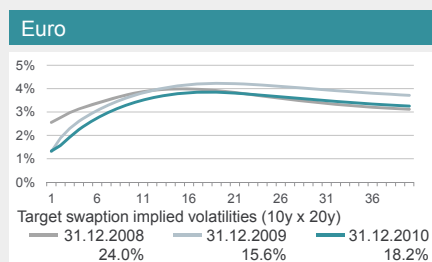
Munich RE 

€m		
<b>MCEV 31.12.2009</b>	<b>1,971</b>	
Opening adjustments	5	
<b>Adjusted MCEV 31.12.2009</b>	<b>1,977</b>	
New business value	28	
Expected return	47	
Experience variances	35	
Assumption changes	-178	
Other operating variance	126	
<b>Operating MCEV earnings 2010</b>	<b>58</b>	
Economic variances	-180	
Other non-operating variance	0	
<b>Total MCEV earnings 2010</b>	<b>-122</b>	
Closing adjustments	-122	
<b>MCEV 31.12.2010</b>	<b>1,733</b>	

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Backup: Market Consistent Embedded Value 2010

## Development of swap rates

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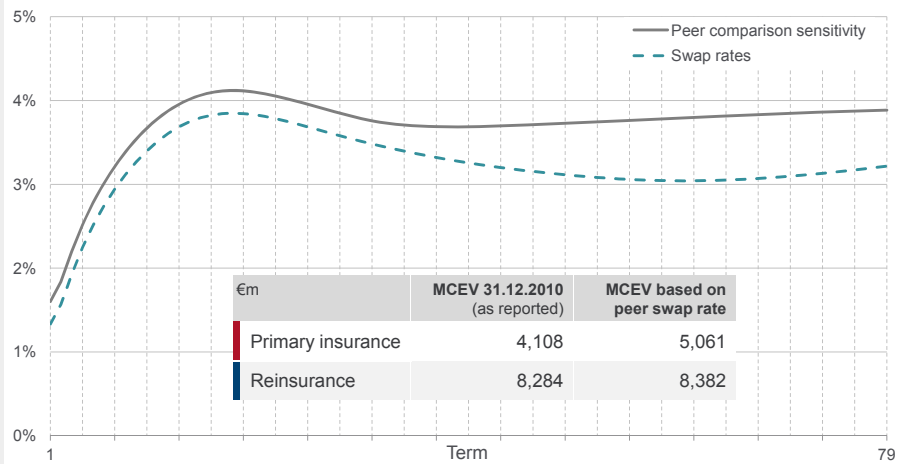
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Backup: Market Consistent Embedded Value 2010

## Euro swap rates (used by Munich Re) vs. peer comparison sensitivity



## Euro swap rates vs. peer comparison sensitivity (at year end 2010)



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## Agenda – Backup



Additional highlights Q1–4 2010

Risk management

Life reinsurance

Investments

Reserves

Market Consistent Embedded Value 2010

Shareholder information

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Backup: Shareholder information

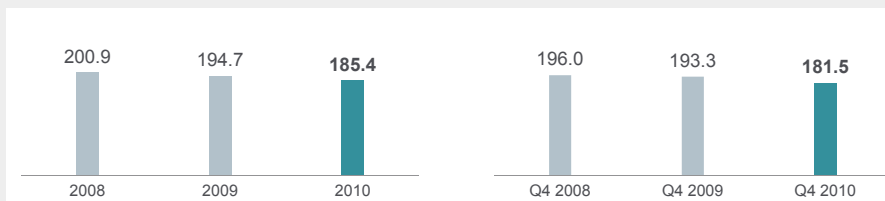
## 8.9 million own shares were retired in 2010

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## Development of shares in circulation

Shares million	31.12.2009	Acquisition of own shares in Q1–4 2010	Retirement of own shares in Q1–4 2010	31.12.2010
Shares in circulation	191.9	–11.5	0	180.4
Own shares held	5.5	11.5	–8.9	8.1
<b>Total</b>	<b>197.4</b>	<b>0</b>	<b>–8.9</b>	<b>188.5</b>

## Weighted average number of shares in circulation



Between 1 January until 28 February 2011 additional 1.7 million shares were repurchased for an amount of €200m

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Appendix

## Financial calendar

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## FINANCIAL CALENDAR

17 March 2011	Commerzbank, "Growth & Responsibility Conference", Frankfurt
31 March 2011	Morgan Stanley "European Financials Conference", London
20 April 2011	Annual General Meeting, Munich
21 April 2011	Dividend payment
9 May 2011	Interim report as at 31 March 2011
20 May 2011	Deutsche Bank "German & Austrian Corporate Conference", Frankfurt
26 May 2011	Autonomous "Rendez-Vous 2011", London
20 July 2011	Munich Re Capital Markets Day 2011, New York
4 August 2011	Interim report as at 30 June 2011 Half-year press conference
8 November 2011	Interim report as at 30 September 2011

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