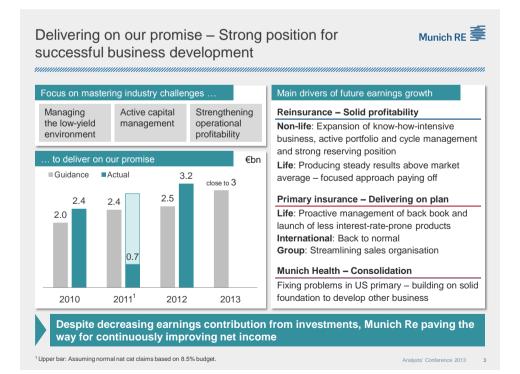


# DELIVERING GROWTH IN BOTTOM-LINE RESULTS

**ANALYSTS' CONFERENCE 2013** 

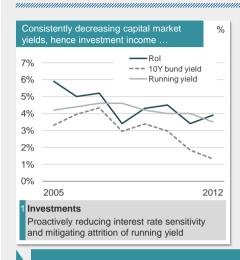


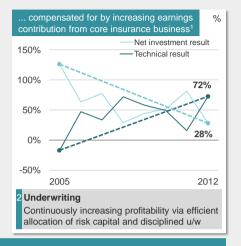
Delivering growth in bottom-line results	Nikolaus von Bomhard	
Financial highlights 2012	Jörg Schneider	12
Risk management	Joachim Oechslin	30
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Reinsurance non-life	Torsten Jeworrek	
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# Profitability in core business becoming even more important in times of financial repression







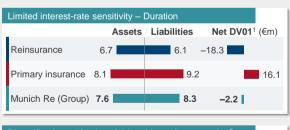
### Successfully dealing with low-yield environment

<sup>1</sup> Contribution of net investment result (investment result minus income from technical interest) and technical result as a percentage of operating result.

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# Investments – Striking the balance between thorough diversification and earnings resilience







### Disciplined ALM

Ongoing increase of asset duration reducing interest-rate sensitivity at Group level – Continuation of hedging programme in primary life

### Portfolio diversification

Defensive investment portfolio safeguarding earnings stability by limiting downside risk of any kind of capital market scenario

### Mitigating yield attrition

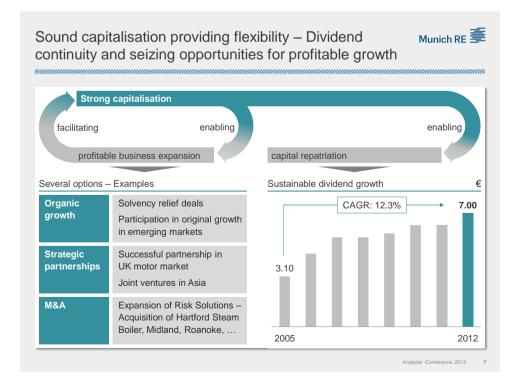
Cautious expansion of credit risk and real assets mitigating attrition of running yield while increasing inflation protection

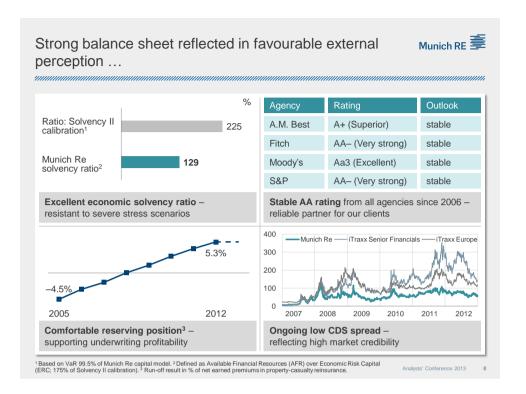
Earnings stability by strictly limiting investment risks and keeping high level of diversification while actively managing the low-yield environment

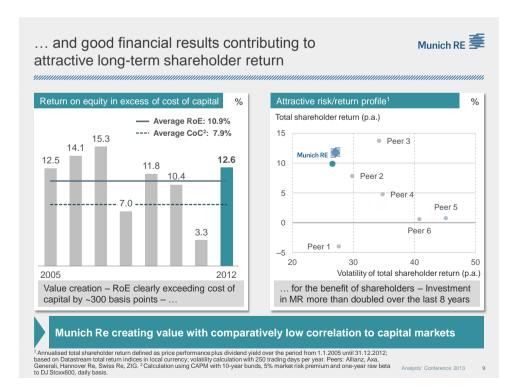
'As at 31.12.2012. Sensitivity to parallel upward shift of yield curve by one basis point reflecting portfolio size. <sup>2</sup> Gross exposure divided by shareholders' equity. As at 31.12.2012 (31.12.2011). <sup>3</sup> German and US government bonds and supranationals. \*Equities, inflation linked bonds and swaps, renewable energies, real estate and commodities. <sup>5</sup> Corporate bonds and structured products.

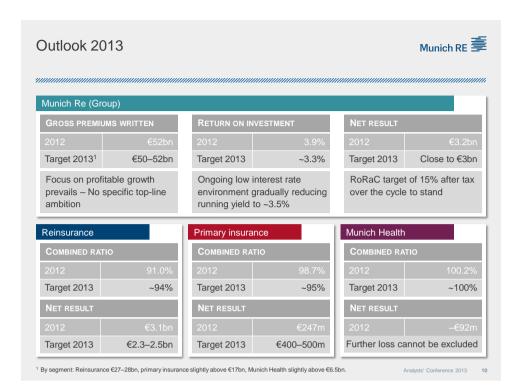
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### 2 Underwriting – Continuously improved value creation Munich RE building the foundation for earnings growth Reinsurance Primary insurance Munich Health (MH) Non-life - Target combined ratio Non-life international -Operating result - Apart from at attractive level Combined ratio back to normal US primary business ... 206 <sup>∈</sup>m MH total 107.8 → MH ex US primary ~97 ~96 144 ~94 99.8 97.5 109 108 2012 2007 2012 2010 2011 until 2011 2012 2013 Life - Delivering on increased Life - Management of low good financial development technical result ambition yields from early stage in line with expectations €m Interest-rate hedging Building on solid foundation to 400 programme started in 2005 p.a. develop other business 300 Increase of asset duration Still adhering to our Reasonable bonus policy expectation of mid-term · Launch of new product family segment result of ~€100m p.a. until 2010 2011-2015 Execution and delivery - Management measures securing sound profitability irrespective of interest-rate level





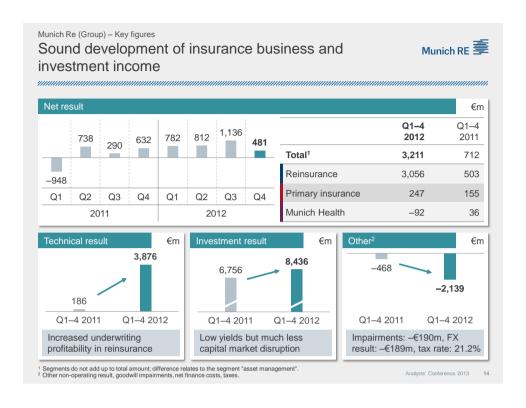




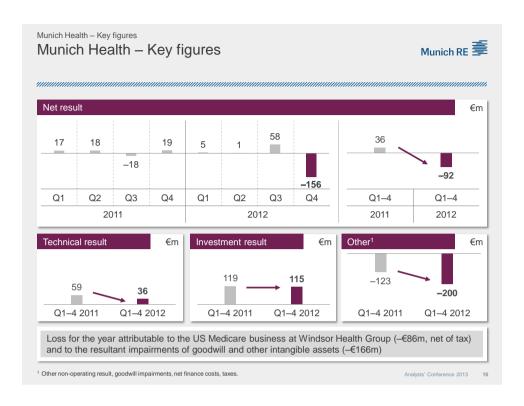


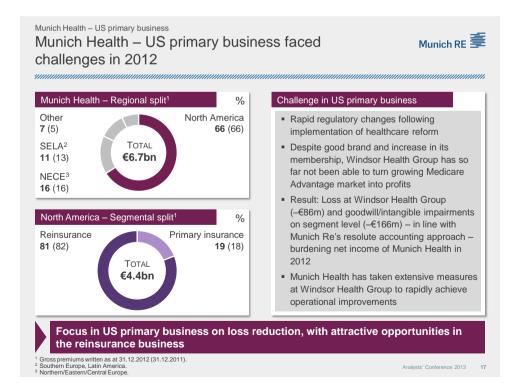
# Munich RE Agenda Delivering growth in bottom-line results Nikolaus von Bomhard Financial highlights 2012 Jörg Schneider Risk management Joachim Oechslin Primary insurance Torsten Oletzky Reinsurance non-life Torsten Jeworrek Reinsurance life Joachim Wenning Backup Analysts' Conference 2013 12



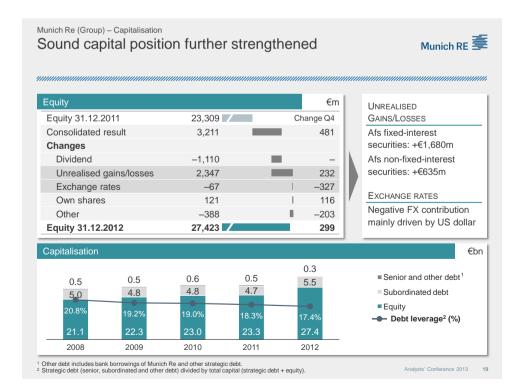


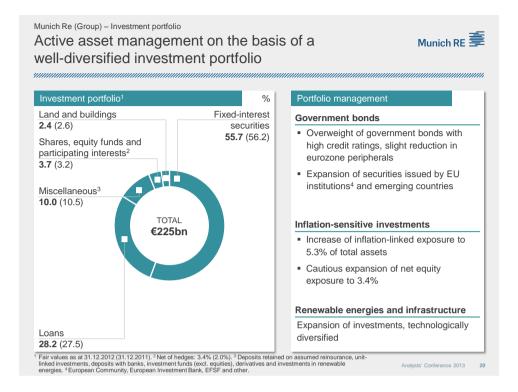


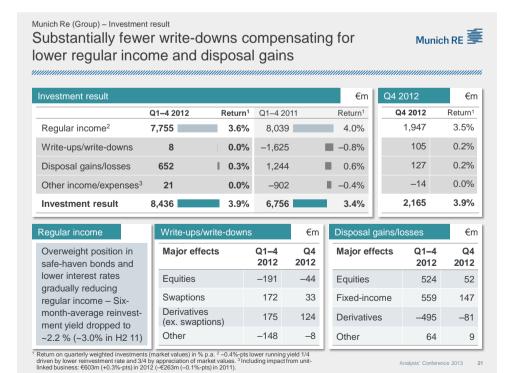




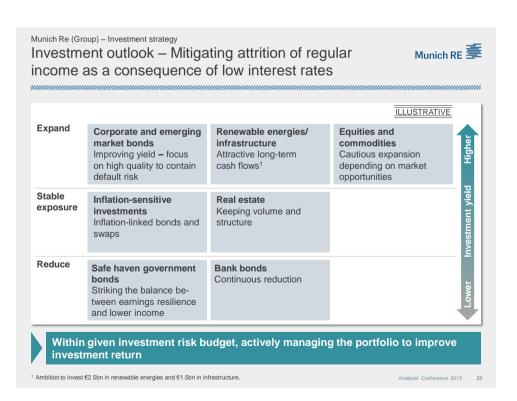
### Munich Health - Outlook Munich Health – Operating performance and outlook Munich RE Financial performance - Operating result Outlook Operating performance of Munich Health ----Munich Health total ----Munich Health ex US primary (€108m in 2012) remains favourable and in 206 line with expectations • Given the difficult situation at Windsor Health 144 Group, a further loss for Munich Health in 2013 cannot be ruled out 109 ■ 108 Well-positioned to benefit from rapidly growing health market in a disciplined way 2010 2011 2012 Good financial development apart from Windsor Health Group driven by reinsurance and European primary insurance units (e.g. Spain and Belgium) as well as promising development Mid-term net result for Munich Health of ~€100m achievable in Arab world and India Apart from US primary business, operating performance of Munich Health in line with expectations







Munich Re (Group) - Investment strategy Falling interest rates leaving their mark on reinvestment Munich RE yield - still achieving significant spread above safe haven Running yield more resilient Reinvestment yield: Market-value-weighted excess yields % than reinvestment yield over 7-year German bunds ■2011 ■2012 ■Bond yield H2 2011 ■Bond yield H2 2012 <sup>4.0</sup> 3.6 3.0 1.0% 2.2 0.5% 0% Running Reinvestment ABS, MBS, Cumulative Corporate Government Covered yield yield 1 bonds bonds honds bonds CDO, CLN spread Drivers to mitigate attrition of running yield Duration Illiquid asset classes International Credit diversification management Earning illiquidity Finding attractive Investing in higher-Achieving higher yields premium by investing opportunities in by ongoing increase of in renewable energies yielding international corporate and asset duration and infrastructure bond markets structured credit Further diversification of investment portfolio helps mitigate declining yields spread above safe haven still above 130 basis points Average rate of second half of the vear Analysts' Conference 2013



### Reserves

# Munich Re's reserving strategy comprises several building blocks



### Building blocks of reserving strategy

# Elevated starting point



### SS

## Asymmetry in response



# Provisions for risk scenarios



 Initial assessment of the most recent underwriting year is set above the actuarial midpoint  Group-wide consistent monitoring of actual versus expected loss emergence on a quarterly basis, with in-depth analysis of drivers

- Immediate response to early signs of adverse development ...
- ... while signs of positive development are viewed with caution. Releases are booked to earnings after confirmed manifestation
- Holistic view of reserve position, over and above actuarialsegment-driven view
- Provisions are held to absorb adverse impact from those reserve scenarios that are difficult to analyse and measure in a segmented view

Our reserves remain best estimates – however, as they are set conservatively in the range, it is likely that we will experience favourable run-off results on a frequent basis  $\frac{1}{2}$ 

High reserve confidence level affords protection against major adverse developments

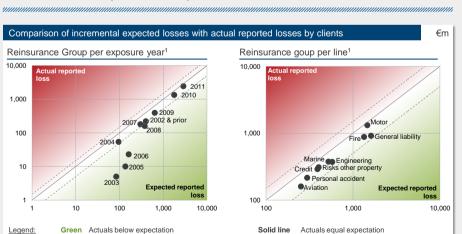
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### Reserves

# Best-in-class monitoring – Actual versus expected comparison



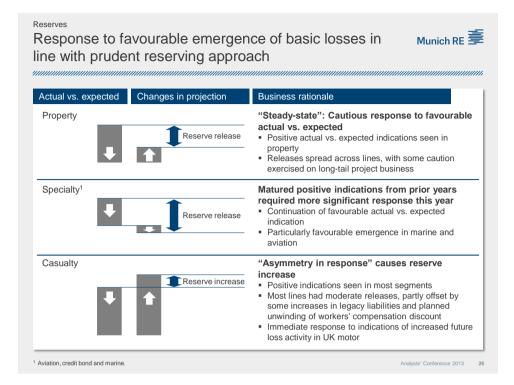


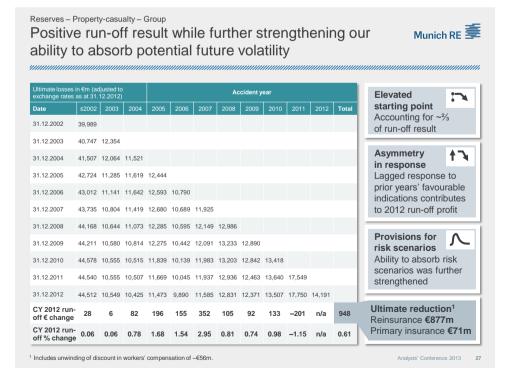
Actual losses consistently below actuarial expectations – Very strong reserve position at the upper end of the range of reasonable best estimates

¹ Reinsurance group losses as at Q4 2012, not including parts of Munich Re Risk Solutions, special liabilities and major losses (i.e. events over €10m or US\$ 15m for Munich Re's share).

Actuals above expectation

Dotted line Actuals are 50% above / below expectations





Market Consistent Embedded Value 2012

Improved MCEV result – Strong growth in reinsurance and benefit from spread-tightening in primary insurance





- Sustainably high value of new business (€573m)
- Favourable mortality development
- Overall positive impact from economic environment
- Closing adjustment driven by negative FX and dividends



- High opening adjustment due to inclusion of ERGO Direct Health
- Increase of economic variances largely driven by calmer capital markets – spread-tightening more than compensating for decline in interest rates
- MCEV according to Solvency II<sup>2</sup>: ~€4.7bn

Munich Re strictly adhering to market-consistent valuation of embedded value refraining from any smoothing measures

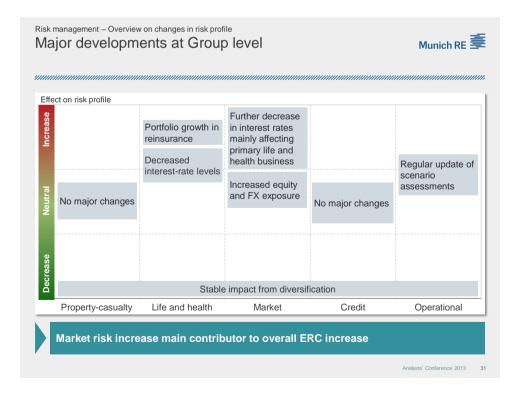
<sup>1</sup> Economic and other non-operating variances. <sup>2</sup> Inclusion of countercyclical premium and extrapolation according to current Solvency II discussions. For further details please refer to MCEV report 2012.

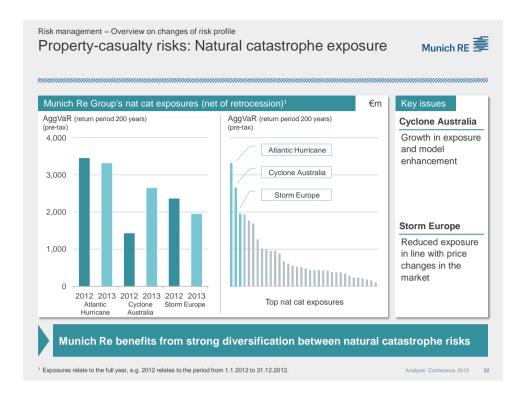
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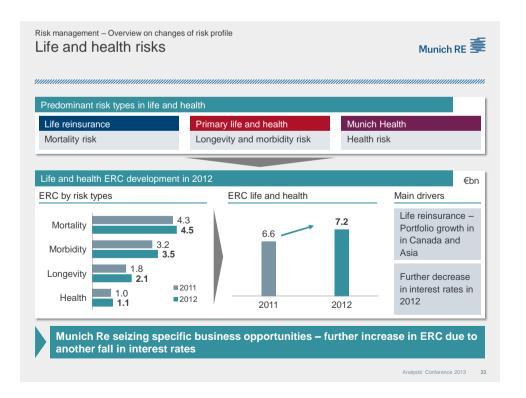
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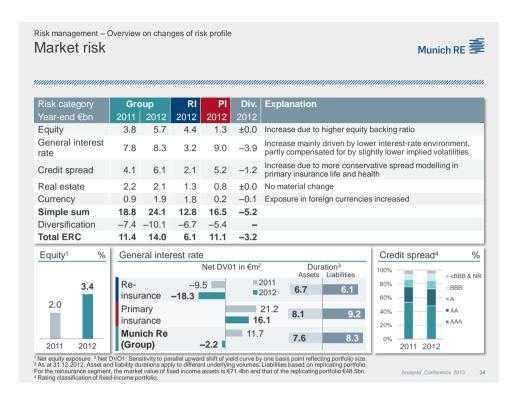


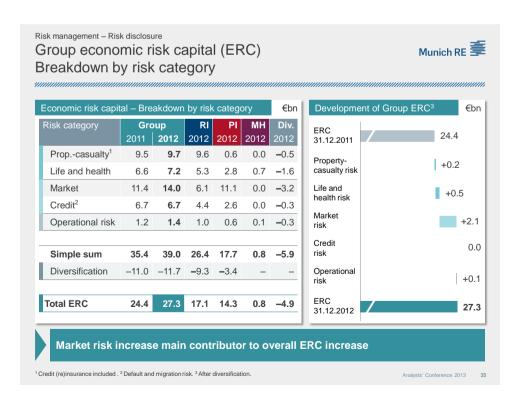












### Risk management - Capital position Munich RE Available financial resources (AFR) Change and relation to economic earnings Probability distribution of economic earnings €bn 29.9 -0.5 +7.1 36.5 Expected economic earnings 2013 0 Munich Re ERC -5 (-1.7)(-1.2)31.12.12 (€27.3bn) Previous year -10 -15 -20 -25 10 100 1,000 10,000 Loss return period (years) AFR Capital Economic AFR Economics earnings in 2012 correspond to 31.12.2011 mgmt.2 31.12.2012 earnings a 10% quantile according to our risk model<sup>3</sup> Significant profit in a challenging market environment , Including funds financing new business recognised for first time at year-end 2012. Thereof dividends (-E1.1bn) and change in hybrid capital rejacement (+E0.8bn subordinated liabilities). Probability of achieving at least the corresponding economic earnings. Analysts' Conference 2013

Risk management - Capital position

### Composition of economic earnings



Risk category €bn	ERC 1.1.	ERC 31.12.	ΔAFR 2012 Rough estimates	
Equity	3.8	5.7	+0.8	Gains on equity investment
Credit	6.7	6.7	+0.1	No material default
Interest rate	9.0	10.9	+3.8	Tightening of credit spread and lower implied volatilitie
Currency	0.9	1.9	+0.1	No material changes
Technical result and new business <sup>1</sup>			+1.9	
AFR roll-forward <sup>2</sup> and other			+0.4	
Economic earnings			+7.1	
Note: This table illustrates the impact of varespective ERC, which gives an indication				

### Market and credit risk

Positive effects due to relief in capital markets especially in second half of 2012

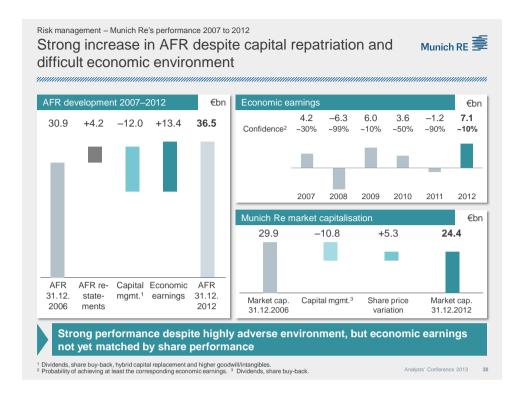
### Insurance risk

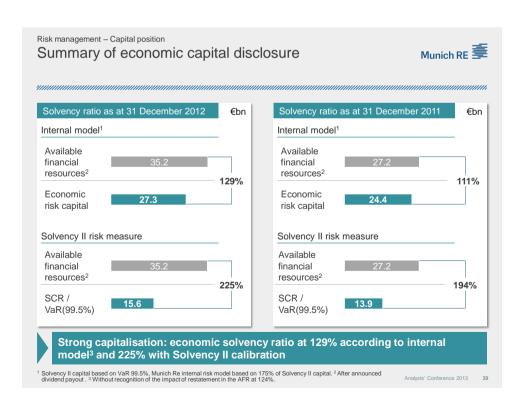
Good technical result in non-life reinsurance and new business in life reinsurance

### Satisfactory technical results and relief in capital markets

<sup>1</sup> Includes unwind of market value margin, P-C result, Life VANB, experience variances and assumption changes.
<sup>2</sup> Investment return on AFR.

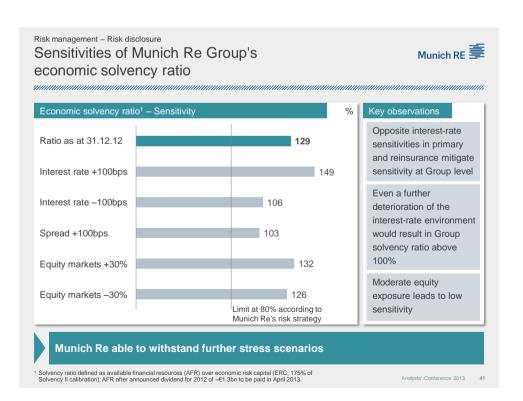
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Risk management - Munich Re's proven risk strategy at work Strong capitalisation allowing for attractive capital Munich RE repatriation Munich Re solvency ratio Regulatory actions<sup>2</sup> >120% MRCM Solvency II MCR-100% Excellent capitalisation **Below target capitalisation** Solvency ratio adjusted Capital repatriation for capital repatriation Obligation to submit a Increased risk-taking comprehensive and Holding excess capital to realistic recovery plan meet external constraints Insurer to take necessary measures to achieve 100%-120% compliance with the SCR Comfortable capitalisation Actual 120% 210% 80%-100% solvency ratio <MCR Adequate capitalisation Insufficient capitalisation 100% 175% Tolerate and monitor Obligation to submit a 80% 140% • (Partial) suspension of short-term realistic finance capital repatriation scheme 100% Regulator may restrict or <80% prohibit the free disposal Below target capitalisation of insurer's assets MCR<sup>3</sup> Ultimate supervisory Risk transfer intervention: Withdrawal Scaling down of activities of authorisation Raising of (hybrid) capital 2008 2009 2010 2011 2012 Based on Munich Re capital model (MRCM): 175% of VaR 99.5%.
Based on Solvency II calibration: VaR 99.5%.
MCR = Minimum Capital Requirement, typically between 25% and 45%; for groups called "Group SCR floor".



Risk management – Future regulatory developments

# Despite delay in Solvency II introduction, risk-based thinking is winning recognition



Current situation

- Further development of Solvency II process will depend on appropriate solutions for the valuation of insurance liabilities (long-term guarantee) in low-interest-rate environment
- Current LTGA¹ addresses a certain set of measures² – results expected for mid-July
- Rising concerns that the LTGA will not resolve the deadlocked negotiations – possibly new measures need to be considered

### "Solvency 1.5

- In order to keep up the momentum, EIOPA and some national supervisory authorities propose an "interim period" bringing forward certain elements of Solvency II
- Industry generally supportive of "Solvency 1.5" idea with regard to certain Pillar II elements (governance, ORSA, etc.) and in particular for an ongoing internal-model pre-approval process

### Munich Re's positions

### Munich Re supportive of a transitional approach to phase in Solvency II

- Against backdrop of stressed financial markets, it is essential to find a balance between a smooth transition and adhering to the letter and spirit of the Solvency II Directive in the long run.
- While solutions to resolve open valuation questions are being sought, "Solvency 1.5" could pave the way for the Solvency II regime

### Munich Re well prepared for Solvency II

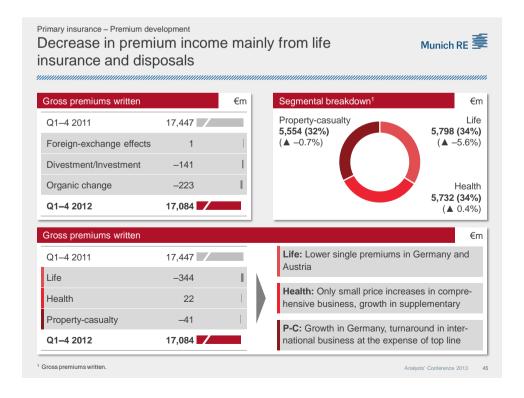
<sup>1</sup> Long-Term Guarantee Assessment conducted by EIOPA. <sup>2</sup>E.g. counter-cyclical premium, matching adjustment.

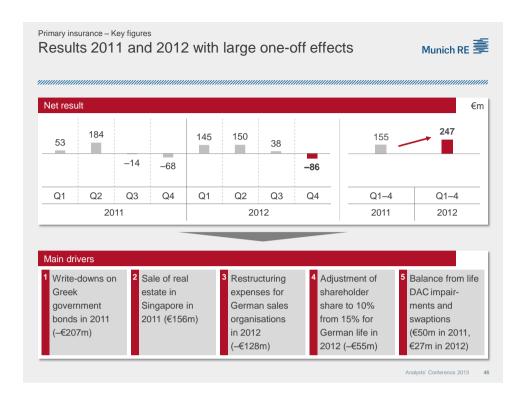
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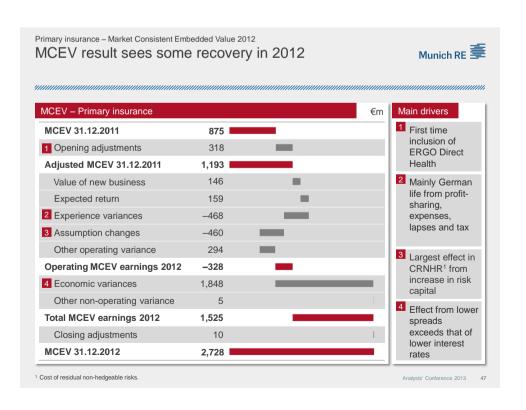
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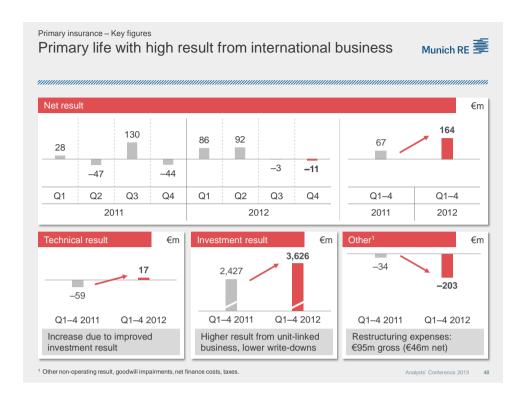
# Risk management – Summary Key takeaways Risk profile Continuity in terms of risk profile – Cycle management at work Profitability Significant economic earnings strengthen capital position despite challenging market environment Solvency position Strong economic solvency ratio to withstand stress scenarios Business strategy Liability-driven business approach to be maintained with disciplined increase of investment portfolio diversification

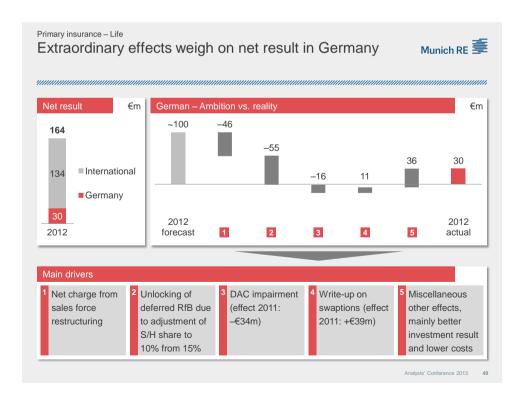












Primary insurance - Life - Germany Low interest rates in a changed regulatory environment

IFRS

Reduced running yield

Positive effect from swaptions

Change of policyholders' share

under IFRS to reflect profit

Indirect impact of ZZR due to

realisation of unrealised gains

development under HGB

DAC impairments



### HGB

### Low interest rates feed through to bottom line over time only

- Introduction of ZZR in 2010 to reflect risks from low interest
- Set-up of ZZR in 2011 and 2012 reduced distributable earnings, thus being a driver of lower bonus declarations
- ERGO decreased bonus rates for 2013 significantly
- Financing of ZZR 2012 mainly from unrealised gains
- Expected ZZR in 2013: ~€390m

Swaptions<sup>1, 2</sup>: **+€11m (+€39m),** DAC1: -€16m (-€34m)

### Economic

- Market-consistent view leads to early recognition of adverse capital market scenarios (interest-rate levels and spreads) - already taking into account potential gains/losses from posting/releasing the ZZR
- Large impact as early as 2004 - swaption programme of 2005 as a direct consequence
- Huge negative effect in 2011 from low interest rates and high spreads - some recovery in 2012 due to narrowing spreads

MCEV ⊦€0.7bn (–€2.6bn)

Germany, net 2012 (2011). Life total: €43m (€84m).

ZZR effect:

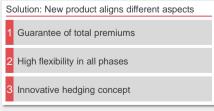
€318m (€97m) gross

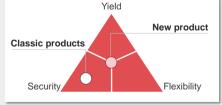
Primary insurance - Life - Germany

### Launch of less interest-rate-prone new products -Concept for Germany well advanced









Primary insurance - Life - Germany

### New product attractive for customers and shareholders

Munich RE



- Guarantee for total premiums paid at beginning of annuity phase
- No yearly guarantee
- No guaranteed surrender values
- Customer can start without quarantee and include it later

### 2 High flexibility in all phases

### Possible options

- Increase/decrease of savings rate
- Single payments in savings
- Withdrawals in savings or annuity phase

### 3 Innovative hedging concept

- Volatility-managed fund and reinsurance-based hedging
- Customers participate in performance of financial markets (interest rates and equities)
- No lock-in effect
- Value of reinsurance contract part of customers' surrender value

### Profitability

- Only ~25% of risk capital compared to traditional products
- Higher margins better profitability than traditional products
- Profitability levels less dependent on interest-rate levels than classic products

More attractive for customers - better profitability with much lower risk capital consumption

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Primary insurance - Life - International

### International life business with good profitability -Progress with joint ventures in China and India







Value of New Business (VNB) / Present Value of New Business Premium (PVNBP).
Shandong State-owned Assets Investment Holding Company.

### Highlights

- Some reserve realisations due to local GAAP aspects
- Belgium: Good new business; reserve increase for guarantee business
- Austria: Single-premium business reduced by changed tax legislation and low interest rates
- Co-operation with Volksbanken extended

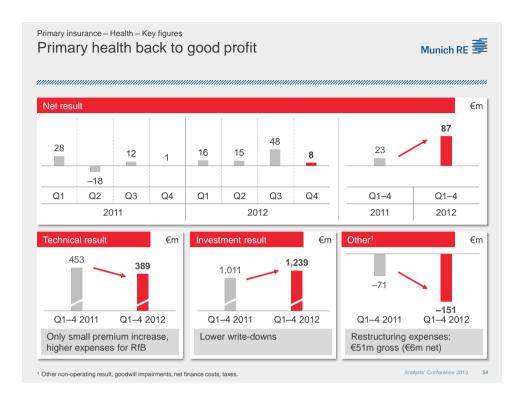
### Joint ventures in Asia

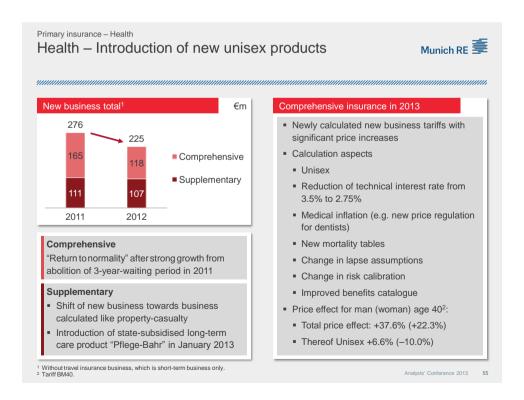
### India - Partner Avantha

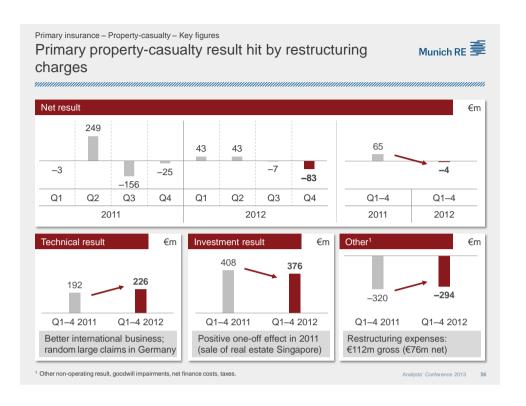
- Launch of business operations mid-2014
- Ambition: premiums of ~€800m in year 10
- Stake 26% increase to 49% envisaged

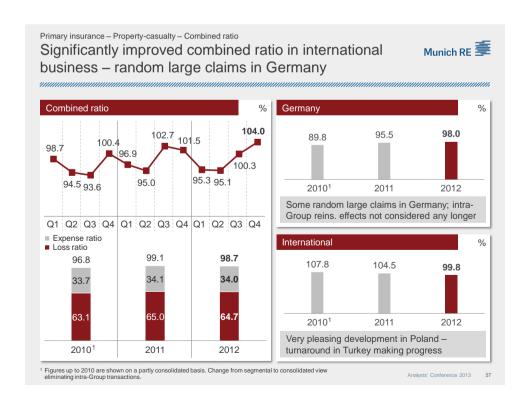
### China - Partner SSAIH<sup>2</sup>

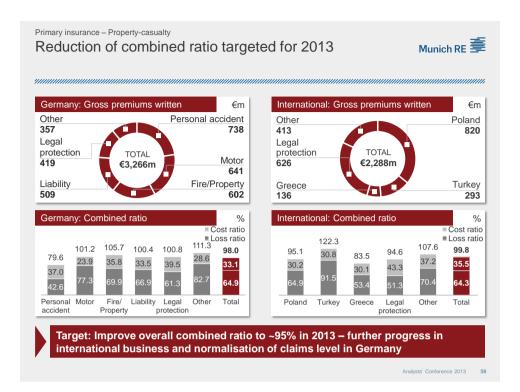
- Launch of business operations ~Q2/Q3 2013
- Ambition: premiums of ~€600m in year 10
- Stake 50%







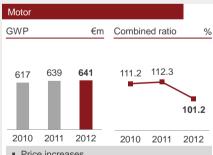




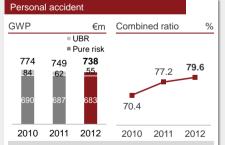
Primary insurance - Property-casualty - Germany

Germany - Improving motor profitability, new product philosophy in personal accident





- Price increases
  - 10% for new business as at July 2012
  - 5% for existing business
- German GAAP 2012 combined ratio at 104.2% roughly in line with expected market ratio of 103.0%



- New philosophy: Focus on assistance providing care and benefits for customers after accident even if there is no disability
- Increase number of touch points with customers
- Termination of products with premium refunds (UBR) - run-off of UBR business
- · Relative profitability will increase

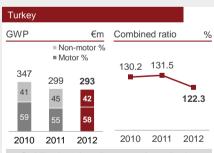
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### Primary insurance - Property-casualty - Germany Germany - Commercial and industrial business hit by Munich RE large claims Commercial and industrial business GWP1 Lines of business breakdown1 €m Combined ratio<sup>2</sup> €m Other Liability 886 836 773 118.2 383 (44%) 74 (8%) Industrial property TOTAL 118 (13%) €886m 97.7 93.2 Commercial property Marine 2010 2011 2012 2010 2011 2012 151 (17%) 160 (18%) Large losses<sup>3</sup> (gross) – 2012 vs. average Comment 2012 a year with randomly high large losses €m %-points Reinsurance with Munich Re not visible in primary insurance segment results due to 2012 243 27.6 full consolidation approach - combined ratio at ERGO level: 102.0% 129 17.1 5-year average Focused on technical profits – not on growth 10-year average 117 16.4 German GAAP, 2 IFRS, gross, 3 Claims exceeding €1m. Analysts' Conference 2013

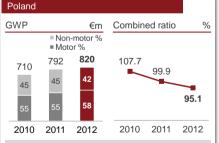
Primary insurance - Property-casualty - International

### First steps in Turkey, excellent results in Poland





- Stabilisation of top line even after adjusting for FX effects
- Result improvement against market trend lower combined ratio despite reserve increase
- Strong accident-year loss ratio improvement (from 92% to 72% in 3 years)
- New management team continues disciplined execution of turnaround programme

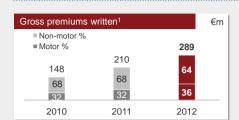


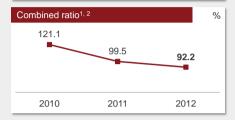
- Tariff adjustments in motor and property (10–15%)
- Combined ratio improvement due to
  - Good claims development exceptionally good year in commercial/industrial business
  - Lower costs
- Increasing premiums

Primary insurance - Property-casualty - International

### India – HDFC ERGO continues to outperform the market Munich RE







### Highlights

- Outperforming market: Top-line growth of almost 40% in 20131
- HDFC ERGO has built the largest bancassurance partnership in non-life
- Successful steering among the best net combined ratios in the market and expected net profit of close to €20m
- Retail portfolio rigorously shifted away from being a motor mono liner five years ago to most balanced portfolio in the market
- Ongoing task to move portfolio towards "high margin/high control" business to improve sustainable profitability
- HDFC ERGO accounted for at equity with 26% share

Solid foundation established for sustainable further growth and risk-commensurate returns going forward

Indian financial year (1.4. previous year to 31.3 reported year).
 Excluding Indian Commercial Vehicle Third Party Motor Pool.

Primary insurance - Sales initiative in Germany

### Sales quality and efficiency programme started



### A new advice process .

- Brand promise "to insure is to understand" demands all-round yet individual advice process for all sales organisations
- New tool "ERGO compass" also brings advantages for documentation of advice

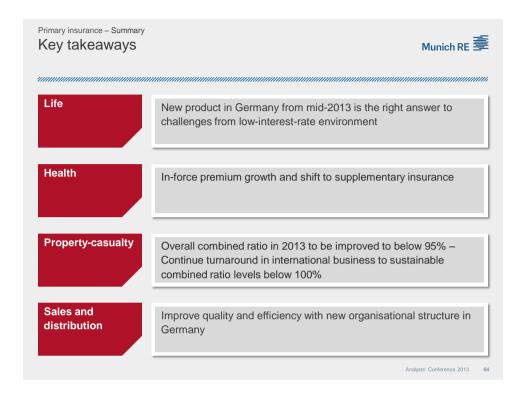


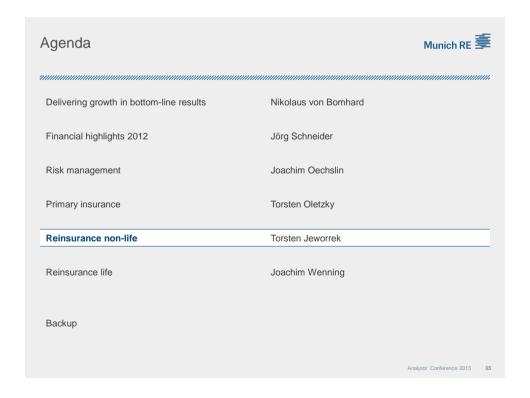
### .. and structural changes ..

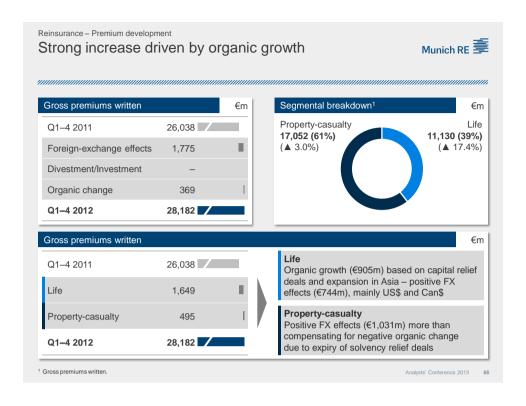
- Streamlining sales organisations of tied agents:
  - 5 existing organisations will be merged into 2
- Uniform instruments for sales management and quality assurance
- Reducing regional sales offices from 218 to 120 regional representative offices ...
- ... while maintaining a broad regional presence: ERGO present in 66 (previously 83) towns and cities in future
- · Foundation of a sales company
- Measures to be implemented in 2014

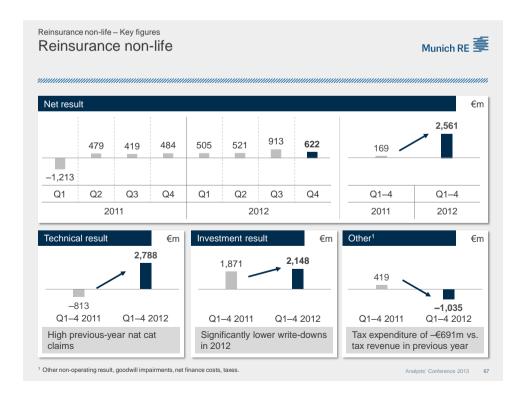
### will lead to improved efficiency and costs

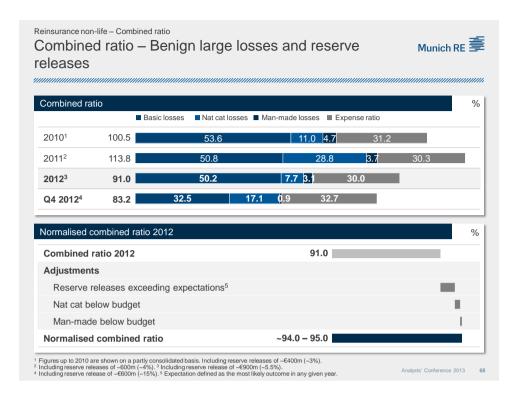
- Cutback of 1,350 jobs
- Savings volume of ~€160m gross and ~€60m net from 2015













Reinsurance non-life - Strong reserving position

We have now reached a steady state with best-in-class processes and prudent reserve levels





Reinsurance non-life – Promising business fields – Capital relief transactions

### Demand for capital relief translates into new business opportunities for Munich Re





### Proven demand for capital relief solutions

Motivation

### Optimisation

- Capital optimisation
- Market growth funding Replacement of capital
- M&A financing/enabling
- Earnings volatility

### Distress

- Economic crisis
- Hits on asset side
- Change of interest rates
- High (cat) losses
- Negative valuation levels
- · Capital ratio can be steered by internal measures, capital market solutions or
- · Reinsurance provides highly flexible solution, e.g. no minimum size, low external visibility, no access to capital markets required and risk transfer included

### Munich Re's core strengths

Financial strength to provide significant capacity

Unique access to clients and markets

Best-in-class underwriting and capital management expertise

- Dedicated teams of various experts develop solutions and execute transactions
- Capital relief deals generating new premiums beyond conventional cessions
- Considerable premium development with sustainable margin contribution expected

Reinsurance non-life – Promising business fields – Risk Solutions

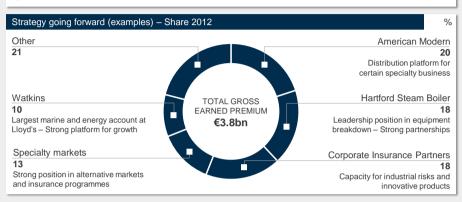
## Risk Solutions - Well-positioned to profitably expand the business



## Strategic rationale achieved

Applying expertise to selected, highly profitable risk segments and exploiting trends via specialised distribution channels Seizing independent growth potentials based on a broader scope of business

Adding profitable business to detach from reinsurance cycle

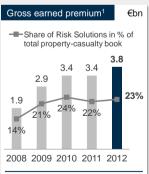


Reinsurance non-life – Promising business fields – Risk Solutions

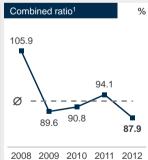
# Risk Solutions – Strong bottom-line contribution





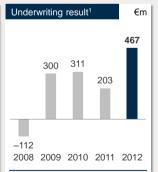


- 2012: Top-line growth (+12%) mainly driven by exchangerate effects (+7%)
- Risk Solutions contributes 23% to total propertycasualty book with an upward trend



Five-year average combined

- ratio of 92.4% 2008: Impacted by large
- Ambition: Combined ratio of ~92% for current portfolio



- Sound underlying performance over five years
- 2012: excellent performance driven by low major-loss experience and reserve releases for prior years

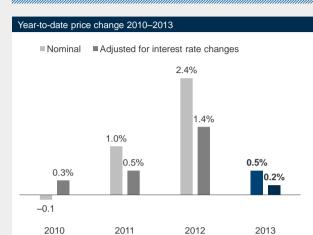
losses

Management view, not comparable with IFRS reporting. Figures for acquired companies only included since consolidation: AMIG as from April 2008 and HSB as from April 2009. Exchange rate YTD as of each year.

## Reinsurance non-life

# Disciplined underwriting leads to improved economic profitability despite lower yields





#### Portfolio management:

Expected underlying combined ratio clearly improved due to

- focus on bottom-line rather than volume growth
- cancellation of business not meeting technical price level (marine sub-lines, motor XL)
- taking advantage of positive pricing trends, especially in nat cat (e.g. Australia, Japan, US)
- profitable growth in business that is not freely available in the market (agriculture, UK motor client)

Price increases achieved in recent renewals more than sufficient to offset lower interest rates from a pricing perspective

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Reinsurance non-life - January renewals 2013

# Ongoing strong competition due to ample reinsurance capacity, while demand tends to be unchanged



## Market environment

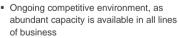
- Capital base of the (re)insurance sector further increasing driven by low large-loss burden in 2012 (except Sandy) and inflated market value of bond portfolio (low interest rates)
- Reinsurance prices are rather flat overall Sandy's impact helped to stabilise US prices
- Segments with recent loss experience show noticeable price increases
- Prices for long-tail business with slight upward bias due to low yields
- For primary rates, slight positive price trend continues (e.g. US)

### Competitors







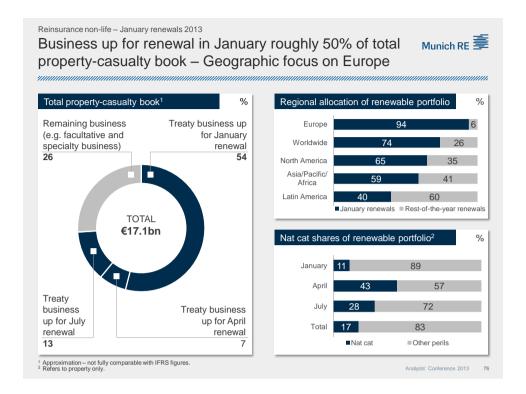


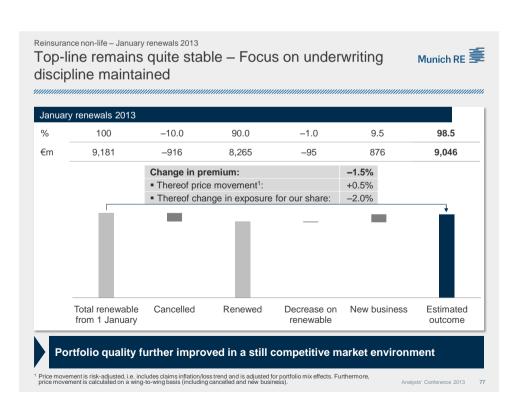
- Increased inflow of alternative capital (e.g. cat bonds, collateralised reinsurance, aggregated XLs), as institutional investors are searching for yield opportunities
- Competitors strongly focus on keeping their business in force

### Clients Demand



- Overall, reinsurance demand without material changes
- Stable development of original markets in difficult economic environment
- Clients are retaining largely the same or an even higher level of risk as capital increases





Reinsurance non-life - January renewals 2013

## January renewals: On average, prices flat to slightly up



Munich Re portfolio – Premium change in major business lines								
	Total	Prop	perty	Cas	ualty	Specialty lines		
Business line Premium split <sup>1</sup>	€9.2bn	Prop. 31%	XL 11%	Prop. 34%	XL 5%	Marine 10%	Credit 6%	Aviation 3%
Price change	~0.5%	0.3%	1.4%	0.6%	1.6%	0.9%	-1.2%	0.2%
Volume change	-1.5%	-4.3%	1.0%	-0.8%	-1.0%	3.0%	-0.5%	-6.7%

## Price

- Overall, a positive price change (+0.5%) was achieved
- Most significant price increases were realised in loss-affected marine and property portfolios
- Casualty lines: Flat to slightly up
- · Proportional business: Remains stable to slightly up benefiting from positive primary pricing trend
- Credit: still profitable despite price decreases

- Top-line decrease of 1.5% as a result of a still bottom-line-orientated underwriting approach
- Proportional book: Slightly reduced in Asia/Pacific and Europe
- Marine: Elevated top line due to growth of Risk Solutions business
- Aviation: Decreases as a result of a reduction in the airline segment

<sup>1</sup> Relative premium share in relation to total renewable business in January.

Reinsurance non-life - Renewal outlook

# Current pricing trend is expected to continue in upcoming renewals

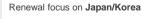




Renewal focus on Europe

- Overall flat to slightly positive pricing trend
- Positive price change of ~0.5% achieved







Renewal focus on USA, Latin America and Australia

- Higher nat cat portion in April (~40%) and July (~30%) renewals than in January renewals (~11%)
- Rate outlook stable in the absence of a market-changing event
- · Persisting low interest rates will increase pressure on casualty

Disciplined underwriting approach is key to maintaining portfolio quality in a very competitive market environment

Reinsurance non-life - Outlook

## Positive outlook for developing business in different market environments

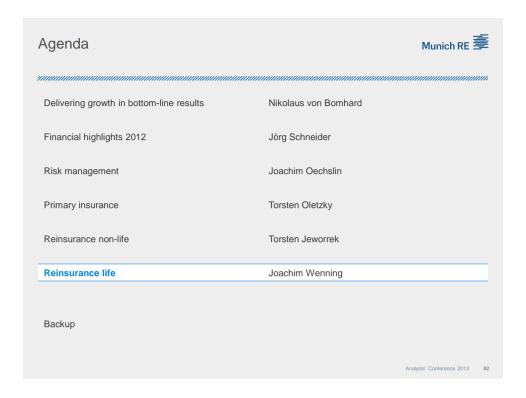


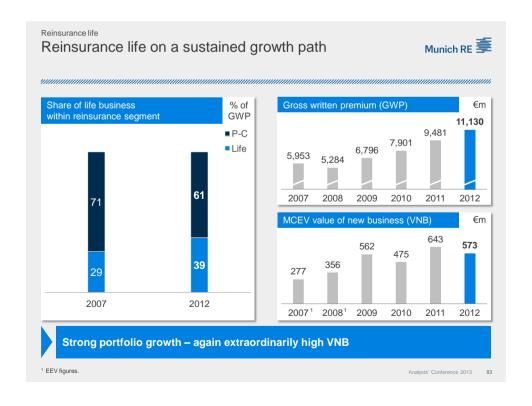
Munich Re GWP1 Outlook 2015 Outlook 2015 Comparably smaller market share provides USA: Largest single market – Stabilisation North growth potential America Selective approach in low-margin segments of negative trend Difficult market Core market for capital relief transactions Market competition still keen for traditional environment but Europe 3.4 stable outlook reinsurance Continuous high Growth in line with market2 but with strict growth rates adherence to profitability targets
Differentiated approach in mature markets APAC driven by (Japan, Australia) emerging markets Latin America High growth dynamic Munich Re's presence and market with increasing 1.3 experience provide excellent basis to & Africa prosperity participate in developments Global Clients Stable outlook for Continued successful business with Global large insurers -Clients & Special 42 Attractive specialty High growth expectations in Special Lines Lines business (agriculture etc.) Differentiated approach allows Munich Re to capitalise on opportunities in line with

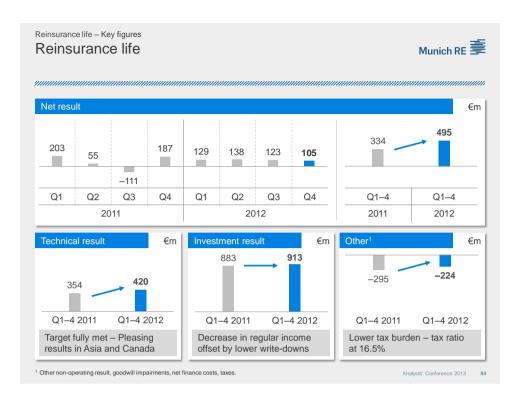
market expectations

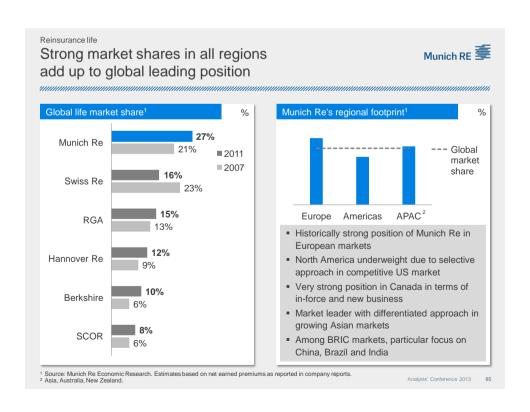
Gross written premiums 2012. Traditional reinsurance only. Allocation based on management view. Not considering specific quota-share business.

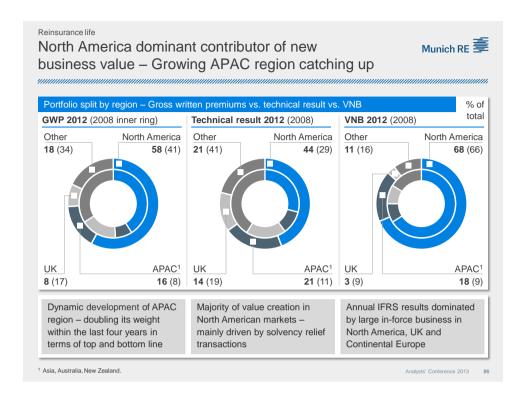


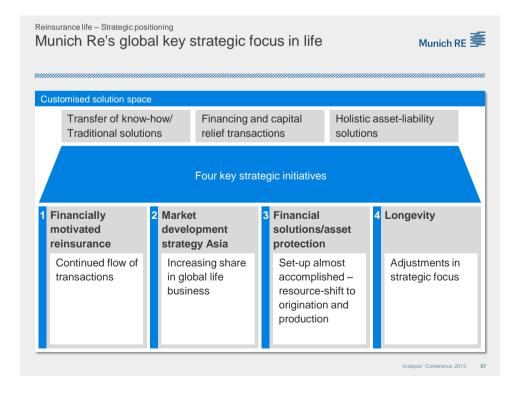


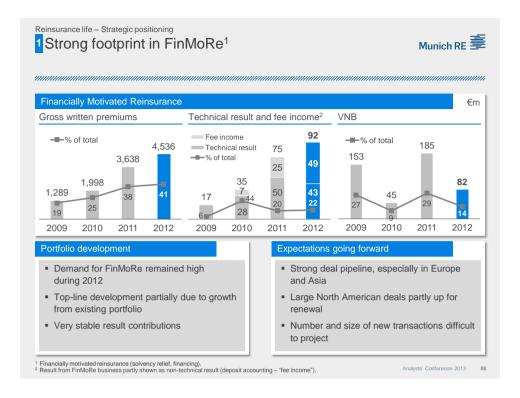


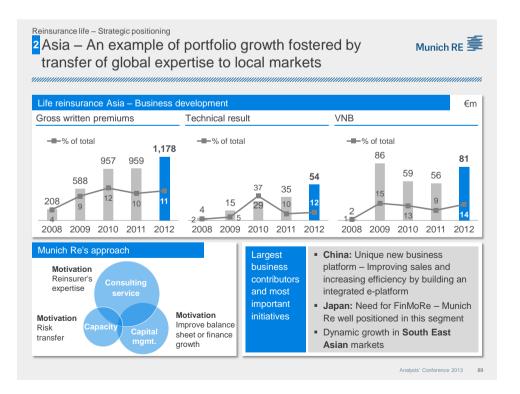


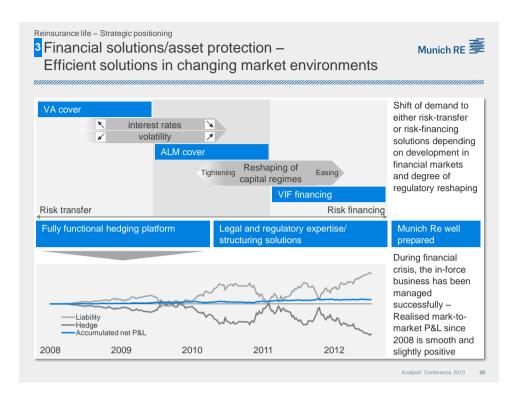


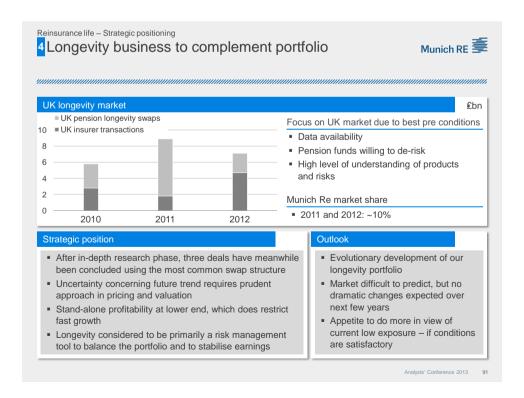


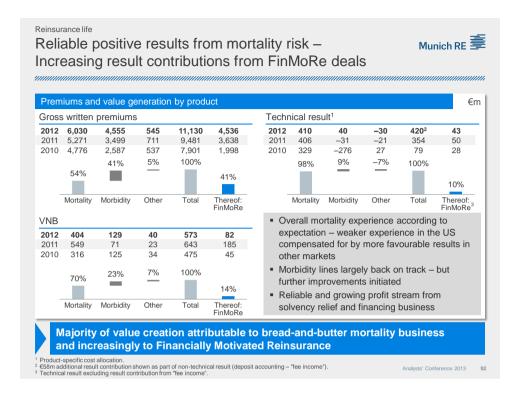


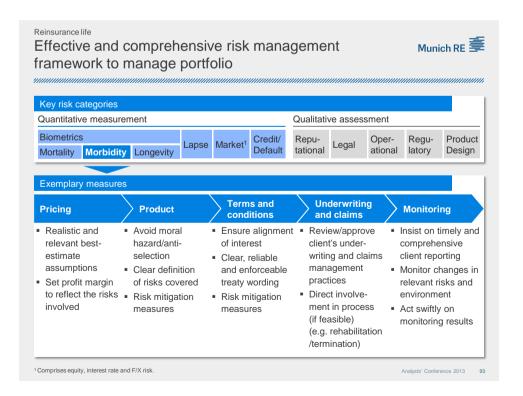


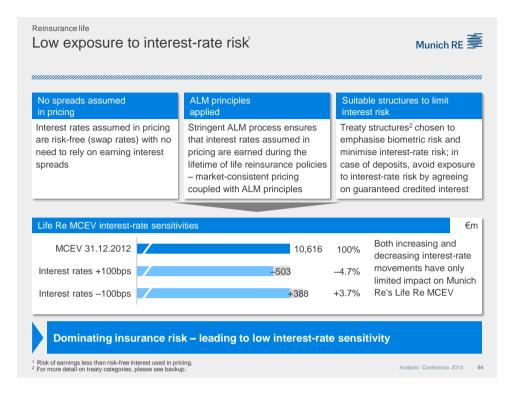


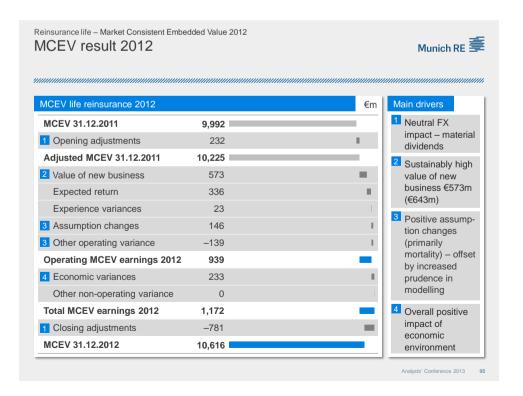


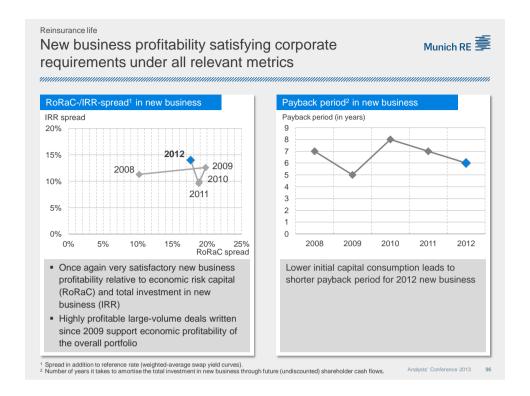


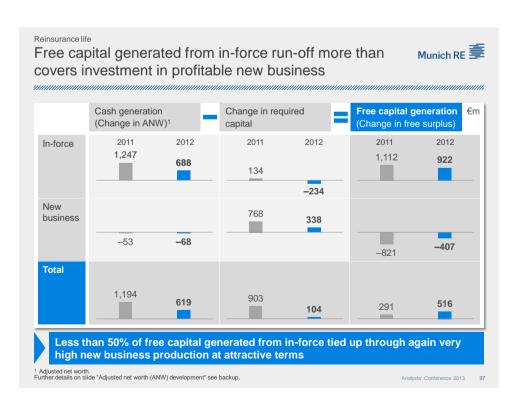


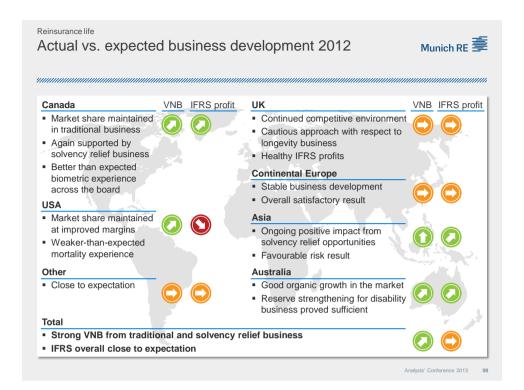


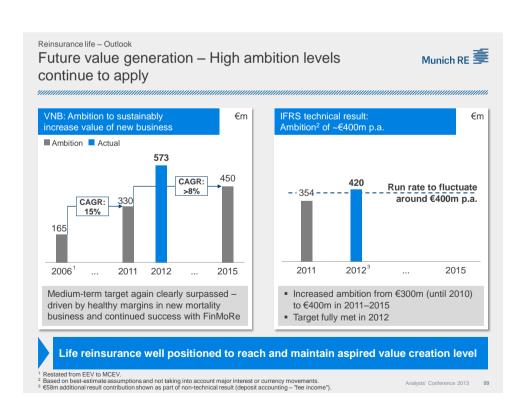


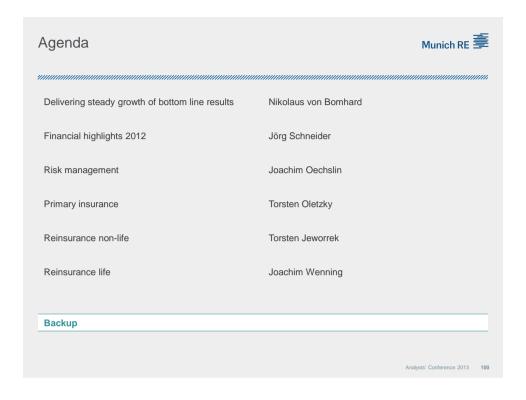


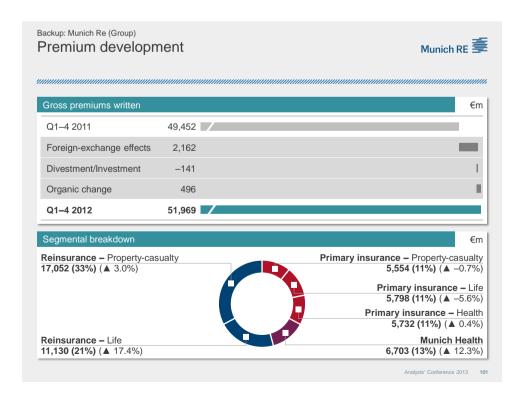


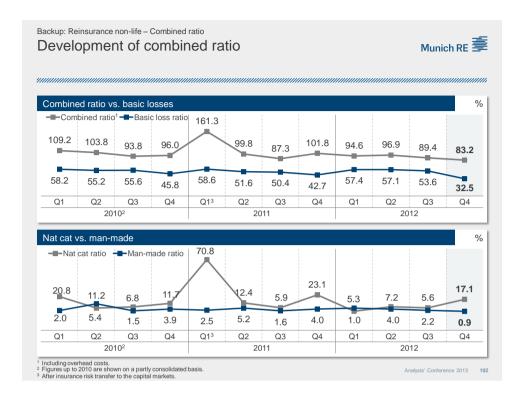


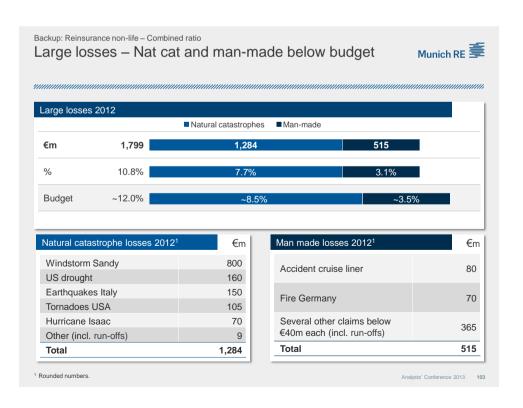


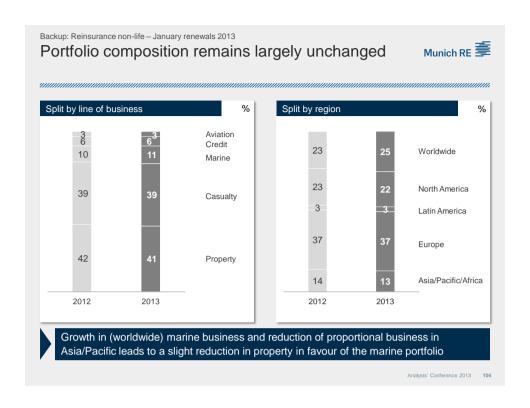


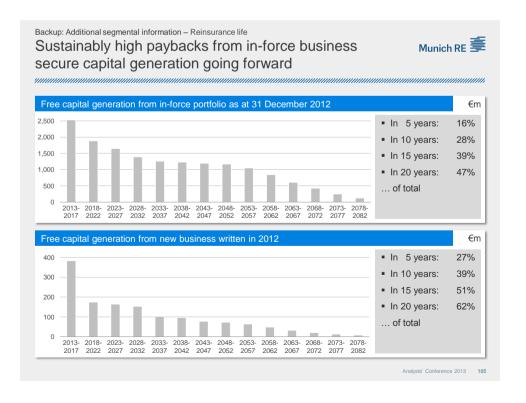












premiums

-19 4%

935 182 753

794 187 607

**-15.1%** 2.7%

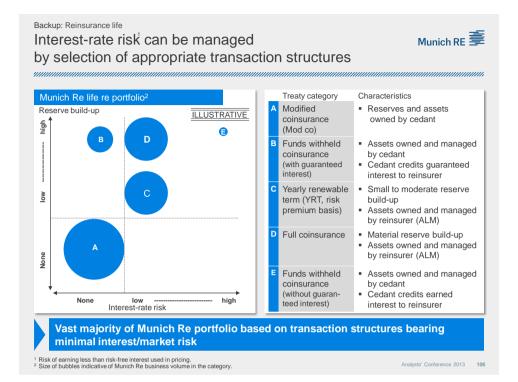
APF1

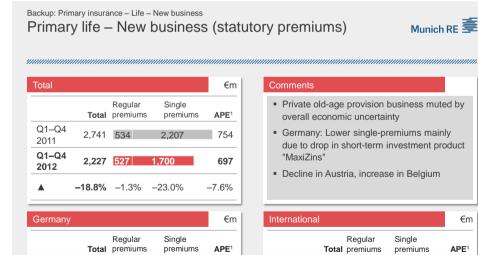
257

248

-3.5%

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APF1

497

449

-9.7

Q1-Q4

Q1-Q4

2011

2012

Total premiums

1,806 352 1,454

1,433 340 1,093

**-20.7%** -3.4% -24.9%

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

Q1-Q4

Q1-Q4

2011

2012

premiums

Backup: Primary insurance - Life

## Comprehensive management of back book



#### Interest-rate hedging programme

- Started in 2005 continuously buying additional slices every year depending on capital market and portfolio development
- Protection against reinvestment risk via receiver swaptions but also preserving flexibility for rising interest rates via CMS floaters with floor
- First tranche: No hedge accounting large P&L impact of interest-rate fluctuations
   Later use of instruments suitable for hedge accounting less P&L and balance-sheet visibility
- Annual performance costs: ~10bps

TARGET: Deliver guarantee promise to customers without additional shareholders' equity

#### Buffers and key figures<sup>1</sup> (German business)

	, , ,		•			
	Free RfB	Terminal bonus fund	Unrealised gains	Average coupon	Reinvestment rate	Average guarantee
2012	€0.9bn	€2.0bn	€8.1bn	~3.8%	~3.1%	~3.2%
2011	€1.0bn	€2.3bn	€3.2bn	~4.1%	~3.3%	~3.3%

ERGO well protected against "lower for longer" scenario

<sup>1</sup> German GAAP figures for ERGO Leben, Victoria Leben and ERGO Direkt Leben.

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## Backup: Investments

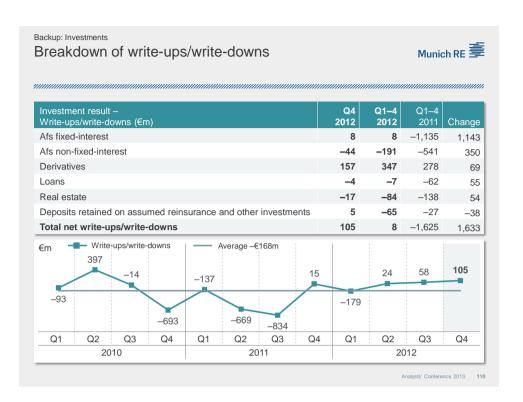
## Breakdown of regular income

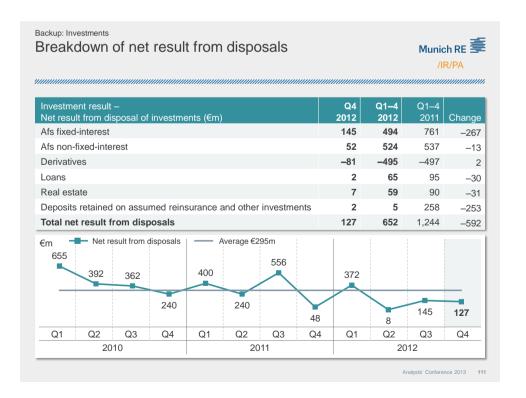


Q4 Q1-4 Regular income (€m) 2012 2012 Afs fixed-interest 996 4,073 4,305 -232 Afs non-fixed-interest 73 352 342 10 Derivatives 63 232 335 -103 Loans 562 2,242 2,174 68 Real estate 83 334 340 -6 Deposits retained on assumed reinsurance and other investments 170 522 543 -21 Total regular income 1,947 7,755 8,039 \_284

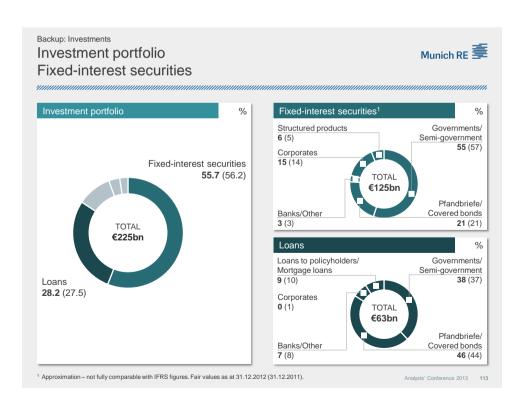


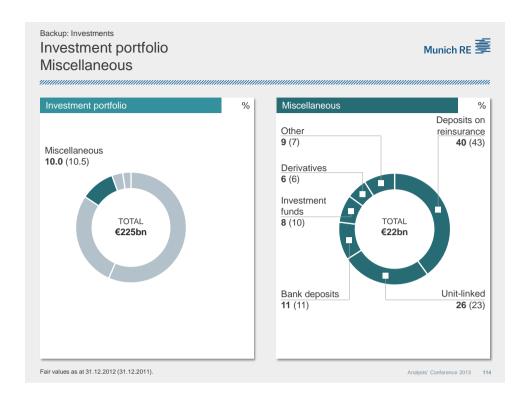
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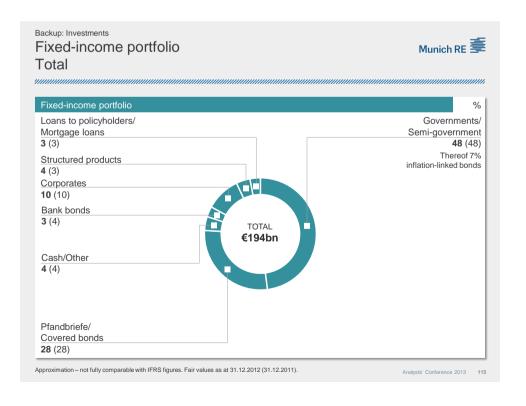


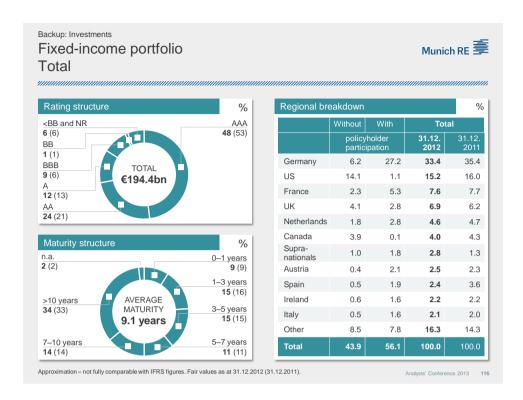


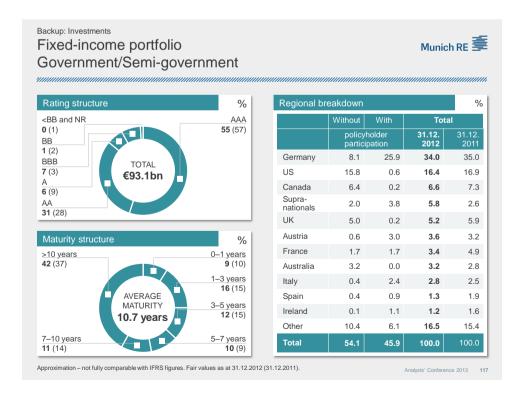
#### Backup: Investments Munich RE Return on investment by asset class and segment Regular income | Write-ups/downs | Disposal result | Afs fixed-interest 3.4 0.4 120,436 Afs non-fixed-interest 4 1 -22 6.1 8.0 8.538 Derivatives 12.6 18.9 -27.0 -3.6 0.9 1,840 Loans 3.7 0.1 3.8 60,308 Real estate 6.3 -1.6 5.8 5,287 1.1 Other 2.6 -0.3 0.42 2.7 20,132 Total 216,541 3.6 0.3 3.9 3.4 0.8 -0.4 3.7 83,086 Primary insurance 3.7 0.1 0.3 127.967 4.1 Munich Health 2.9 -0.3 -0.2 4,286 0.3 2.7 Return on investment Average 3.9% 5.4% 5.2% 4.4% 4.3% 4.0% 4.0% 3.9% 3.8% 3.4% 3.1% 2.7% 2.7% Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 2010 2011 2012 ¹ Annualised. ² Including management expenses and impact from unit-linked business. ³ In €m. Segments do not add up to total amount; difference relates to the segment "asset management".

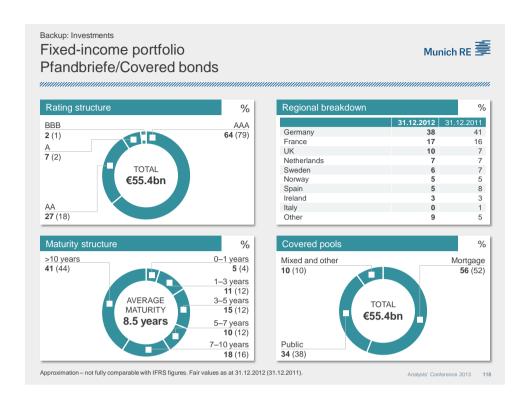


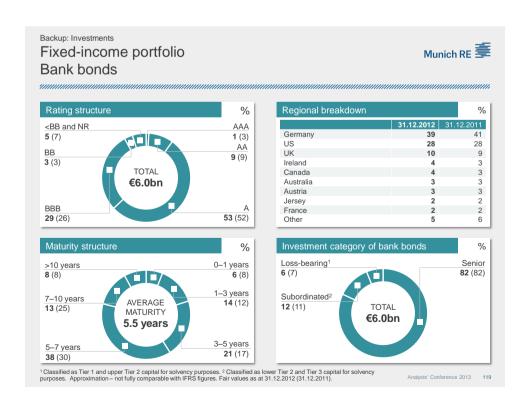




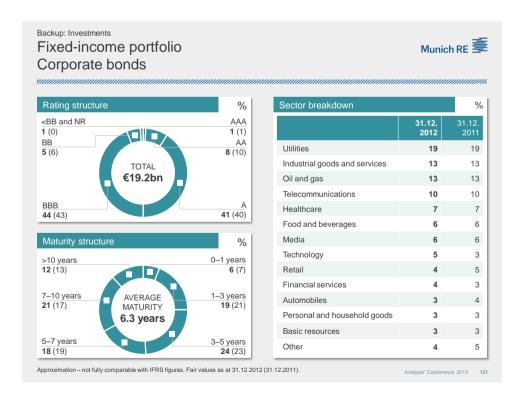








#### Backup: Investments Munich RE Fixed-income portfolio Bank bonds Senior, subordinated and loss-bearing bonds exposure by country Loss-bearing bonds Senior Subordinated Country Total Germany 2.357 1,729 351 277 US 1,449 189 30 1,668 UK 42 7 622 573 Ireland 235 0 0 235 128 61 30 219 Canada Australia 202 0 1 203 Austria 128 31 28 187 2 Jersey 121 10 133 0 100 France 89 11 Italy 36 3 0 39 Spain 9 0 0 9 Other 177 9 18 204 Total 4,876 707 393 5,976 Approximation – not fully comparable with IFRS figures. Fair values as at 31.12.2012. Analysts' Conference 2013 120



Backup: Investments

# Fixed-income portfolio Structured products



Structured products portfolio (at market values): Split by rating and region					€r						
			Rating					Region			
		AAA	AA	Α	BBB	<bbb< th=""><th>NR</th><th>USA + RoW</th><th>Europe</th><th>Total</th><th>Market- to-pa</th></bbb<>	NR	USA + RoW	Europe	Total	Market- to-pa
ABS	Consumer-related ABS <sup>1</sup>	422	190	296	75	2	0	351	634	985	101%
	Corporate-related ABS <sup>2</sup>	34	30	294	92	13	0	1	462	463	98%
	Subprime HEL	3	3	2	5	0	0	13	0	13	99%
CDO/ CLN	Subprime-related	0	0	0	0	0	0	0	0	0	0%
	Non-subprime-related	78	128	85	30	0	29	41	309	350	92%
MBS	Agency	2,202	98	0	0	0	0	2,300	0	2,300	108%
	Non-agency prime	681	134	254	37	1	0	110	997	1,107	99%
	Non-agency other (not subprime)	64	75	58	0	0	0	25	172	197	99%
	Commercial MBS	1,133	258	519	141	14	3	1,056	1,012	2,068	101%
	Total 31.12.2012	4,617	916	1,508	380	30	32	3,897	3,586	7,483	101%
	In %	62%	12%	20%	5%	0%	1%	52%	48%	100%	
	Total 31.12.2011	4,008	1,053	831	184	100	36	3,527	2,685	6,212	989

Consumer loans, auto, credit cards, student loans.
 Asset-backed CPs, business and corporate loans, commercial equipment.
 Approximation – not fully comparable with IFRS figures. Fair values as at 31.12.2012.

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Backup: Investments

# Sensitivities to interest rates, spreads and equity markets



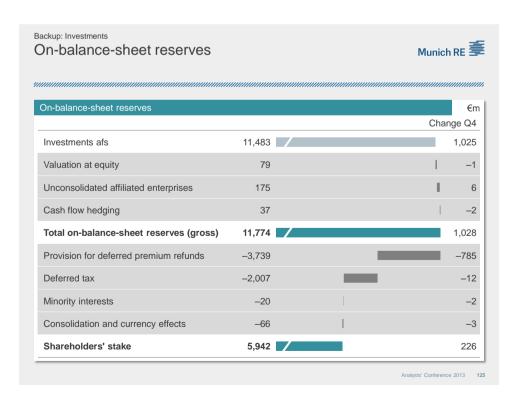
Sensitivity to risk-free interest rates – Basis points	<b>–50</b>	<b>–25</b>	+50	+100
Change in gross market value (€bn)	+7.6	+3.7	-7.1	-13.5
Change in on-balance-sheet reserves, net (€bn)¹	+1.9	+0.9	-1.8	-3.5
Change in off-balance-sheet reserves, net (€bn)¹	+0.4	+0.2	-0.4	-0.7
P&L impact (€bn)¹	+0.1	+0.1	-0.1	-0.2

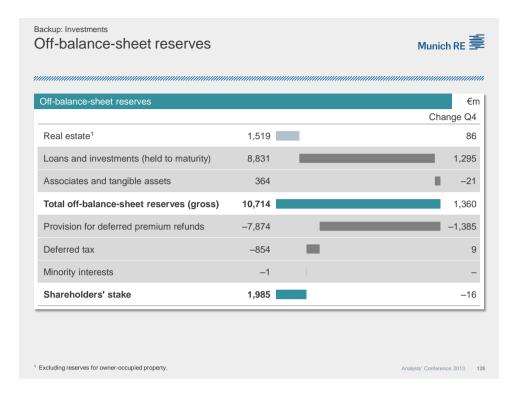
Sensitivity to spreads <sup>2</sup> (change in basis points)	+50	+100
Change in gross market value (€bn)	-4.8	-9.3
Change in on-balance-sheet reserves, net (€bn)¹	-0.9	-1.7
Change in off-balance-sheet reserves, net (€bn)¹	-0.3	-0.5
P&L impact (€bn)¹	-0.1	-0.2

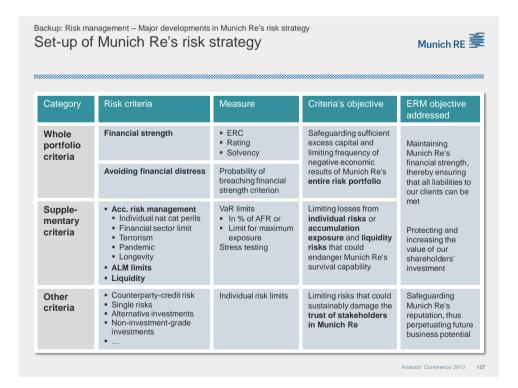
Sensitivity to equity markets <sup>3</sup>	-30%	-10%	+10%	+30%
EURO STOXX 50 (2,636 as at 31.12.2012)	1,845	2,372	2,900	3,427
Change in gross market value (€bn)	-3.0	-1.0	+1.0	+3.0
Change in on-balance-sheet reserves, net (€bn)¹	-0.7	-0.4	+0.6	+1.8
Change in off-balance-sheet reserves, net (€bn)¹	-0.5	-0.2	+0.2	+0.5
P&L impact (€bn)¹	-1.3	-0.3	+0.1	+0.3

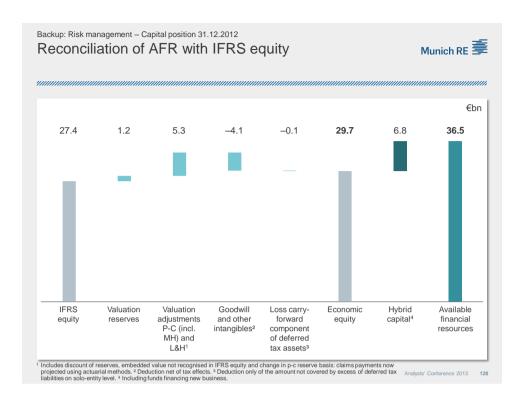
<sup>Rough calculation with limited reliability assuming unchanged portfolio as at 31.12.2012. After rough estimation of policyholder participation and deferred tax; linearity of relations cannot be assumed. Approximation – not fully comparable with IFRS figures.
Sensitivities to changes of spreads are calculated for every category of fixed-interest securities, except government securities with AAA ratings. Worst-case scenario assumed including commodities: impairment as soon as market value is below acquisition cost. Approximation – not fully comparable with IFRS figures. Fair values as at 31.12.2012.</sup> 

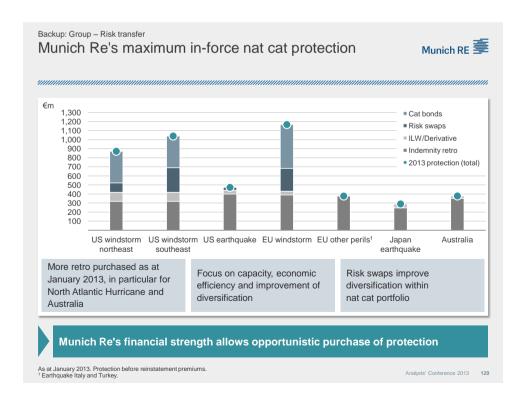
#### Backup: Investments Munich RE On- and off-balance-sheet reserves (gross) 2012 Market value of investments 185,097 196,398 207,108 222,431 224,537 Total reserves 7,905 7,374 11,236 20,100 22,488 On-balance-sheet reserves Fixed-interest securities 3,342 2,201 4,892 9,240 9,980 Non-fixed-interest securities 1,408 1,634 693 1,218 1,503 Other on-balance-sheet reserves<sup>1</sup> 233 249 250 288 291 Subtotal 4,983 4,084 5,835 10,746 11,774 Off-balance-sheet reserves Real estate<sup>2</sup> 1,447 1,425 1,435 1,433 1,519 Loans and investments (held to maturity) 1,289 1,554 3,633 7,536 8,831 Associates and tangible assets 311 333 385 364 Subtotal 2,922 3,290 5,401 9,354 10,714 Reserve ratio (%) 4.3% 3.8% 5.4% 9.0% 10.0% Unrealised gains/losses from unconsolidated affiliated companies, valuation at equity and cash-flow hedging. Excluding reserves from owner-occupied property. Analysts' Conference 2013 124

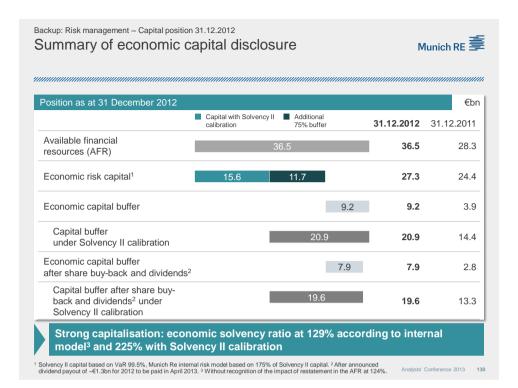




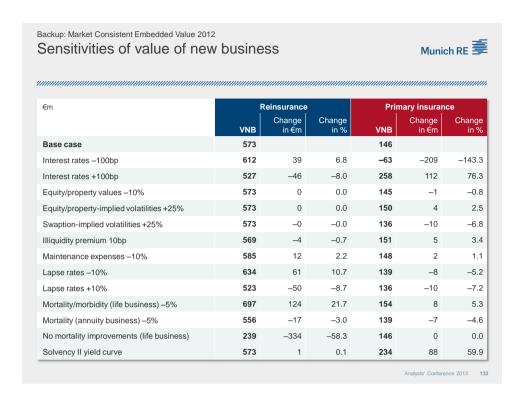


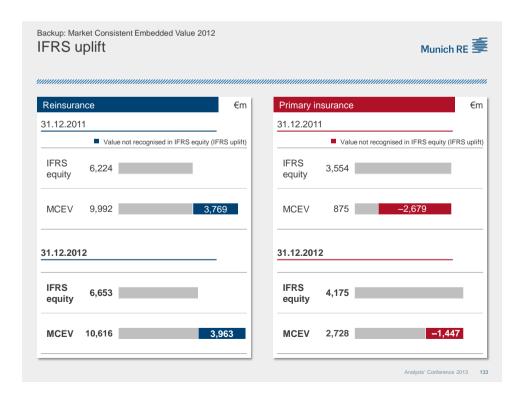


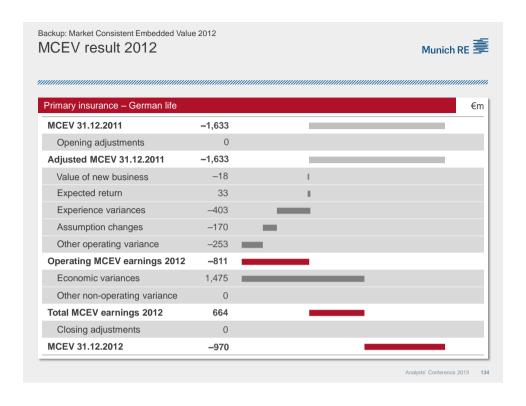


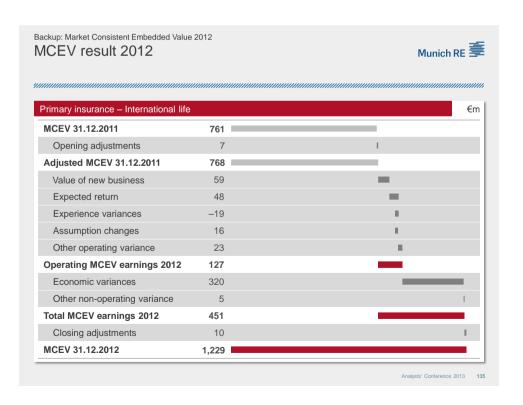


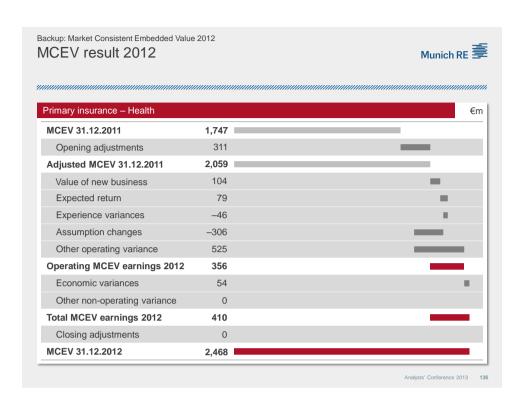
Backup: Market Consistent Embedded Value 2012 Munich RE Sensitivities of MCEV Primary insurance Reinsurance €m Change in €m Change Change Change MCEV MCEV in €m 2.728 Base case 10.616 Interest rates -100bp 11,004 388 -1,041 -3,769 -138.2 10,113 -4.7 84.3 Interest rates +100bp -503 5,027 2,298 Equity/property values -10% 10,607 -9 -0.1 2,552 -176 -6.5 Equity/property-implied volatilities +25% 10,604 -12 -0.1 2,638 -91 -3.3 Swaption-implied volatilities +25% 10.615 -2 -0.02.542 -186-6.810,611 -6 -0.1 3,317 589 21.6 Illiquidity premium 10bp Maintenance expenses -10% 2,798 10,729 70 2.6 113 1.1 Lapse rates -10% 11,003 387 3.6 2,577 -151 -5.5 Lapse rates +10% 10,297 -319 -3.0 2,868 140 5.1 Mortality/morbidity (life business) -5% 12,484 1,867 17.6 2,835 107 3.9 Mortality (annuity business) -5% 10,546 -70 -0.7 2,548 -180 -6.6 -44.2 0 0.0 No mortality improvements (life business) 5.929 -4.688 2.728 10,627 0.1 4,707 1,979 72.5 Solvency II yield curve Analysts' Conference 2013

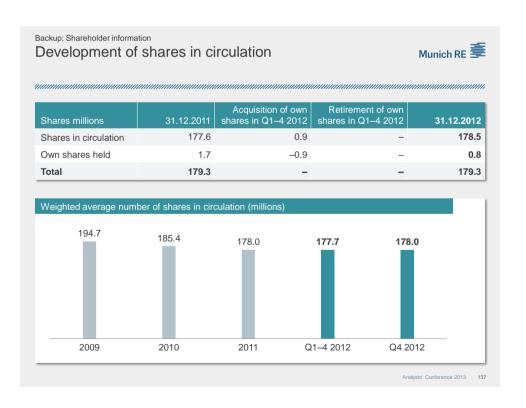












## Backup: Shareholder information Financial calendar



FINANCIAL CALENDAR	
19 March 2013	Morgan Stanley "European Financial Conference", London
25 April 2013	Annual General Meeting, Munich
26 April 2013	Dividend payment - Ex-dividend date
7 May 2013	Interim report as at 31 March 2013
7 August 2013	Interim report as at 30 June 2013
8 – 10 September 2013	Les Rendez-Vous de Septembre, Monte Carlo
7 November 2013	Interim report as at 30 September 2013

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Backup: Shareholder information

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## Disclaimer



This presentation contains forward-looking statements that are based on current assumptions and forecasts of the management of Munich Re. Known and unknown risks, uncertainties and other factors could lead to material differences between the forward-looking statements given here and the actual development, in particular the results, financial situation and performance of our Company. The Company assumes no liability to update these forward-looking statements or to conform them to future events or developments.

Figures up to 2010 are shown on a partly consolidated basis.

"Partly consolidated" means before elimination of intra-Group transactions across segments.

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