MUNICH RE EQUITY STORY Executing business opportunities – Good start to the 2020 ambition

September 2019

Munich RE Image: AdobeStock/LuckyStep

Why invest in Munich Re





Strong capital position and financial stability



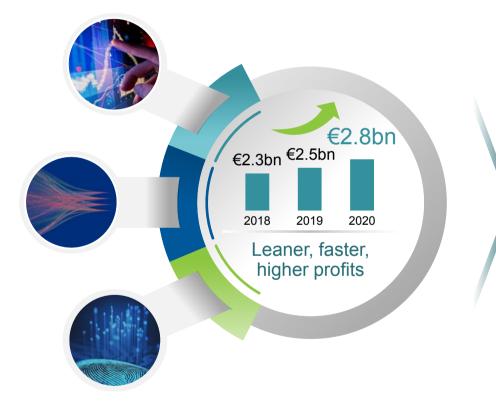


1 As at 31.12.2018. 2 99.97% unrestricted, 0.03% hybrid capital. 3 As at 30.6.2019. Strategic debt (senior, subordinated and other debt) divided by total capital (strategic debt + equity).

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Increasing confidence level to deliver on next year's net profit targets as a basis for our mid-term strategy



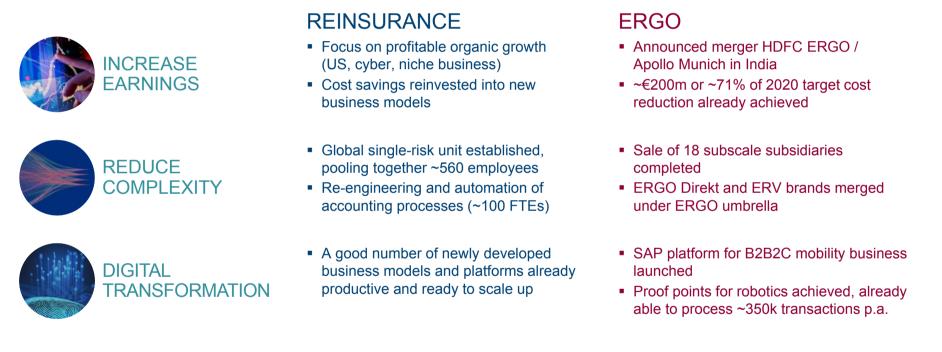


Focus on our three pillars is paying off, both strategically and financially

We take care of our long-term TSR development and seek top 3 position in our peer group

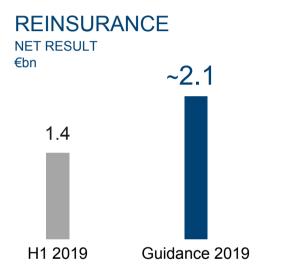
Consistent progress towards our 2020 strategic ambition – Select highlights of H1 2019

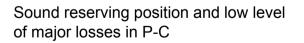




The Group is building the basis to become faster, leaner and increase earnings

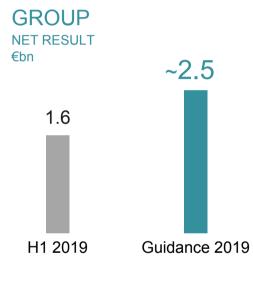






ERGO NET RESULT ém 220 220 H1 2019 Guidance 2019

ESP well on track – pleasing profitability across all segments

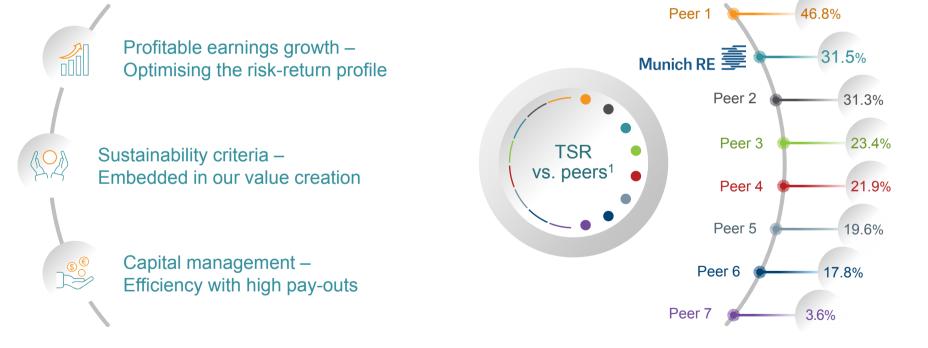


Unchanged guidance given the usual uncertainty concerning developments in major losses in H2

Our market performance since 2018 – We are in the top 3 among our peer group



Committed to leveraging drivers of TSR to deliver attractive returns to our shareholders



1 Source: Datastream. Period from 1.1.2018 to 31.7.2019. Peers: Allianz, Axa, Generali, Hannover Re, Scor, Swiss Re, Zurich.

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Systematically integrating sustainability criteria when creating value – Key achievements in 2018



Climate strategy

Enabling new technologies for a low-carbon economy

- Innovative insurance solutions for new technologies, e.g. battery storage
- €1.6bn invested in renewable energies, €0.9bn in green bonds

Driving industry standards for climate risk management via UNEP FI PSI¹ Working Group on TCFD² recommendations



Sustainability criteria deeply entrenched in our underwriting and investment decisions

- Investment process established to fully integrate ESG criteria for all asset classes
- New approach to coal sector divestment (30% revenue threshold) and strict underwriting exclusions for new coal projects



Governance

New remuneration system for the Board of Management, aligned with long-term shareholders' interests

Responsible employer

- Establishment of Munich Re Digital School to enhance digital qualifications of employees
- Voluntary programme to support reduced complexity and digital transformation

Top positions in major external ratings: MSCI AA rating, top 10 in DJSI, #1 Union Investment for governance



Strong balance sheet, dividend increase and continuation of €1bn share buy-back in 2019





Reinsurance – Good 2018 performance

PROPERTY-CASUALTY

NET RESULT €1,135m (–€476m) Sound underlying profitability despite higher frequency of smaller and medium-sized losses

COMBINED RATIO 99.4% (114.1%) Close to original full-year target – underlying combined ratio ~99%

RESERVE RELEASES¹ **4.6%** (5.2%) Absolute amount of reserve releases largely unchanged – confidence level preserved

Figures as at 31.12.2018 (31.12.2017). 1 Basic losses.





LIFE AND HEALTH

NET RESULT €729m (€596m) Improvement in line with technical result and high investment result

> TECHNICAL RESULT INCL. FEE INCOME €584m (€428m)

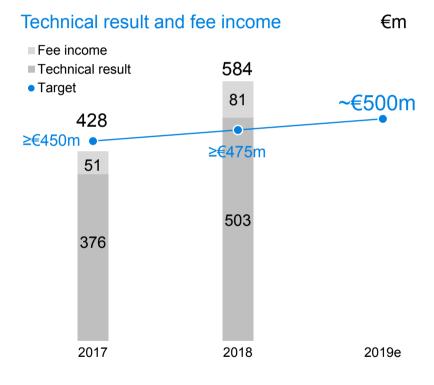
Significantly above guidance due to favourable claims experience and pleasing new business development

NEW BUSINESS CONTRIBUTION €1.1bn (€1.1bn)

Again attractive level – driven by strong traditional business in NA and Asia as well as FinMoRe

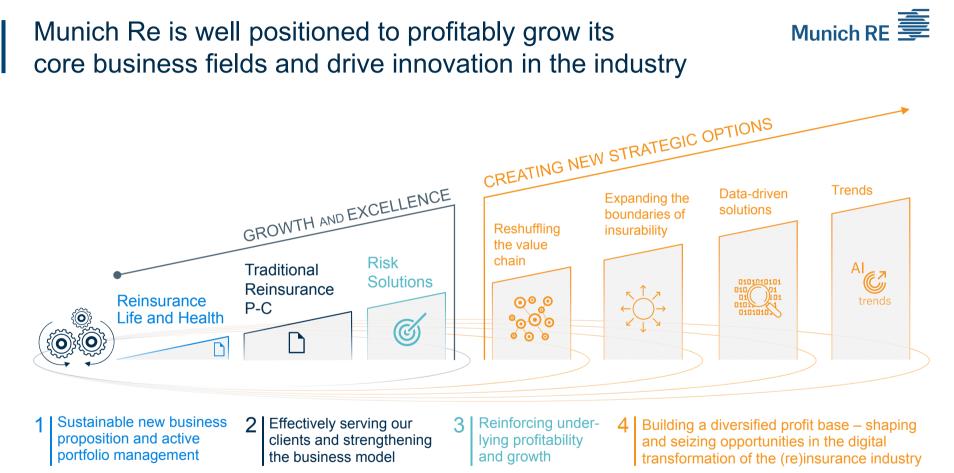
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Sustainable new business proposition and active portfolio management foster earnings growth



Steady earnings growth

- Strong footprint in traditional reinsurance as the core of new business generation
- Established initiatives (FinMoRe, Asia, asset protection, longevity) contributing to growth
- New reinsurance products and risk-related services
- Active portfolio management improving earnings stability and reducing strain from underperforming business
- Guidance 2019 assumes claims in the range of expectation and no major one-offs from in-force management



1 Well-diversified portfolio – New business growth opportunities in North America and Asia

Canada (€1.5bn / 14%)

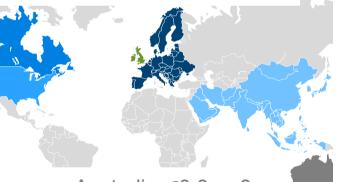
- Attractive margins despite competitive environment
- Maintain leadership position in traditional reinsurance and financially-motivated business
- Develop multi-channel distribution initiative

USA (€2.8bn / 26%)

- Solid position among market leaders
- Develop FinMoRe business and predictive analytics to foster growth
- In-force management on legacy block and attractive risk-return profile in new business leads to sustainable bottom-line growth
- In-depth understanding of mortality key long-term success factor

UK / Ireland (€1.8bn / 16%)

- Successful FinMoRe and longevity proposition
- Unattractive margins in protection business
- Business set-up prepared for Brexit



Australia (€0.8bn / 8%)

- Top priority: Rehabilitation efforts and in-force management
- Highly selective new business proposition



Continental Europe (€1.1bn / 10%)

- Sound but stagnating traditional business overall
- Demand for tailor-made FinMoRe solutions

Asia (€2.3bn / 22%)

- Pleasing development of new business including vital pipeline of FinMoRe solutions
- Substantial share of health reinsurance
- Product trends to be monitored closely, particularly in critical illness

2 Strategic initiatives are delivering

BUSINESS GROWTH



BUSINESS

EXCELLENCE

Top position in core mature markets

- Expansion in currently underrepresented segments/markets
- Stronger focus on US regional business
- ✓ Selective expansion of cat XL business

Living client centricity

- Regional centers successfully implemented
- ADVANCE¹ with strong response

Smart growth in core emerging markets

- ✓ Focus on Asia, Latin America and Africa
- Expansion of specialty business, e.g. agro, marine, credit/mortgage
- Public-sector development closing the protection gap

First-class underwriting and risk management

 Invest in in-house cyber expertise and technology partnerships

Capital management solutions

- Expanding global footprint
- ✓ Diversifying portfolio

Efficient and agile processes

- Complexity and cost reduction
- Digitalisation of selective processes and functions
- Global IT transformation

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3 Risk Solutions: 2018 marked by nat cat and other large losses – Foundations set to capture profitable growth



GROSS EARNED PREMIUMS

€4.3bn (€4.5bn)



Stable portfolio – reduction solely driven by FX effects

Munich Re Specialty Insurance – New growth platform for commercial specialty insurance

- Munich Re's commercial specialty insurance units in North America brought together in one unit under one brand, with a strong growth ambition
- Mutual benefits for clients, distribution partners and Munich Re
 - Center of excellence with underwriting capabilities, capacity, risk insights, advanced technology and claims expertise
 - Broad solution portfolio available out of one hand
- Targeting mid-market segment across P-C and Specialty Lines including excess and surplus lines business

Munich Re Syndicate Ltd. – Focusing growth on leading Lloyd's syndicate

- Growing MRSL from a leading marine and energy Lloyd's syndicate into a diversified Specialty syndicate and leading digital syndicate
- Investments in IT and process automation
- Divestment of MSP Underwriting Ltd.



COMBINED RATIO

(%)

103.4% (106.7%)

Strongly impacted by large loss events, normalised ambition (combined ratio in the mid-nineties) still intact

Munich RE 4 We focus on tangible business impact – Innovative and more disruptive offerings are gaining traction

MUNICH RE STRATEGIC ADVANTAGES

Domain expertise in underwriting, claims, risk management Efficient access to new solutions Strong brand and reputation **Global presence** Financial strength No IT legacy

Reshuffling ೲ಄ the value chain Nov

- Digital cooperation models (e.g. Digital Partners, SaveUp)
- IoT applications and services (via HSB/relayr)

Data science community >200 FTEs

Expanding the boundaries of insurability

- Cyber (re)insurance: GWP 2018 US\$ 473m. low loss ratios, stringent accumulation control
- Cyber embedded service solutions and growing cooperation network, e.g. DXC Technology
- Insurance of AI technology

Data-driven solutions

 Digitally augmented underwriting/ claims solutions for our cedants (e.g. Realytix, Improvex, Non-Life Analytics Platform)

Investments in technology and people



Cutting-edge AI cooperations (e.g. DFKI¹ membership)

Global analytics organisation and infrastructure in place

Strategic investments in partnerships

- Section 20 companies (e.g. Team 8) focusing on InsurTech, IoT, data analytics and AI
- Focus on joint value creation



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ERGO Strategy Programme – Highlights

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P)	2016 Launch of ESP	 ✓ 2018 I Current status 	2020 Ambition
Sales efficiency	Separated, partially integrated sales forces	Full integration of sales forces into one organisation; tied agent productivity increased by ~25% since 2016	Continuous increase of agent productivity
Cost structure	Germany and International: Efficiency improvement programme initiated	Total cost savings ¹ Germany: €174m already achieved International: €30m already achieved	Total cost savings¹ Germany: €279m International: €120m
IT landscape	Dependency on legacy systems	Back-book migration in preparation (IBM) Separation of information from legacy systems started; 44 out of 59 systems ramped down so far	Step change in modernisation of IT infrastructure
Products	Separate product offerings of several risk carriers	Product portfolios substantially renewed and de-risked; integrated on- and offline offering started	Omnichannel retail product approach implemented Simplified product approach

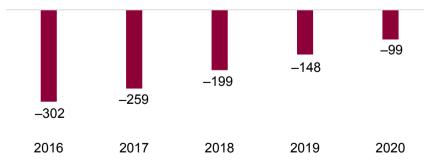
1 Net, accumulated.

Munich Re – September 2019 17

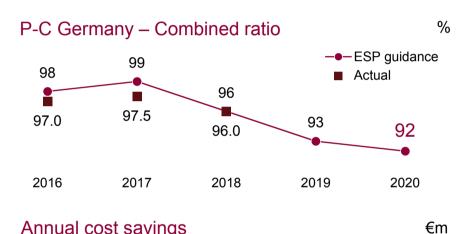
ERGO Strategy Programme (ESP) -Continuously increasing net profit



Net profit impact of investments¹



1 ESP guidance, after policyholder participation and taxes.



Annual cost savings

€m

■ Gross ■ Net¹ Munich Re – September 2019

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ERGO Strategy Programme (ESP) on track – Consistent financial delivery and consequent strategic execution

€m

~530

ESP

Target

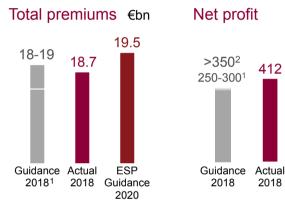
2020

412

2018

Investments

(net, accumulated)



ERGO Germany **GROUNDWORK FOR GROWTH**

- Tied agent productivity increased by ~20%^{4,5}
- New business increased by ~10%, new business in Life increased by 25%^{4,5} driven by attractive product portfolio
- Overall cost savings (€174m of €279m) and FTE reduction (~1,240 of ~2,100) in plan



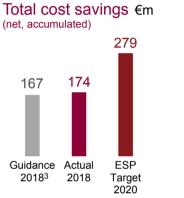
€m

1.008

INNOVATION AND DIGITISATION

- nexible more than doubled⁵ number of policies to ~50,000
- Increasing number of use cases for robotics. voice and AI, modernisation of IT infrastructure on its way
- Number of users of ERGO-wide customer selfservice portal increased by 31%⁵ to ~900,000

1 Annual report 2017. 2 As at Q3 2018 reporting. 3 ESP Guidance as at 1 June 2016. 4 Tied agents (EBV) only. 5 2018 vs. 2017.



ERGO International

Guidance Actual

2018¹

Combined ratio

96.0%

2018

92%

ESP

Target

2020

19

P-C Germany

96%

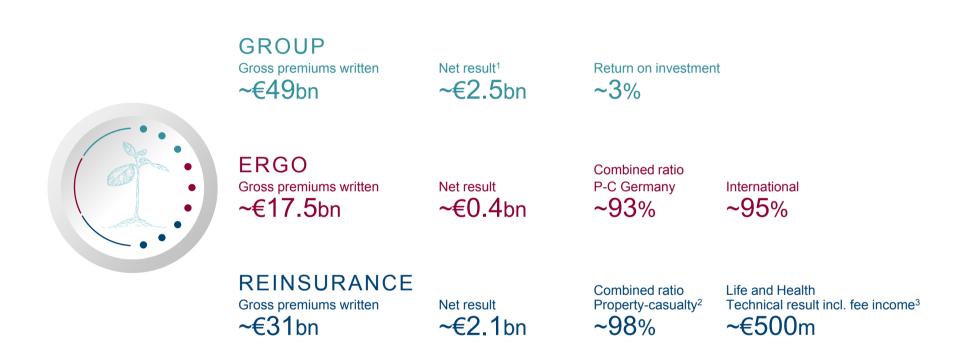
- Portfolio consolidation fully on track
- Increased profits in core markets esp. Poland, Baltics. Spain and Austria
- Strong premium development⁵ in India (+14%) and China (+45%)

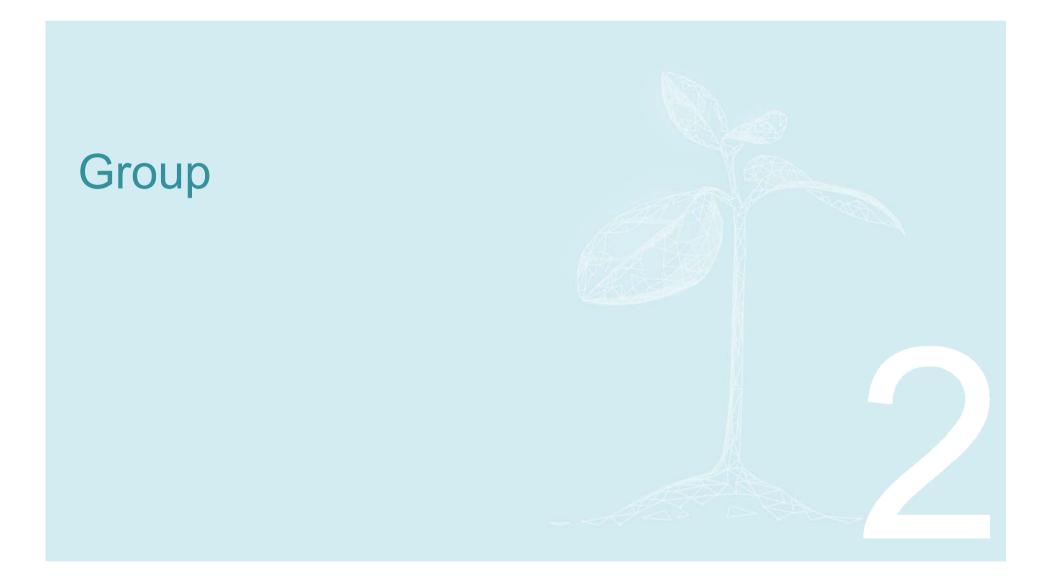
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Munich RE





Backup: Group - Key financials

Munich Re at a glance – Key financials

2018 2017 2016 2015 2014 48.8 Gross written premiums 49.1 49.1 48.9 50.4 €bn 3,725 Operating result 1,241 4,025 4,819 4,028 €m -576 298 -760 -476 312 Taxes on income €m 2.275 392 2.581 3.122 3.171 Consolidated result €m 216.9 217.6 219.4 215.1 218.9 Investments €bn 1.3 Return on equity % 8.4 8.1 10.0 11.3 26.5 28.2 31.8 31.0 30.3 Equity €bn 16.1 15.0 17.3 16.0 17.4 Off-balance-sheet reserves¹ €bn 208.3 205.8 202.2 198.5 198.4 Net technical provisions €bn 43.554 41,410 42.410 43,428 43,316 Staff at 31 December 180.9 185.2 200.9 188.4 178.1 Book value per share € Earnings per share € 15.5 2.4 16.0 18.7 18.3 Dividend per share € 9.25 8.60 8.60 8.25 7.75 Amount distributed 1.342 1,290 1,338 1,329 1,293 €m 190.6 180.8 179.7 184.6 165.8 Share price at 31 December € 28.5 28.0 28.9 30.8 28.7 Market capitalisation at 31 December €bn 166.8 149.5 155.0 161.1 172.9 No. of shares at year-end m

1 Including amounts attributable to minority interests and policyholders.

22



Munich Re – September 2019

Solid balance sheet limits downside while providing a good basis for earnings growth





PROTECT DOWNSIDE

Resilience to adverse development

Defensive portfolio

Prudent setting of reserves

Low level of goodwill limits risk of write-downs

SUPPORT EARNINGS

Ongoing reserve releases

Usual harvesting of unrealised gains

Some tax releases in recent years

Strong reserving position – Protection against adverse development while contributing to earnings strength



MOTOR LIABILITY

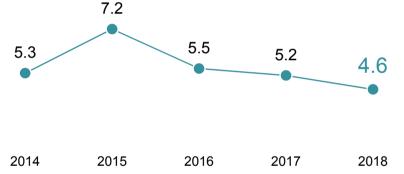
UK: Significant reduction of	USA: Continually increasing loss
discount rate for claims	frequency and severity – reserve
settlement ("Ogden") in 2017	increases for whole US primary market

CASUALTY

USA: High	Asbestos: Complex	US workers' compensation:
litigation risk,	litigation, changes in	High losses for reinsurers
increased claims	legal and regulatory	in business underwritten
inflation risk	environment	during soft market (late 90s)

- Prudent reserving approach ensuring solid reserve position going forward
- Stable reserve situation in 2018 demonstrating resilience to all hot-spot areas





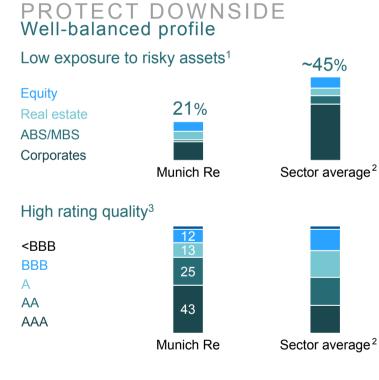
- Positive run-off responds to benign loss emergence while preserving confidence level
- Cautious initial loss picks for new underwriting year expected to unwind over time

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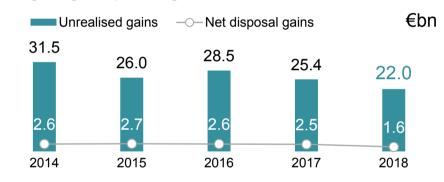
1 Basic losses.

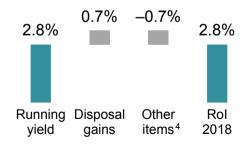
Investment portfolio – Resilience to capital market shocks while providing reliable earnings contribution





SUPPORT EARNINGS Ongoing disposal gains





Part of the valuation reserves realised as a result of usual portfolio turnover and prudent ALM

1 In relation to total investments. 2 Sector average based on company data and analysts' research. 3 Fixed-income portfolio. 4 Write-ups/write-downs, derivatives, other income/expenses.

Backup: Group - Capitalisation

IFRS capital position

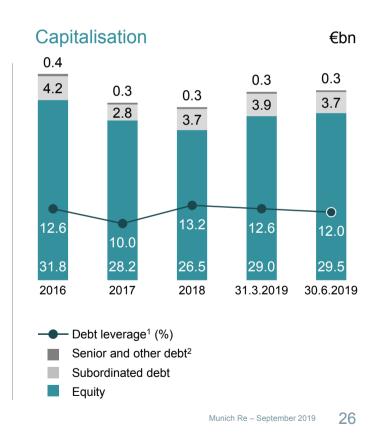
Equity €m Equity 31.12.2018 26,500 Change in Q2 1,626 993 Consolidated result Changes -1.335 Dividend -1,3351,414 Unrealised gains/losses 3,480 126 -200 Exchange rates -109 -389 Share buy-backs Other -465 -211 Equity 30.6.2019 29,543

Unrealised gains/losses

Non-fixed-interest securities

H1: €814m Q2: €117m

Fixed-interest securities H1: €2,667m Q2: €1,301m Exchange rates FX effect mainly driven by US\$ Munich RE



1 Strategic debt (senior, subordinated and other debt) divided by total capital (strategic debt + equity). 2 Other debt includes Munich Re bank borrowings and other strategic debt.

Backup: Group – Capitalisation

Outstanding bonds

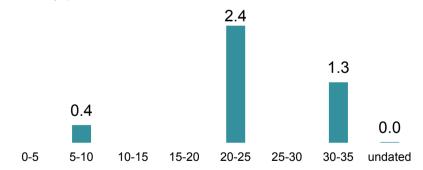


Senior and subordinated bonds¹

Nominal volume	Coupon rate p. a.	Emission/Issue	Maturity	First possible redemption date
€1,250m	Until 2029 3.25%, thereafter variable	2018	2049	26 May 2029
€900m	Until 2022 6.25%, thereafter variable	2012	2042	26 May 2022
£450m	Until 2022 6.625%, thereafter variable	2012	2042	26 May 2022
€1,000m	Until 2021 6.00%, thereafter variable	2011	2041	26 May 2021
US\$342m	7.45%	1996	2026	

€bn

Maturity pattern



Currency pattern

USD

9%

GBP 13%



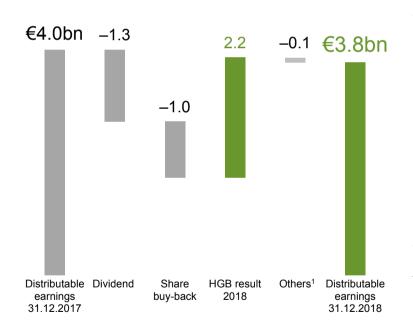
1 As at 31 March 2019. Bonds with a nominal value below €100m not considered. In addition, Munich Re has placed some natural catastrophe bonds.

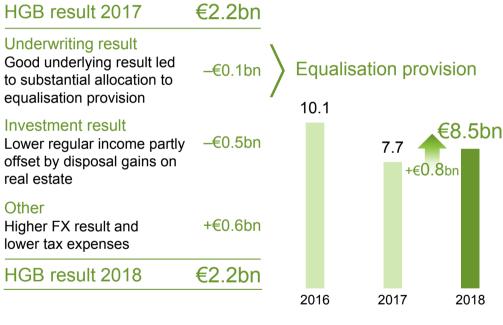
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German GAAP (HGB) – Distributable earnings remain largely stable



HGB result is financing capital repatriation





1 Changes in restrictions on distribution.

Backup: Group - Economic earnings

Munich Re (Group) – Economic earnings 2018 Outlook 2019: >€2.5bn

3.2

0.1

2.0

1.6

-0.2

-0.4

-0.2

-11

-0.5

-0.6

1.9



€bn

Operating impact
New business contribution
Expected in-force contribution
Operating variances in-force business
Debt costs
Other, including holding costs
Market variances
Other including tax
Other, non-operating and non-market changes
Tax
Economic earnings 2018

Actual Operating impact

- Positive operating impact from Reinsurance and ERGO
- New business contribution includes major losses above expectation for first development year and prudency margin in P-C Reinsurance
- Expected in-force contribution mainly driven by expected excess return from risk-bearing assets based on "real world" assumptions (€1.7bn) and unwind of risk margin
- Positive operating variances in in-force business mainly from prior year development in P-C Reinsurance, including release of prudency

Market variances

- Variances from "real world" assumptions with high countervailing effects
- Economic gains from revaluation of real estate, foreign currencies and other¹ compensate for economic losses from credit spreads, equities and risk-free interest rates

Other, including tax

 Taxes on economic earnings components as all other line items are disclosed pre-tax

1 Primarily related to illiquid investments: property, infrastructure, forestry, hedge funds, private equity.

Backup: Group – Economic earnings

P&L attribution – Positive operating impact in RI and ERGO

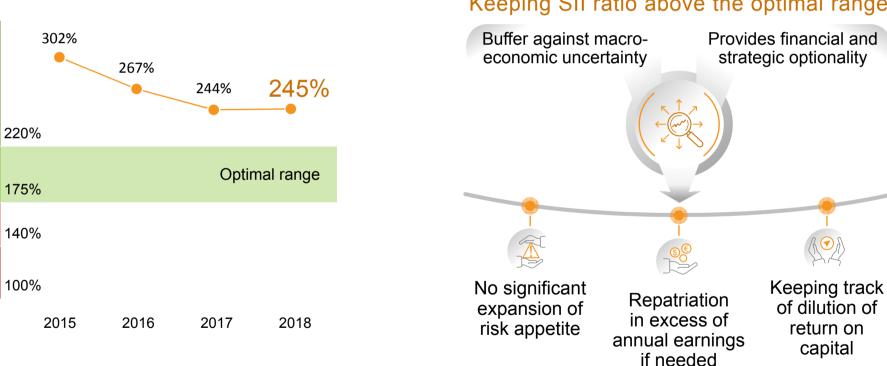


Munich Re (Group) 2018 €bn	Reinsurance L/H	Reinsurance P-C	ERGO L/H Germany	ERGO P-C Germany	ERGO International	Munich Re (Group)
Operating impact	1.3	1.2	0.6	0.2	-0.1	3.2
New business contribution	1.1	-1.5	0.1	0.1	0.3	0.1
Expected in-force contribution	0.6	1.1	0.3	0.1	0.1	2.0
Operating variances in-force business	-0.3	1.8	0.2	0.2	-0.3	1.6
Debt costs	0.0	-0.1	-0.1	0.0	0.0	-0.2
Other, including holding costs	0.0	-0.1	0.0	-0.1	-0.2	-0.4
Market variances	0.3	0.2	-0.5	0.0	-0.2	-0.2
Other, including tax	-0.5	0.0	-0.3	-0.2	0.0	-1.1
Other, non-operating and non-market changes	-0.1	0.0	-0.2	-0.1	-0.1	-0.5
Тах	-0.5	0.0	-0.1	0.0	0.0	-0.6
Economic earnings	1.0	1.4	-0.3	0.1	-0.4	1.9

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Backup: Group - Risk disclosure

Solvency II ratio -Stable capitalisation despite volatile capital markets



Keeping SII ratio above the optimal range

SII ratio does not include long-term guarantees

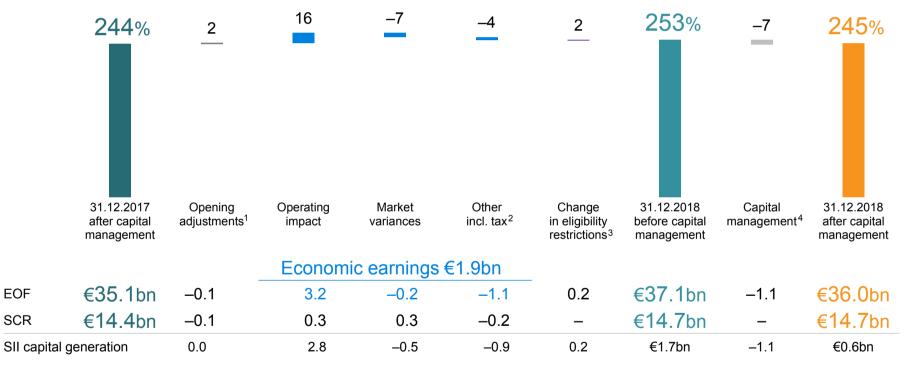
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31

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Backup: Group - Risk disclosure

Solvency II ratio – Solid economic earnings offset slight increase in SCR



1 Opening adjustments incl. M&A, regulatory model changes and other. 2 Operating impact and market variances pre-tax. 3 Change in non-available own fund items. 4 Foreseeable dividend for 2018 (€1.3bn), foreseeable share buy-back in 2019/20 (€1.0bn) and issuance of subordinated bond in 2018 (€1.25bn).

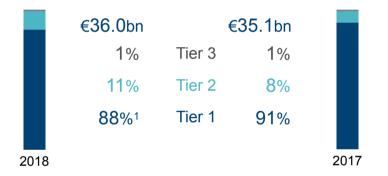
Munich Re – September 2019 32



SCR increase due to business growth – Impact of volatile capital markets well absorbed



Eligible own funds



- Strong operating earnings in Reinsurance and ERGO
 - RI: High NBC² from L&H offset by large losses and initial prudency in P-C – ERGO: positive NBC in all segments
 - Sound expected in-force contribution across all segments
 - Positive variances in P-C RI (favourable run-off result)
- Issuance of hybrid debt slightly increased debt leverage

1 99.97% unrestricted, 0.03% hybrid capital. 2 New business contribution.

SCR before diversification

	2018	2017	
Property-casualty	7.6	6.3	+1.3
Life and Health	5.3	4.9	+0.4
Market	9.2	9.2	-0.0
Credit	3.2	3.4	-0.3

- Selective exposure growth in L&H and P-C Reinsurance
- Investments: Tight duration matching and some de-risking, e.g. reduction of equity exposure
- More balanced risk profile leads to higher diversification benefit

Backup: Group – Risk disclosure

Breakdown of SCR – Property-casualty growth partly offset by better diversification at Group level



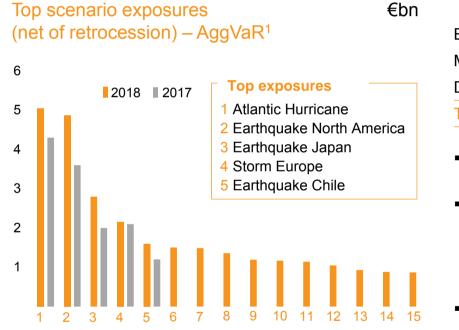
	Grou	C		RI	ERGO	Div.	
Risk category (€bn)	2017	2018	Delta	2018	2018	2018	Remarks
Property-casualty	6.3	7.6	+1.3	7.6	0.4	-0.3	Substantial portfolio growth
Life and Health	4.9	5.3	+0.4	4.5	1.1	-0.4	Exposure growth and capital-market impact
Market	9.2	9.2	-0.0	5.5	5.7	-2.0	
Credit	3.4	3.2	-0.3	2.1	1.2	-0.1	
Operational risk	1.2	1.1	-0.2	0.8	0.5	-0.2	Active risk mitigation
Other ¹	0.7	0.7	+0.0	0.5	0.2		
Simple sum	25.8	27.0	+1.2	20.9	9.2	-3.1	
Diversification	-9.1	-9.9	-0.8	-7.8	-2.0		Diversification benefit at Group level increased due to more balanced risk profile
Tax	-2.3	-2.4	-0.2	-2.3	-0.6		
Total SCR	14.4	14.7	+0.3	10.8	6.6	-2.7	

1 Capital requirements for associated insurance undertakings and other financial sectors, e.g. institutions for occupational retirement provisions.

Backup: Group – Risk disclosure

Property-casualty risk – Increase mainly driven by business growth in P-C Reinsurance





	2018	2017
Basic losses	4.0	3.4
Major losses ²	7.1	5.7
Diversification	-3.5	-2.8
Total	7.6	6.3

Basic losses

Portfolio growth and material model update

Major losses

Despite selective exposure growth, expectation of major nat cat losses in combined ratio remains unchanged – overall share of nat cat premiums is largely stable, also due to growth in proportional and personal lines business

IT Virus

Explicit reflection in the Group Internal Risk Model in 2018

Backup: Group – Risk disclosure

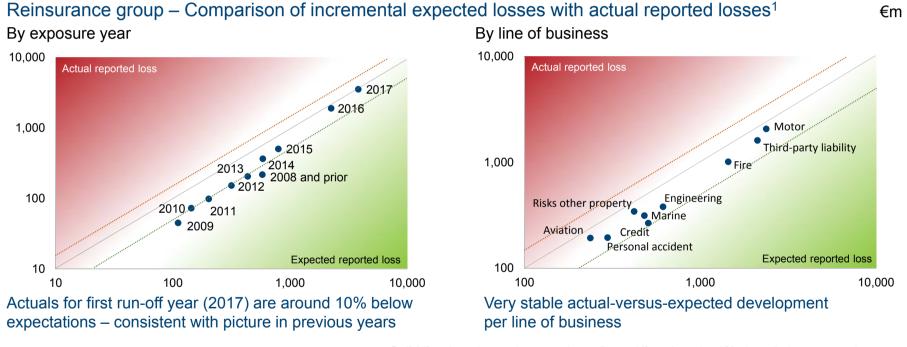
Sensitivities of SII ratio





Backup: Group – Reserves

Very strong reserve position – Actual losses continue to be consistently below actuarial expectations



Legend: Green Actuals below expectation Red Actuals above expectation Solid line Actuals equal expectation Dotted line Actuals 50% above/below expectations

1 Reinsurance group losses as at Q4 2018, not including parts of Risk Solutions, special liabilities and major losses (i.e. events of over €10m for Munich Re's share).

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Reserve position remains strong – Positive run-off result without weakening resilience against future volatility



Ultimate losses¹ – Favourable actual-vs.-expected comparison facilitates ultimate reductions for prior years

					Accide	nt year								-
€m	≤2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total		
31.12.2008	52,184													
31.12.2009	51,699	13,098												
31.12.2010	51,074	13,029	13,394											
31.12.2011	50,556	12,565	13,569	17,385										
31.12.2012	49,563	12,448	13,457	17,479	14,362									
31.12.2013	49,090	12,441	13,543	17,206	14,141	14,219								
31.12.2014	48,489	12,119	13,573	16,807	13,943	14,437	14,124							
31.12.2015	47,826	11,911	13,380	16,683	13,740	14,403	14,169	13,433						
31.12.2016	47,529	11,874	13,160	16,225	13,708	14,113	14,154	13,489	14,308					
31.12.2017	47,385	11,855	13,031	16,197	13,605	14,013	13,942	13,285	14,168	17,425				
31.12.2018	46,885	11,654	12,864	15,910	13,351	13,747	13,682	13,084	14,205	17,450	17,663			60 0 / F
CY 2018 run-off change	499	201	167	286	254	266	260	202	-37	-25	_	2,073	Reinsurance ² ERGO	€2,015m €58m
CY 2018 run-off change (%)	1.1	1.7	1.3	1.8	1.9	1.9	1.9	1.5	-0.3	-0.1	_	-1.2		

1 Basic and major losses; accident-year split partly based on approximations. Adjusted to exchange rates as at 31.12.2018. 2 Basic losses: 1,151m, major losses: €864m.

Backup: Group - Corporate responsibility

Governance – New remuneration system¹ for the Board of Management meets shareholder requirements





1 Effective as at 2018. 2 For 100% achievement of objectives/performance evaluation. Evaluation of overall performance: Adjustment of achievement figures by the Supervisory Board of up to 20 percentage points (loading/reduction). 3 Peer group: Allianz, Axa, Generali, Hannover Re, SCOR, Swiss Re, Zurich.

Reinsurance



Backup: Reinsurance

Moderate reinsurance premium growth expected



P-C reinsurance: Ceded premiums 2018

P-C insurance: real growth rates¹

				Reinst	Reinsurance		Primary insurance	
				16–18	19–21	16–18	19–21	
	Europe	€73bn	32%	0.5%	1%	1%	1.5%	
AP 23	North America	€72bn	32%	3%	2%	3%	2%	
	Asia Pacific	€55bn	24%	1.5%	3%	5%	5%	
	Latin America ²	€15bn	6%	2%	1%	1%	3%	
	Africa/Middle East	€13bn	6%	1%	2%	2.5%	3%	
	Total	~€228bn		1.5%	2%	3%	3%	

1 CAGR. 2 Excluding Venezuela. Source: Munich Re Economic Research

Backup: Reinsurance

Munich Re – Leading global reinsurer



Rank	Company	Country	Net reinsurance premiums written 2017 (US\$ bn)
1	Munich Re	Germany	36.5
2	Swiss Re	Switzerland	32.3
3	Berkshire Hathaway Re	USA	24.2
4	Hannover Re	Germany	19.3
5	SCOR	France	16.2
6	Lloyd's	UK	10.8
7	China Re	China	10.0
8	Reinsurance Group of America	USA	9.8
9	Everest Re	Bermuda	6.2
10	General Insurance of India (GIC Re)	India	5.8
	Total top 10		171.1

Source: Standard & Poor's, September 2018

Backup: Reinsurance

Reinsurance – Overview



		2018	2017	2016	2015	2014
Gross written premiums	€bn	31.3	31.6	31.5	28.2	26.8
Investments	€bn	85.6	85.8	91.9	89.2	88.0
Net technical provisions	€bn	72.4	68.1	67.1	65.4	63.5
Major losses (net)	€m	2,152	4,314	1,542	1,046	1,162
Thereof natural catastrophes	€m	1,256	3,678	929	149	538

%

Property-casualty – GWP by region 2018





Backup: Reinsurance Property-casualty - Portfolio

Increased top line – Well-balanced diversified portfolio



- Growth in traditional and tailormade reinsurance business
- Lower share of Risk Solutions mainly due to growth of remaining business



- Well-balanced traditional portfolio
- Slight move towards casualty



- Dominated by US business around 60%
- Adjusted for currency effects stable premium overall despite exit from underperforming business

Rounded figures. 1 Gross premiums written in property-casualty reinsurance as at 31.12.2018 (31.12.2017). 2 Aviation, marine and credit.



Backup: Reinsurance Property-casualty - Portfolio

Portfolio management and high share of proportional business support earnings resilience



Traditional % Casualty motor Proportional Aviation Facultative 32 (28) 1(1)77 (75) 8 (9) Marine TOTAL TOTAL 2(2)€16bn €16bn Credit 4 (5) XL Agro Casualty ex motor 15 (16) 4 (6) 19 (20) Property ex Property nat cat XL nat cat XL 30 (29) 7 (9)

Portfolio developments

Share increases

- Proportional property and casualty – following the realisation of profitable business opportunities
- Accordingly, ongoing slight shift towards proportional business

Share decreases

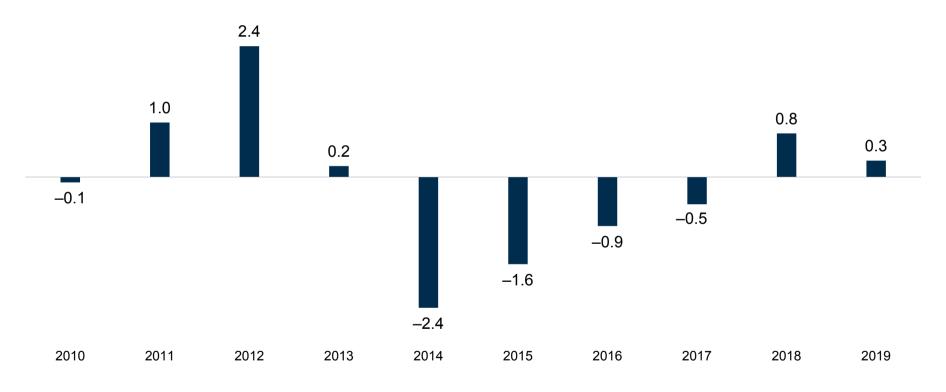
- Top-line reduction in agro driven by a merger-driven cancellation, partly compensated for by selected expansions
- Relatively stable nat cat XL volume, reduced share due to growth in proportional business

Rounded figures. 1 Traditional reinsurance, incl. tailor-made solutions. Allocation based on management view, not comparable with IFRS reporting.

Backup: Reinsurance Property-casualty - Renewals

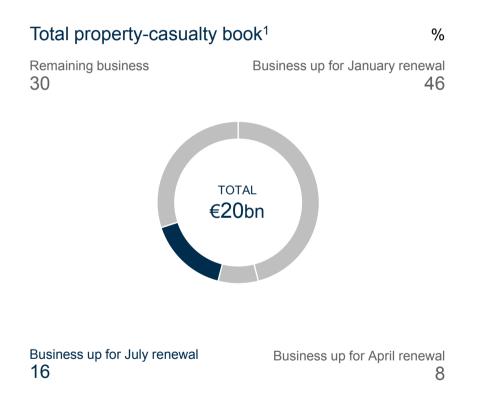
Renewal results – Nominal price changes since 2010

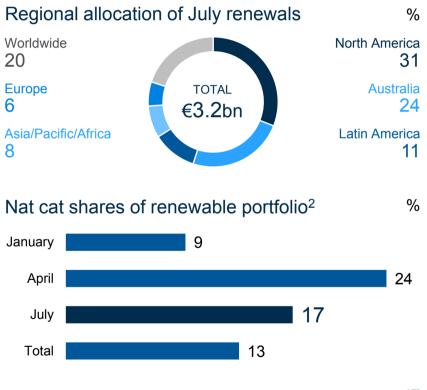




Backup: Reinsurance Property-casualty - July renewals 2019

July renewals – Overview





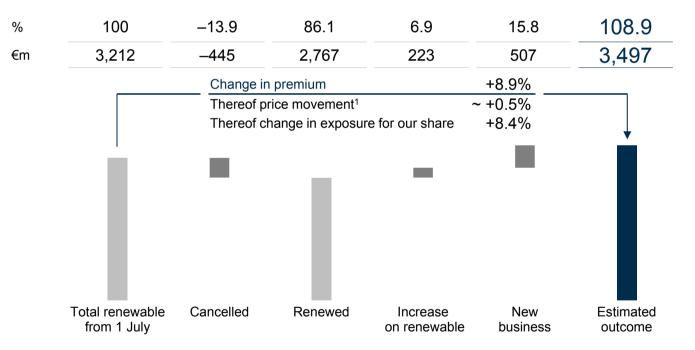
1 Gross premiums written. Management view - not fully comparable with IFRS figures. 2 Total refers to total P-C book, incl. remaining business.



Backup: Reinsurance Property-casualty - July renewals 2019

Positive price dynamic continues

July renewals 2019



Munich RE

- Munich Re able to continue its growth, and in particular to generate attractive new business in the Americas
- Significant price improvement in lossaffected markets, stable development elsewhere
- Overall risk-adjusted price change of ~0.5% includes increased loss expectations

1 Price movement is risk-adjusted, i.e. includes claims inflation/loss trend and is adjusted for portfolio mix effects, including cancelled and new business.

Backup: Reinsurance Property-casualty

Large-loss experience in line with expectation overall





Munich Re's experience in 2018

Cautious loss picks for prior years' major claims facilitating positive run-off over time, resulting in an 11.6%-point majorloss ratio close to average expectation (~12%)

1 Fiscal-year view. Nat cat: Earthquake in 2011, hurricanes and wildfires in 2017, typhoons and wildfires in 2018. Man-made: Continuous number of fire losses – Other categories fluctuate more (e.g. satellite, mining)

Consistent underwriting action ...

- Update models, pricing and underwriting for visible trends and topics
- Develop understanding for new categories of loss relationships or indirect drivers of losses



... and clientcentered solutions

- Offer protection where feasible
- Develop new covers for clients' needs, e.g. US flood cover
- Support clients in risk mitigation measures, e.g. building code promotion

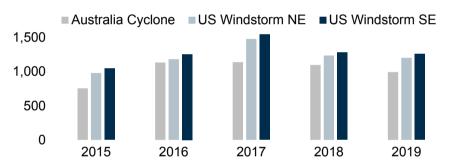
Backup: Reinsurance Property-casualty - Risk trading

Retrocession – Munich Re is utilising multiple instruments, consistent market approach/placements well received

€m



Retrocession – Maximum in-force protection per nat cat scenario¹



- Protection against peak risks via multiple instruments mainly traditional retrocession (CXL) and sidecars
- Well-balanced buying strategy reflecting
 - strong Munich Re capital base and risk-bearing capacity,
 - expected IFRS result stabilisation,
 - market terms

Munich Re key channels to tap alternative capacity sources

Traditional retrocession

- One of the largest retrocession programmes globally
- Munich Re's retro placements well received capacity constraints in the market only with limited effect

Sidecar programme²

- One of the largest sidecar programmes in the market (US\$ 700m); QS cessions of certain lines of business
- Placed with a broad range of investors and targeting long-term partnerships with large institutional accounts
- Two products: (1) placed with broad investor group,
 (2) bilateral (single counterparty)

Backup: Reinsurance Property-casualty - Risk trading

Munich Re's maximum in-force nat cat protection



Nat cat protection before reinstatement premiums, as at January 2019 Cat bonds 1,500 Risk swaps Sidecars Indemnity retro 1,000 500 0 **US Windstorm US Windstorm** US EU EU Australia Japan Northeast Southeast Earthquake Windstorm Other perils Earthquake Cyclone

€m

51 Munich Re – September 2019

Backup: Reinsurance Property-casualty - Risk trading

Outstanding insurance-linked securities (ILS) – Munich Re's Capital Partners unit is a recognised player in the ILS market

	Transaction	Closing	Maturity	Volume	Perils covered			
For clients	Pandemic Emergency Financing Facility	7/2017	7/2020	US\$ 225m	Class A – Pandemic influenza, Coronavirus	 Generation of fee income 		
Gilorito				US\$ 95m	Class B – Filovirus, Coronavirus, Lassa Fever, Rift Valley Fever, and Crimean Congo Hemorrhagic Fever	 Active investor in 		
	Atmos Re DAC	2/2019	2/2022	€45m	Atmospheric perils, flood, snow pressure	the primary and secondary market		
	Lion Re II DAC	6/2017	7/2021	€200m	Europe Windstorm, Italy Earthquake, Europe Flood	2		
	Vitality Re X Ltd.	1/2019	1/2023	US\$ 200m	US health risks	 Improvement of own risk/return 		
	Vitality Re IX Ltd.	1/2018	1/2022	US\$ 200m US health risks		profile and cost		
	Vitality Re VIII Ltd.	1/2017	1/2021	US\$ 200m	US health risks	efficiency		
	Vitality Re VII Ltd.	1/2016	1/2020	US\$ 200m	US health risks	 Utilisation of 		
	Fonden	8/2017	8/2020	US\$ 150m	Class A – Mexico Earthquake	unexhausted risk		
		8/2017	12/2019	US\$ 100m	Class B – Atlantic Hurricane	budgets		
	l	8/2017	12/2019	US\$ 110m	Class C – Pacific Earthquake	 Offering one-stop 		
For Munich	Eden Re II Ltd. (Series 2018-1)	12/2017	3/2022	US\$ 300m	Various perils	shopping to clients as sponsors		
Re's	Eden Re II Ltd. (Series 2017-1)	12/2016	3/2021	US\$ 360m	Various perils			
book ¹	Queen Street XII Re DAC	5/2016	4/2020	US\$ 190m	Hurricane US & Windstorm Europe			

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1 Excluding private transactions.

Backup: Reinsurance Property-casualty - Digital Partners

<u> </u>

Digital Partners – Building digital insurance with partners

Examples nextinsurance

BOUGHT BY MANY



Making insurance like the rest of the internet

DIGITAI **ECONOMY**

Insuring the sharing and gig economies

DIGITAL DATA

Using new sources of data to price risk better



VRISK

Examples trov

(C) INSHUR

VALUE PROPOSITION Global multi-line capacity

Product design and data

Agile delivery

Venture capital

Flexible technical architecture



ACHIEVEMENTS

- ✓ Growth above expectation
- Larger partnerships including BMW UK and Google Waymo
- Pleasing loss development
- ✓ Strong international expansion (US, Europe, Asia)

Backup: Reinsurance Property-casualty - IoT

Internet of Things – Developing insurance, finance and technology solutions

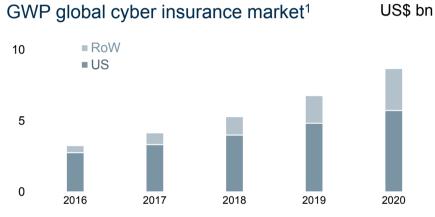


SME	MID to LARGE Insurance and financial solutions	LARGE INDUSTRIAL			
Loss prevention via sensor deployment	End-to-end IoT implementations	Financial asset and risk management			
Direct (HSB) or white- labelling for insurers	Direct (HSB/relayr)	Direct/via industry partners			
We bring the technology		Partners bring the technology			
 Acquisition of meshify Turnkey IoT solutions in place¹ Ongoing commercialisation 	 Acquisition of relayr. 	 Partnerships with leading IoT industrials BOSCH MARK KUKA 			

1 Applications monitored include water detection, freeze loss, perishable goods, mould and more.

Backup: Reinsurance Property-casualty - Cyber (re)insurance

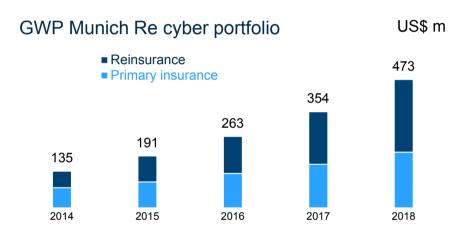
Strong long-term growth in cyber (re)insurance expected – Munich Re with leading-edge expertise and market presence



REINSURANCE: First mover and global market leader

- Dynamic growth through joint projects with cedants
- Steady growth in the US, accelerated growth in Europe
- Strong accumulation models, increased expert headcount
- Network with external cyber-service providers further extended (underwriting, data, claims services for cedants/insureds)

1 Munich Re estimates.



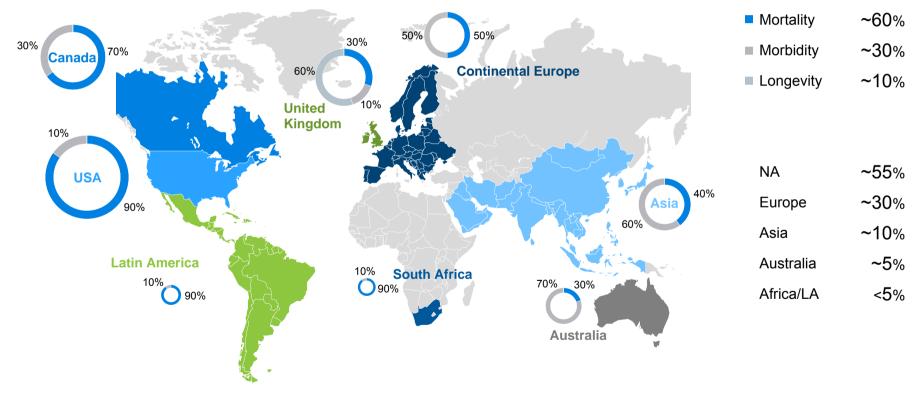
PRIMARY INSURANCE: Specialised single-risk taker

- Hartford Steam Boiler: Established player in the US for SMEs and individuals
- Corporate Insurance Partner: Focus on larger corporate clients – Cooperation with IT providers and Beazley

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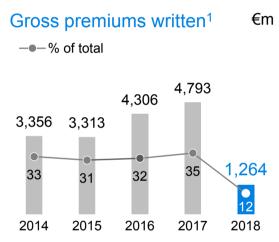
Well-diversified portfolio: Overweight in North America, and traditional mortality risk

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Size of bubbles indicative of present value of future claims.

Financially Motivated Reinsurance – Strong demand prevails



Technical result¹ €m ---% of total 127 136 127 ---% 68 37 34 17 4 2014 2015 2016 2017 2018

New business contribution² €m ---% of total 257 214 205 178 73 23 22 19 17

2016

Portfolio development

- Geographically well-diversified portfolio
- Drop in top line due to scheduled termination and restructuring of two particularly premium-intensive transactions
- 2018 result affected by depreciation of acquisition expenses in Australia

Expectations going forward

- Demand expected to remain high
- Transaction types tailored to client needs
- Number and size of transactions will vary on an annual basis

2014

2015

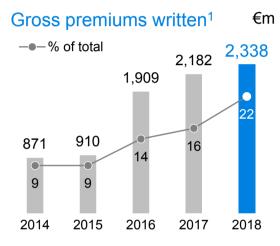
1 2014–15 Life only, from 2016 including Health. Technical result incl. fee income. 2 2014 MCEV, from 2015 Solvency II, from 2017 including Health.

2017

2018

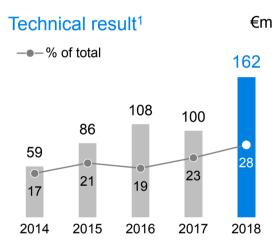


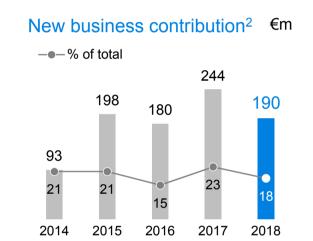
Asia – Growth potential confirmed



Portfolio development

- Sustained growth path
- Focus on Greater China and FinMoRe
- Tailor-made market and client strategies





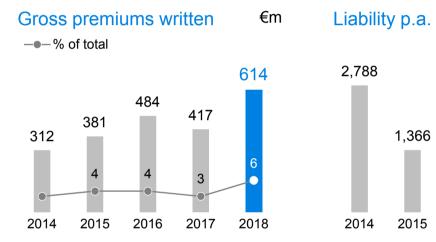
Expectations going forward

- Growth path in the region prevails
- High demand for solvency relief and financing solutions
- Competition expected to increase
- Closely watch product trends, particularly in critical illness

1 2014–15 Life only, from 2016 including Health. Technical result incl. fee income. 2 2014 MCEV, from 2015 Solvency II, from 2017 including Health.



Longevity – Book developed carefully in line with risk appetite



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Strategic proposition

- Longevity primarily written as a risk-management tool
- Prudent approach in pricing and valuation

Portfolio development

- Portfolio comprises longevity transactions in the UK
- Market entry in 2011 after in-depth research
- Claims emerge better than expected in pricing
- Positive contribution to IFRS and SII earnings
- 2018 extraordinarily strong year in terms of new business

Expectations going forward

2018

€m

3.292

1,884

2016

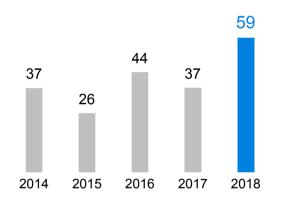
697

2017

- Develop portfolio within clearly defined risk tolerance
- Careful investigation of expansion beyond UK

Asset protection – Comprehensive market-risk solutions gained Munich RE spectra greater significance with accelerated growth in the future

IFRS earnings contribution¹ €m



Portfolio development

- Initial focus on Europe and Asia (mainly Japan)
- More recently expansion across the US and Asia
- Portfolio has gained stand-alone significance
- Growing contribution to IFRS earnings and new business contribution

1 Recognised in non-technical result

Strategic proposition

- Offer comprehensive solutions to clients globally to manage their market risks and returns
- Innovate new business, optimise in-force business, and boost asset returns of (life) insurers, pension providers and other institutional investors
- Capitalise on growth opportunities for the global savings, retirement and investment industry
- Leverage capital market, structuring, accounting, legal, and regulatory expertise on the basis of strong technical and quantitative capabilities
- State-of-the-art hedging platform to transfer financial risks to markets

Expectations going forward

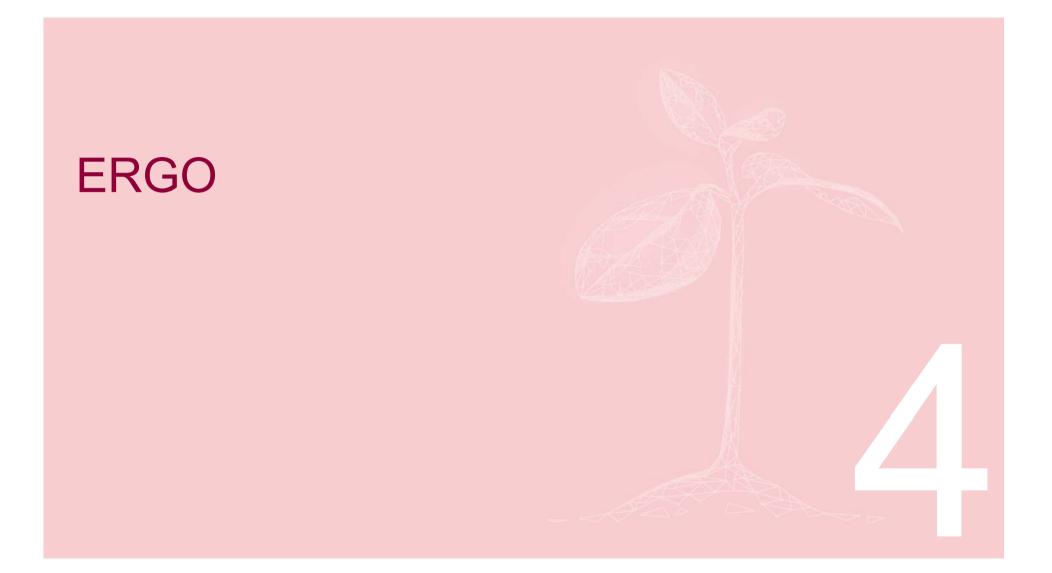
- Intensify coverage of existing markets and expand to new markets and regions
- Accelerate growth by scaling up the organisation globally and increasing visibility
- Further broaden the offering in the area of savings, retirement and investment products

New-business profitability continues to be strong





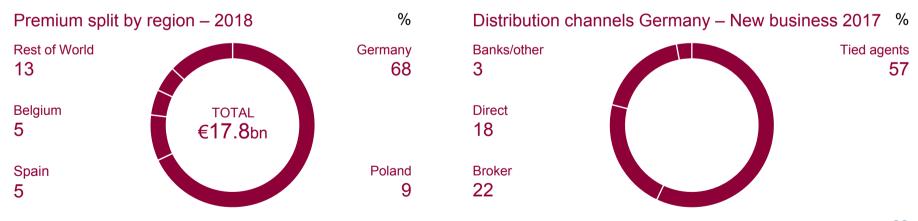
- Very good new-business profitability relative to economic risk capital and total investment
- Composition of new business portfolio main driver of changes over the years
- Payback period particularly influenced by share of financing business



ERGO – Overview



		2018	2017	2016	2015	2014
Gross written premiums €	bn	17.8	17.5	17.4	16.5	16.7
Investments €	bn	139.7	141.1	139.4	131.0	135.5
Net technical provisions €	bn	135.9	137.6	135.2	130.3	132.4
Combined ratio p-c Germany	%	96.0	97.5	97.0	97.9	95.3
Combined ratio p-c International	%	94.6	95.3	98.0	104.7	97.3

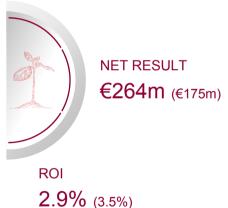


Figures from 2016 including international primary insurance business of Munich Health.

Life and Health Germany

Status 2018

GROSS PREMIUMS WRITTEN €9.3bn (€9.2bn)



Life

New IT platform: Reducing legacy risks, lifting efficiency gains

- Life portfolio management partnership with IBM
- Ramp-up phase successfully completed, migration of first tranche expected for Q1 2020
- Reduction of IT costs (sourcing/partnership) and realisation of efficiency gains

Maintain sustainable profitability

- Strengthen earnings potential of back book over time while maintaining financial stability
- Operational and organisational separation of classic life business completed
- Continued hedging programme via receiver swaptions and new interest-rate reinsurance programme to mitigate interest-rate risk



Health

Strong position in comprehensive insurance

- Stable and attractive earnings contribution
- Offering for online and hybrid customers further developed
- Position as second biggest insurer in German market (GWP: €3.7bn) confirmed

Market leadership in supplementary health

- Further growth in supplementary health business (+12%¹)
- ERGO clear market leader (GWP: €1.6bn) expansion in long-term care and direct insurance
- Hybrid customer: All relevant supplementary health products available online

Life Germany – Key figures and ZZR

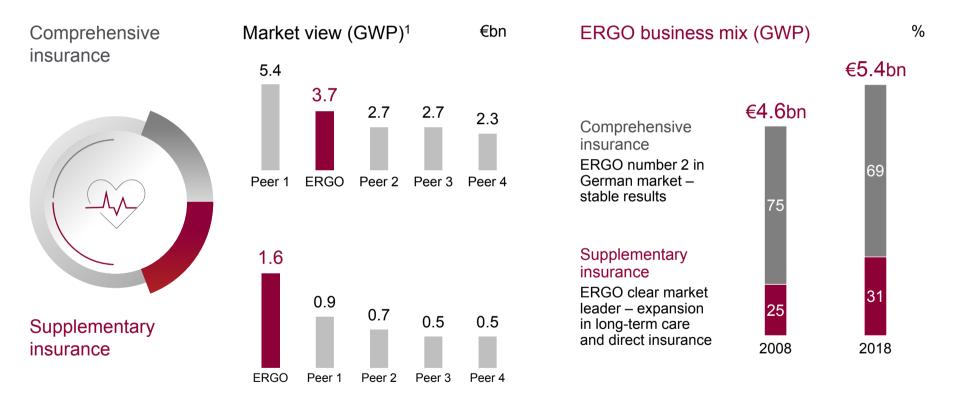
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				%
Key figures ¹	2021	2018	2017	2016
Reinvestment yield	n.a.	1.6	1.5	1.3
Average yield	~2.7	2.9	3.0	3.3
Average guarantee ²	~1.2	2.0	2.1	2.4
				€bn
Key financials ¹		2018	2017	2016
Free RfB		1.3	1.4	1.2
Terminal bonus fund		0.9	0.9	1.1
Unrealised gains		9.4	10.4	13.7
Accumulated ZZR		5.4	5.0	3.6

1 German GAAP figures. 2 Actuarial interest rate incl. effect from ZZR, not considering changes from corridor method.

Health Germany – Stabilise comprehensive insurance, strengthen supplementary insurance





1 Gross premiums written as at 31.12.2017. Source: PKV Verband.

Property-casualty Germany



GROSS PREMIUMS WRITTEN €3.4bn (€3.3bn)

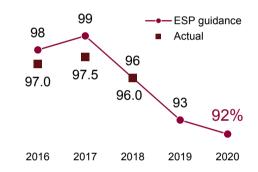


COMBINED RATIO 96.0% (97.5%)

Combined ratio - On track to 92% target

Improvement driven by

- Top-line growth
- Decrease in expense ratio mainly driven by realisation of efficiency gains and decreasing ESP investments
- Decrease in claims ratio influenced by E2E digitalisation of claims processes, e.g. motor, further product lines planned



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Products – Achievements in 2018

- Modularisation and simplification of retail product portfolio
- New IT back-end system and pricing engine for motor business implemented, ~7m policies migrated
- New motor tariff with simplified product model launched, further product optimisations planned
- Profitable premium growth in commercial and industrial business

Figures as at 31.12.2018 (31.12.2017)

ERGO

International

Status 2018

GROSS PREMIUMS WRITTEN P-C €2.8bn (€2.8bn) Life €0.8bn (€0.9bn) Health €1.4bn (€1.4bn)

> NET RESULT €103m (€40m)

COMBINED RATIO 94.6% (95.3%)

Strengthen presence in core markets

- Poland and Baltics: Significant contribution, continuous high profitability of motor business
- Greece: Bancassurance cooperation extended (10 years)
- Spain Health: Operational improvement leading to higher profit
- Belgium Health: Premium growth² (+7%), product portfolio de-risking started

Capture opportunities in dedicated growth markets

- Positive development in major growth markets despite adverse currency effects
- India: Good premium growth² (+14%)
- China: Significant premium increase² (+45%)

Execute international optimisation

- Progress in defined portfolio optimisation: Sale of 13 entities¹
- Implementation of cost optimisation programme: Planned savings of ~€80m (gross, run rate) until 2020, efficiency measures on track



Financial highlights H1 2019



Backup: Financial highlights H1 2019 - Reinsurance

Reinsurance Property-casualty

€m

Gross premiums written

H1 20189,940Foreign exchange380Divestments/investments-98Organic change104H1 201910,327

- Positive FX effects mainly driven by US\$
- Sale of MSP Underwriting
- Organic growth mainly in liability

Major result drivers

	H1 2019	H1 2018		Q2 2019	Q2 2018		
Technical result	1,297	933	364	910	184	726	
Non-technical result	104	283	-179	47	194	-147	
thereof investment result	830	900	-70	445	496	-51	
Other	-330	-290	-40	-253	-43	-210	
Net result	1.071	925	146	704	335	369	

Technical result

- Very low major losses, especially in Q2
- Q2: Transactions with corresponding release of basic-loss reserves and particularly favourable development in some lines of business
- Q2: Elevated normalised combined ratio due to seasonality effects and adverse claims development in our North American Risk Solutions business

Investment result

- Increased regular income and disposal gains from sale of fixed income investments
- Q2: Return on investment: 2.8%

Other

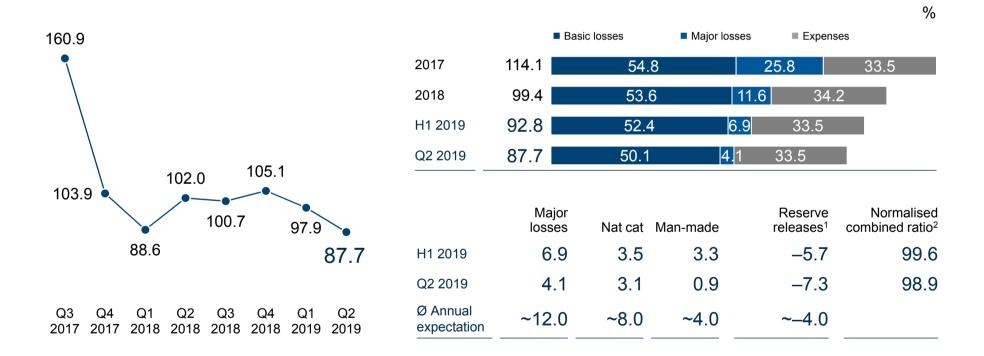
 H1: FX result of €114m (€1m), thereof €75m in Q2



€m

Backup: Financial highlights H1 2019 - Reinsurance

Reinsurance Property-casualty – Combined ratio



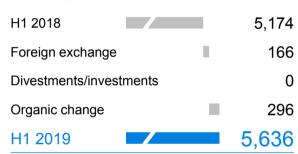
1 Basic losses prior years, already adjusted for directly corresponding sliding-scale and profit-commission effects. 2 Based on reserve releases of 4%-pts.

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Backup: Financial highlights H1 2019 - Reinsurance

Reinsurance Life and Health

Gross premiums written



- Positive FX effects mainly driven by US\$
- Organic growth in Asia and Europe

Major result drivers

€m

	H1 2019	H1 2018		Q2 2019	Q2 2018	
Technical result	114	296	-182	36	156	-120
Non-technical result	281	249	32	170	167	2
thereof investment result	580	510	70	340	302	38
Other	-60	-100	40	-51	-38	-13
Net result	335	444	-110	154	285	-131

Technical result, incl. fee income of €169m

- Q2 negatively impacted by
 - Australia: Negative claims experience in disability business and DAC write-off related to "protect your super" legislation
 - Canada: Shortening of asset duration
- Overall, claims experience in line with expectations in all major markets except for Australia

Investment result

- Disposal gains due to shortening of asset duration in Canada exceeding reduction in the technical result
- Q2: Return on investment: 4.9%

Other

 H1: FX result of €42m vs €5m, thereof €22m in Q2

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€m

ERGO Life and Health Germany

€m

Gross premiums written



Health: +€83m

Increase mainly driven by Travel; growth in comprehensive and supplementary health insurance

- Digital Ventures: +€21m Growth driven by dental tariffs and nexible
- Life: -€79m

Decline in regular premiums from ordinary attrition of back book, growth from new products

Major result drivers

	H1 2019	H1 2018		Q2 2019	Q2 2018	
Technical result	198	158	40	88	67	20
Non-technical result	179	59	120	128	-1	128
thereof investment result	2,000	1,857	144	1,008	807	201
Other	-242	-196	-46	-143	-81	-62
Net result	135	21	114	72	-15	87

Technical result

 H1/Q2: Increase driven by higher shareholder profit participation

Investment result

- H1: Disposal gains to finance ZZR
- Q2: Negative contribution from equity derivatives overcompensated by positive result from interest-rate hedging
- Q2: Return on investment: 3.2%

Other

- H1: Higher tax expenses, partly due to a positive one-off in 2018
- Q2: Negative FX result



€m

ERGO Property-casualty Germany

€m

Gross premiums written



- Organic growth driven by Fire/property (+€37m), other insurance (+€35m, primarily marine) and liability (+€23m)
- Positive development by earlier receipt of some large contracts in broker channel

Major result drivers

	H1 2019	H1 2018		Q2 2019	Q2 2018	
Technical result	150	92	58	127	98	29
Non-technical result	33	47	-14	7	27	-20
thereof investment result	71	77	-6	27	40	-14
Other	-114	-82	-32	-79	-68	-11
Net result	69	57	12	55	57	-2

Technical result

H1 combined ratio of 91.9% supports annual guidance – very good C/R of 86.2% in Q2 driven by:

- Profitable premium growth
- Overall good claims experience, with large losses below expectation
- Reversal of seasonality in premiums which had a negative impact in Q1

Investment result

- Q2: Strong equity markets leading to losses from equity derivatives
- Q2: Return on investment: 1.4%

Other

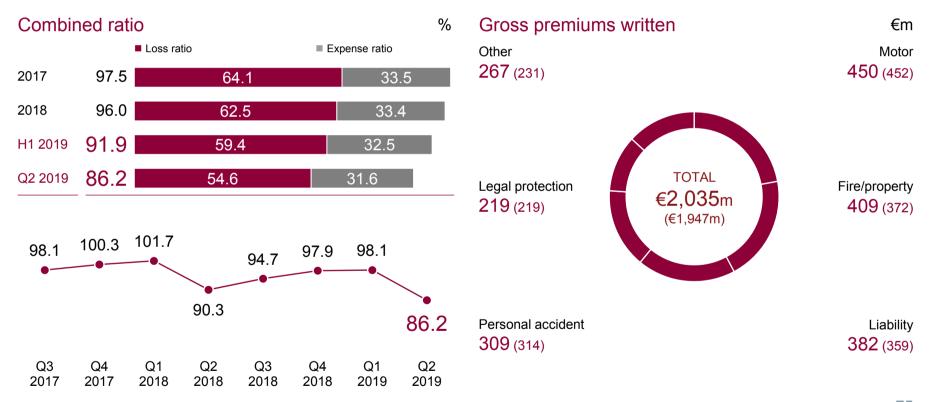
- H1: Positive tax one-off in 2018
- Q2: Negative FX result



€m

ERGO Property-casualty Germany





ERGO International

Gross premiums written

H1 2018 2,619 Foreign exchange -30 Divestments/investments -53 Organic change -16 H1 2019 2,519

Life: –€89m

- Russia: Disposal of life business
- Belgium: Impacted by run-down
- Austria: Reduced new business and expiring traditional book

P-C: –€34m

Growth in Poland, Baltics and Austria more than offset by divestments and FX effects

Health: +€24m

Premium adjustments in Belgium from 2018, growth of individual and burial business in Spain

Major result drivers

€m

	H1 2019	H1 2018		Q2 2019	Q2 2018	
Technical result	95	111	-16	51	63	-12
Non-technical result	-7	54	-61	7	41	-35
thereof investment result	160	211	-51	81	113	-32
Other	-71	-57	-14	-49	-39	-11
Net result	16	107	-90	8	66	-58

Technical result

- Q2: Higher benefits at ERGO Belgium
- P-C: Profitable premium growth in Poland
- Health: Strong Q2 result in Spain, reversing negative seasonal effect of Q1
- Overall, combined ratio in H1/Q2 in line with full-year guidance

Investment result

- Disposal losses related to portfolio optimisation, in particular sale of ERGO Turkey in Q2 (–€39m)
- Q2: Return on investment: 1.8%

Other

 Q2: Noticeable decline of FX result driven by deconsolidation effects



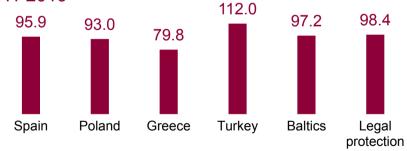
€m

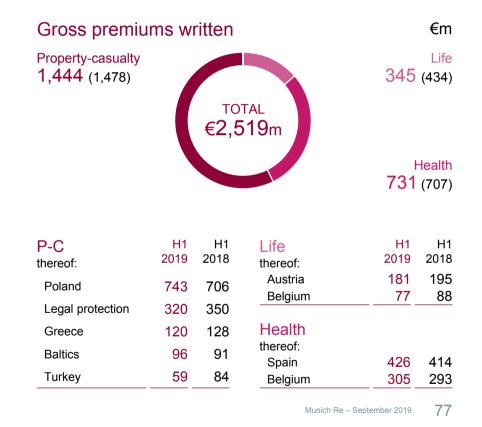
ERGO International





H1 2019





Investments

Investment result H1 2019

Munich RE 🗲

€m	Q2 2019	Return ¹	H1 2019	Return ¹	H1 2018	Return ¹
Regular income	1,848	3.0%	3,459	2.9%	3,329	2.9%
Write-ups/write-downs	-98	-0.2%	-181	-0.2%	-256	-0.2%
Disposal gains/losses	436	0.7%	1,038	0.9%	866	0.7%
Derivatives ²	-97	-0.2%	-329	-0.3%	-70	-0.1%
Other income/expenses	-189	-0.3%	-346	-0.3%	-314	-0.3%
Investment result	1,900	3.1%	3,641	3.0%	3,554	3.1%
Total return		11.7%		12.1%		0.5%

3-month reinvestment yie	ld Q2 2019	Write-ups/ write-downs	Disposal gains/losses	Derivatives	H1 2019	Write-ups/ write-downs	Disposal gains/losses	Derivatives
Q2 2019 2.2	% Fixed income	-9	313	174	Fixed income	-17	682	189
Q1 2019 2.1	Equities	-94	60	-225	Equities	-162	248	-545
Q12019 2.1	Commodities/Inflation	33	0	-27	Commodities/Inflation	38	0	21
Q4 2018 2.1	% Other	29	64	-19	Other	40	108	7

1 Annualised return on quarterly weighted investments (market values) in %. Impact from dividends in regular income: 0.6%-points in Q2 2019 and 0.4%-points in H1 2019 2 Result from derivatives without regular income and other income/expenses.

Return on investment by asset class and segment Mi H1 2019

% ¹	Regular income	Write-ups/ -downs	Disposal result	Extraord. derivative result	Other inc./exp.	Rol	⊚ Market value (€m)
Afs fixed-income	2.3	0.0	0.9	0.0	0.0	3.2	127.723
Afs non-fixed-income	5.5	-1.9	2.9	0.0	0.0	6.5	17.130
Derivatives	7.2	0.0	0.0	-32.0	0.0	-25.8	2.056
Loans	2.8	0.0	0.3	0.0	0.0	3.1	65.525
Real estate	4.8	-1.1	2.2	0.0	0.0	5.9	10.679
Other ²	3.3	0.7	-0.1	0.0	0.0	-0.3	16.048
Total	2.9	-0.2	0.9	-0.3	-0.3	3.0	239.161
Reinsurance	3.0	-0.2	0.9	-0.2	-0.4	3.1	90.055
ERGO	2.8	-0.1	0.9	-0.3	-0.2	3.0	149.106

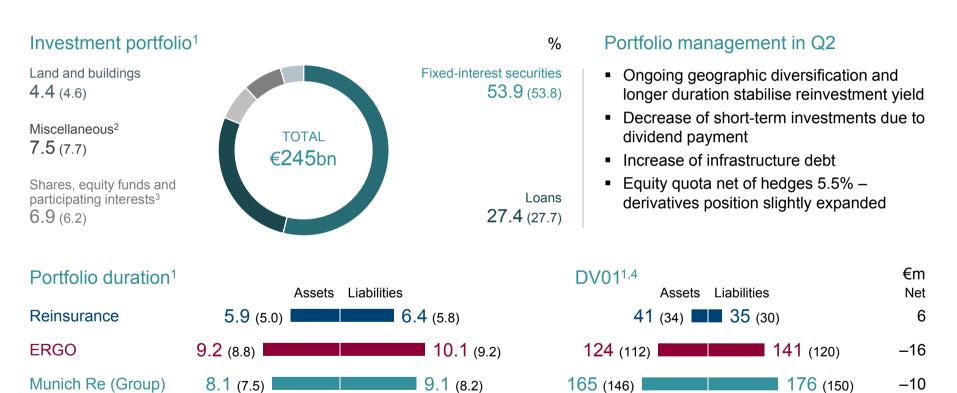


1 Annualised. 2 Including management expenses.



Investment portfolio H1 2019





1 Market values as at 30.6.2019 (31.12.2018). 2 Deposits retained on assumed reinsurance, deposits with banks, investment funds (excl. equities), derivatives and investments in renewable energies and gold. 3 Net of hedges: 5.5% (5.2%). 4 Market value change due to a parallel downward shift in yield curve by one basis point, considering the portfolio size of assets and liabilities (pre-tax). Negative net DV01 means rising interest rates are beneficial.

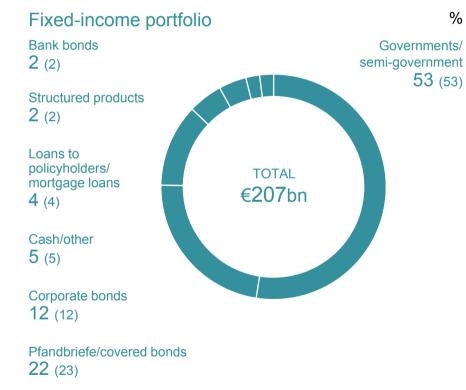
Investment portfolio Fixed-interest securities and miscellaneous – H1 2019



1 Approximation – not fully comparable with IFRS figures. Market values as at 30.6.2019 (31.12.2018). 2 Non-fixed derivatives. 3 Non-fixed property funds and non-fixed bond funds



Fixed-income portfolio Allocation and regional structure – H1 2019



Approximation – not fully comparable with IFRS figures. Market values as at 30.6.2019 (31.12.2018).

Regional breakdown					
	Without	With	Total		
	policyholder par	ticipation	30.6.2019	31.12.2018	
Germany	4.6	23.0	27.6	28.2	
US	13.0	1.8	14.8	14.3	
France	2.4	5.4	7.8	8.1	
UK	3.0	2.1	5.0	4.9	
Canada	4.0	0.6	4.6	4.5	
Netherlands	1.4	2.9	4.3	4.5	
Supranationals	0.7	3.1	3.8	3.7	
Spain	1.0	2.1	3.1	2.8	
Australia	2.5	0.5	2.9	2.8	
Austria	0.5	2.1	2.6	2.5	
Belgium	0.6	1.6	2.2	2.3	
Ireland	0.8	1.4	2.2	2.1	
Poland	1.3	0.5	1.8	1.7	
Sweden	0.2	1.3	1.5	1.6	
Italy	0.5	0.9	1.3	1.7	
Other	6.6	7.8	14.4	14.2	
Total	43.1	56.9	100.0	100.0	

Munich RE

Fixed-income portfolio Rating and maturity structure – H1 2019



Rating structure	Market value (€bn)	AAA (%)	AA	А	BBB	BB	<bb< th=""><th>NR</th></bb<>	NR
Total	207.2	42	25	13	12	3	0	5 ¹
Governments/semi-government	109.9	43	33	16	7	2	-	_
Pfandbriefe/covered bonds	46.4	74	23	2	0	_	-	1
Corporate bonds (excluding bank bonds)	25.5	2	4	20	60	12	2	0
Bank bonds	3.6	_	13	46	34	6	0	1
Structured products	4.1	56	32	10	2	0	0	0
Maturity structure	Average maturity (years)	0-1 years (%)	1-3 years	3-5 years	5-7 years	7-10 years	>10 years	n.a.
Total	9.7	9	13	14	13	15	34	3
Governments/semi-government	11.0	7	12	11	11	15	44	_
Pfandbriefe/covered bonds	7.0	6	13	18	19	21	22	_
Corporate bonds (excluding bank bonds)	7.4	10	19	20	14	14	24	_
Bank bonds	2.8	30	29	26	7	6	2	_

Approximation – not fully comparable with IFRS figures. Market values as at 30.6.2019 (31.12.2018). 1 Mainly loans to policyholders, mortgage loans and bank deposits.

Fixed-income portfolio Corporate bonds and bank bonds – H1 2019

%

Corporate bonds – Sector breakdown

	30.6.19	31.12.18
Utilities	14.1	16.2
Industrial goods and services	14.0	13.7
Oil and gas	11.9	11.9
Financial services	9.6	9.0
Telecommunications	7.9	7.9
Healthcare	7.7	7.3
Technology	6.0	4.8
Food and beverages	4.0	3.7
Media	3.9	4.1
Automobiles	3.2	3.0
Personal and household goods	3.2	3.7
Retail	3.2	3.3
Basic resources	3.1	2.7
Other	8.3	8.7

Bank bonds - Regional breakdown % Total Senior bonds Subordinated Loss-bearing 30.6.2019 31.12.2018 US 35.1 6.4 0.4 41.9 43.4 Canada 8.3 1.5 0.0 9.8 5.4 Ireland 9.6 0.0 0.0 9.6 8.6 Germany 4.3 0.6 4.6 9.6 11.8 UK 6.9 0.6 0.0 7.5 7.8 France 2.9 0.8 1.4 5.1 4.8 2.7 0.0 0.0 2.7 Guernsey 2.6 2.3 0.0 2.3 Australia 0.0 1.1 1.5 Netherlands 0.1 0.0 1.6 1.4 8.2 Other 1.5 0.1 9.8 13.1 Bank bonds – Investment category % Loss-bearing¹ Senior 7 (7) 82 (80) TOTAL €3.6bn Subordinated² 11 (13)

1 Classified as Tier 1 and upper Tier 2 capital for solvency purposes. 2 Classified as lower Tier 2 and Tier 3 capital for solvency purposes. Approximation – not fully comparable with IFRS figures. Market values as at 30.6.2019 (31.12.2018).



On- and off-balance-sheet reserves (gross) H1 2019

€m 30.6.2019 ▲ in Q2 31.12.2017 31.12.2018 31.3.2019 4,640 Market value of investments 231,885 231,876 240,484 245,124 32.839 5.227 Total reserves 25.395 22.002 27.612 **On-balance-sheet reserves** 10.927 3.071 7,622 4,953 7,856 Fixed-interest securities 210 3,261 1,817 2,984 3,194 Non-fixed-interest securities 207 215 -2 189 213 Other on-balance-sheet reserves¹ 14.333 3.278 11.072 6.977 11,055 Subtotal Off-balance-sheet reserves 4.822 41 2,744 4,781 Real estate² 4.769 10,788 12,965 1,872 9,453 11,093 Loans³ 792 803 683 719 36 Associates 14,323 15.024 16,556 18,506 1,949 Subtotal 11.0% 9.5% 11.5% 13.4% 1.9%-pts. Reserve ratio

1 Unrealised gains/losses from unconsolidated affiliated companies, valuation at equity and cash-flow hedging. 2 Excluding reserves from owner-occupied property. 3 Excluding insurance-related loans.

Munich Re – September 2019 86

Munich RE 葦

Munich RE 葦 Sensitivities to interest rates, spreads and equity markets H1 2019 Sensitivity to risk-free interest rates - Basis points -50 -25 +50+100+8.7 +4.3-8.0 -15.4 Change in gross market value (€bn) -2.0-3.9Change in on-balance-sheet reserves, net (€bn)¹ +22 +11 Change in off-balance-sheet reserves, net (€bn)¹ +0.4+0.2-0.4-0.7+0.1-0.2P&L impact (€bn)¹ +0.1-0.1Sensitivity to spreads² (change in basis points) +50+100-5.9 -11.3Change in gross market value (€bn) -1.4 -2.7Change in on-balance-sheet reserves, net (€bn)¹ -0.5Change in off-balance-sheet reserves, net (€bn)¹ -0.3-0.2 P&L impact (€bn)1 -0.1Sensitivity to equity and commodity markets³ -30% -10% +10% +30%Change in gross market value (€bn) -5.5 -1.8+1.8+5.5 -1.4-0.6 +0.9+2.8Change in on-balance-sheet reserves, net (€bn)¹ -0.9 -0.3+0.3+1.0Change in off-balance-sheet reserves, net (€bn)¹ -0.0 P&L impact (€bn)1 -1.4-0.4-0.0

1 Rough calculation with limited reliability assuming unchanged portfolio as at 30.6.2019. After rough estimation of policyholder participation and deferred tax; linearity of relations cannot be assumed. Approximation – not fully comparable with IFRS figures. 2 Sensitivities to changes of spreads are calculated for every category of fixed-interest securities, except government securities with AAA ratings. 3 Worst-case scenario assumed, including commodities: impairment as soon as market value is below acquisition cost. Approximation – not fully comparable with IFRS figures.

Shareholder information



Share information

Shares (millions)	31.12. 2018	Acquisition of own shares in H1 2019	Retirement of own shares in H1 2019	30.6. 2019
Shares in circulation	145.8	-1.9	_	143.9
Treasury shares	3.7	1.9	-5.2	0.4
Total	149.5	-	-5.2	144.3

Key company data Securities codes MUVGn Sector Insurance Reuters MUV2 Country Germany Bloomberg Currency Euro WKN 843002 Accounting principles IFRS ISIN DE0008430026 Weighted average number of shares in circulation (millions)



Type of share	No-par-value registered shares
Votes	Each share entitles the holder to one vote
Dividend	Paid out once per year in cash
Trading venues	All German stock exchanges plus Xetra



Mission of Investor & Rating Agency Relations



We aim to enhancing Munich Re's visibility and attractiveness in the international financial community

RESPONSIBILITY

Munich Re's communication with the capital market / financial community

EXTERNAL COMMUNICATION

INCREASE TRANSPARENCY



on financial performance, strategy and expectations about future perspectives within the principles of a credible, accurate, complete and timely provision of relevant information

TARGET



Achieving a fair valuation and optimising the cost of capital by increasing information efficiency between Munich Re and the financial community while developing a relationship of trust with our investor base

MAIN OBJECTIVE

Active communication to support a fair capital-market valuation of Munich Re shares and outstanding bonds

INTERNAL COMMUNICATION TRANSMISSION



of investors' and creditors' demands, and the capital markets' perception of Munich Re, to management and staff

TARGET



Support management in the setting of ambitious targets as well as in the execution of a valuebased and shareholder-oriented strategy

Financial calendar



2019

7 NOVEMBER	Quarterly	statement	as at 30	September	2019
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2020

28 FEBRUARY	Balance sheet media conference for 2019 financial statements Analysts' and Investors' call
18 MARCH	Annual report (Group), Annual report (Company)
29 APRIL	Annual General Meeting 2020
7 MAY	Quarterly statement as at 31 March 2020
6 AUGUST	Half-year financial report as at 30 June 2020
5 NOVEMBER	Quarterly statement as at 30 September 2020

For information, please contact

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