

In the reporting period just ended we also finalised the succession arrangements at the helm of our company. The Supervisory Board of Hannover Rück SE has appointed Jean-Jacques Henchoz as a member of the Executive Board effective 1 April 2019. He has most recently been in charge of property and casualty as well as life and health reinsurance in the region

Europe, Middle East and Africa at Swiss Reinsurance Company. Jean-Jacques Henchoz will succeed Ulrich Wallin as Chief Executive Officer of Hannover Re upon conclusion of the Annual General Meeting on 8 May 2019. At the same time, Ulrich Wallin is retiring in accordance with the company statutes following his extremely successful service to Hannover Re.

## Results of operations, financial position and net assets

### Property and casualty reinsurance

- Market for property and casualty reinsurance remains challenging as losses rise
- Large loss budget almost entirely exhausted in the third quarter
- Segment result improves on the first nine months of the previous year by 49.8%

Property and casualty reinsurance markets around the world continue to see an oversupply of capital for the coverage of risks. The heavy windstorm losses of the past year did little to change this situation. At the same time, the additional capacities originating from the ILS market are putting prices and conditions under sustained pressure. The environment in which Hannover Re is operating thus remains challenging.

Increased demand can nevertheless still be observed in certain regions of Asia and North America as well as in areas such as the reinsurance of cyber risks, parts of specialty business and for covers in the area of structured reinsurance designed to optimise capital management.

The treaty renewals in property and casualty reinsurance as at 1 June and 1 July 2018 saw undiminished fierce competition. This is the time of year when parts of the North American portfolio, natural catastrophe risks and some areas of credit and surety business are renegotiated. The main renewals also took place for business in Australia and New Zealand: during the 1 July renewal season here we were able to prevent further price erosion and secured significant rate increases in some instances under loss-impacted programmes. This should boost the profitability of the business written. Broadly speaking, we are satisfied with the treaty renewals for the North American market; we boosted our premium volume by roughly another 15% compared to the previous year. In so doing, we were able to grow our business with certain selected clients. We maintained our profit-oriented underwriting approach to catastrophe covers, as a consequence of which our exposure remained comfortably within our risk appetite – which was unchanged from the previous year. We significantly improved our position in relation to a number of sizeable customer accounts, especially in North America and Europe. Altogether, the premium volume booked for the portfolio up for renewal on 1 June and 1 July rose by 16%.

The gross written premium for our total portfolio as at 30 September 2018 surged by an appreciable 17.8% to EUR 9.7 billion (EUR 8.2 billion). At constant exchange rates growth would have reached 24.0%. The level of retained premium was higher than in the previous year's corresponding period at 90.9% (89.2%). Net premium earned improved by 18.7% to EUR 8.0 billion (EUR 6.8 billion); adjusted for exchange rate effects, growth would have been as high as 24.9%.

After the very moderate major loss experience seen in the first half of the year, the loss incidence recorded in the third quarter was largely in line with quarterly expectations. The largest losses incurred in the third quarter included Typhoon Jebi in Japan, for which we anticipate net expenditure of EUR 103 million, as well as Typhoons Prapiroon and Trami with loss expenditure of EUR 54 million and EUR 22 million respectively. As far as Hurricane Florence is concerned, we expect a net strain in the order of EUR 40 million. Man-made large losses in the third quarter amounted to just under EUR 30 million. Our net expenditure on major losses for the first nine months thus totalled EUR 364.6 million (EUR 894.3 million). The net burden of major losses incurred in the first nine months thus remained comfortably within our envisaged large loss budget of EUR 630 million.

The underwriting result for total property and casualty reinsurance improved to EUR 232.6 million (-EUR 309.1 million) on the back of the reduced strain from large losses. The combined ratio consequently improved to 96.8% (104.4%), although it is still slightly above our full-year target of 96% or better. This can be attributed not only to the robust growth in structured reinsurance business, which operates with slimmer margins, but also to an increasing frequency of smaller and mid-sized losses. Viewed in isolation, the combined ratio for the third quarter stood at 98.7% (118.3%).

The investment income booked for property and casualty reinsurance from assets under own management contracted to EUR 757.3 million (EUR 933.3 million). The decline was due primarily to the non-recurrence of the positive effect associated with disposal of the portfolio of listed equities in the previous year.

The operating profit (EBIT) for the Property & Casualty reinsurance business group came in at EUR 1,003.6 million (EUR 601.7 million), equivalent to an increase of 66.8%. The EBIT margin of 12.5% (8.9%) surpassed our minimum target of 10%. Group net income for property and casualty reinsurance increased by 49.8% to EUR 672.4 million (EUR 448.7 million).

### Key figures for property and casualty reinsurance

in EUR million	2018					2017	
	1.1. – 30.6.	1.7. – 30.9.	+/- previous year	1.1. – 30.9.	+/- previous year	1.7. – 30.9.	1.1. – 30.9.
Gross written premium	6,467.1	3,190.4	+15.1%	9,657.5	+17.8%	2,771.9	8,199.3
Net premium earned	5,174.8	2,842.0	+16.5%	8,016.8	+18.7%	2,439.9	6,752.6
Underwriting result	204.7	27.9	-106.1%	232.6		(458.1)	(309.1)
Net investment income	503.0	281.0	-40.4%	783.9	-17.2%	471.2	946.7
Operating result (EBIT)	688.8	314.8		1,003.6	+66.8%	(32.6)	601.7
Group net income	434.4	237.9		672.4	+49.8%	4.8	448.7
Earnings per share in EUR	3.60	1.97		5.58	+49.8%	0.04	3.72
EBIT margin <sup>1</sup>	13.3%	11.1%		12.5%		-1.3%	8.9%
Combined ratio <sup>2</sup>	95.7%	98.7%		96.8%		118.3%	104.4%
Retention	91.4%	89.9%		90.9%		88.8%	89.2%

<sup>1</sup> Operating result (EBIT)/net premium earned

<sup>2</sup> Including funds withheld

## Life and health reinsurance

- Nine-month EBIT of EUR 155 million despite one-time charge of EUR 218 million from treaty recaptures in US mortality business
- Very good development of worldwide business as well as better-than-expected risk experience in the US mortality portfolio
- Growing international interest in innovative, integrated life and longevity insurance concepts

The development of our life and health reinsurance business in the third quarter was in line with our expectations. Treaty recaptures prompted by our announced rate increases in US mortality business resulted in considerable one-time charges in the period under review. This was mitigated by the fact that mortality rates for this business in 2018 are proving to be better than expected. Developments elsewhere in international life and health reinsurance were favourable, driven among other things by sustained strong interest in protection against longevity risks.

In Germany, too, we are seeing continuing interest in reinsurance solutions that address the additional statutory reserve requirement for the interest rate risk (“Zinszusatzreserve”) or deliver solvency relief. The number of contracts actually taken out is, however, still small.

When it comes to the coverage of longevity risks, our business in most European markets fared as anticipated. In the United Kingdom reinsurers are faced with increasing price pressure in annuity transactions involving closed blocks of business. In the area of enhanced annuities interest in tailor-made longevity products is growing not only in the rest of Europe but also in countries such as China, Japan, South Africa and Australia. Most notably, Australia is currently seeing lively interest in longevity solutions for retirees on account of changes in the general regulatory framework. In this connection we are working to partner with numerous primary insurers and pension funds.

In Asia health insurance products that offer guaranteed benefits over time are attracting growing attention. In Korea, for example, an innovative concept launched for critical illness coverage is enjoying brisk demand among customers. Our

branch in Korea successfully secured the reinsurance of this new business with a number of large insurers.

In the United States the measures to optimise US mortality business are bearing fruit, but they also continue to take a toll on the result in life and health reinsurance. The background here is the negative performance overall of a large block of business acquired at the beginning of 2009 and about which we have already reported regularly in the past. After we notified the customers of rate increases in the second quarter, more of them than anticipated availed themselves of their resulting right to treaty recaptures. In the third quarter we absorbed associated pre-tax charges of USD 260 million, equivalent to EUR 218 million. It is to be expected that this figure will increase even further in the course of the fourth quarter. At the present point in time it is our assumption that the strain for the full year will be in the order of USD 350 million to USD 400 million.

While the treaty recaptures are currently a drag on the profitability of US mortality business, the losses associated with these treaties will be largely eliminated in subsequent years and we therefore anticipate a substantial increase in earnings. A better-than-expected mortality in our US mortality solutions portfolio over the past three quarters also contin-

ues to alleviate the strains. Furthermore, our financial solutions business in the United States is developing well and hence living up to our expectations. Our health and special risks portfolio similarly performed as anticipated.

The gross premium income generated for life and health reinsurance business as at 30 September 2018 was stable at EUR 5.3 billion (EUR 5.3 billion). Adjusted for exchange rate effects, growth would have reached 4.8%. Net premium earned was unchanged at EUR 4.8 billion (EUR 4.8 billion). An increase of 3.2% would have been booked at constant exchange rates. The level of retained premium was slightly lower than in the previous year at 90.6% (91.5%).

The investment income amounted to EUR 369.1 million (EUR 432.7 million). The main driver of the decrease in investment income in life and health reinsurance was the realised gains booked in the previous year, which derived largely from fixed-income securities.

The operating result (EBIT) for our life and health reinsurance business contracted to EUR 155.2 million (EUR 205.9 million). Reflecting the strains discussed above, the contribution to Group net income amounted to EUR 93.0 million (EUR 135.7 million).

#### Key figures for life and health reinsurance

in EUR million	2018					2017 <sup>1</sup>	
	1.1. – 30.6.	1.7. – 30.9.	+/- previous year	1.1. – 30.9.	+/- previous year	1.7. – 30.9.	1.1. – 30.9.
Gross written premium	3,518.2	1,816.7	+6.0%	5,334.9	+1.0%	1,714.1	5,284.2
Net premium earned	3,170.7	1,586.1	+1.1%	4,756.8	-0.7%	1,568.4	4,788.7
Investment income	239.1	130.0	-0.7%	369.1	-14.7%	131.0	432.7
Operating result (EBIT)	219.4	(64.2)		155.2	-24.6%	40.7	205.9
Net income after tax	146.8	(53.8)		93.0	-31.5%	21.5	135.7
Earnings per share in EUR	1.22	(0.45)		0.77	-31.5%	0.18	1.13
Retention	91.2%	89.4%		90.6%		91.2%	91.5%
EBIT margin <sup>2</sup>	6.9%	-4.0%		3.3%		2.6%	4.3%

<sup>1</sup> Restated pursuant to IAS 8

<sup>2</sup> Operating result (EBIT)/net premium earned

## Investments

- High-quality diversified investment portfolio maintained
- Ordinary investment income virtually on the level of the previous year
- Return on investment ahead of expectations at 3.3%

The investment climate was rather volatile in the period under review in the face of numerous geopolitical and economic policy issues. In February, for example, the expectation of higher interest rates as a consequence of an anticipated rise in inflation was reflected around the world in stock market corrections and sharply increased volatility. Our company remained unaffected, however, thanks to the liquidation of our equity portfolio in the previous year.

The turbulence on the stock market had scarcely any effect on other markets. In the area of fixed-income securities, however, the dominant factor was still the generally low level of interest rates. The US dollar segment, which saw further significant interest rate increases at a pace not anticipated by the market, was once again the exception here. Appreciable rate increases were also observed across all maturities in the sterling bond market, whereas euro-denominated bonds have seen scarcely any changes since the beginning of the year and are still being sold at negative returns well into the medium maturities. It was only the repeated flare-up of anxieties surrounding instability in Italy that triggered disquiet in this sector. The threat of tariff and trade wars as well as the continuing lack of clarity around the outcome of Brexit negotiations have exacerbated the uncertainty among market actors. Our company has so far not been affected by the crises in Turkey and Argentina since we do not directly hold any investments in the currencies of either country.

Credit spreads on European and US corporate bonds recorded sometimes significant increases in the period under review across almost all rating classes, although in some instances these had softened again by the closing date. On the whole, risk premiums remain at historic lows owing to the declines of recent years. In this respect it is important to monitor the levels at which the potential for funding companies starts to become restricted. Overall, while the unrealised gains on our fixed-income securities fell to EUR 304.1 million (EUR 1,021.5 million) as at 30 September 2018, we benefit from higher interest rates and credit spreads when it comes to new investments and the reinvestment of assets.

Our portfolio of assets under own management grew to EUR 41.5 billion (31 December 2017: EUR 40.1 billion). Along with the positive operating cash flow, this also reflects the fact that the issuance of a senior bond in the second quarter and currency effects more than offset the aforementioned valuation declines. We adjusted the allocation of our investments to the individual classes of securities in the reporting period in that we expanded our portfolio of instru-

ments with inflation-linked coupons and redemption amounts. By taking this step we are counteracting inflation risks, particularly in property and casualty reinsurance. Through the reduction of certain positions in the area of high-yield bonds we also smoothed the risk profile of our investments and generated liquidity for future opportunities in the capital and reinsurance markets. The modified duration of our portfolio of fixed-income securities was left unchanged year-on-year at 4.8 (4.8).

Ordinary investment income excluding interest on funds withheld and contract deposits amounted to EUR 991.4 million as at 30 September 2018, a figure slightly in excess of the comparable period (EUR 942.6 million). Particularly bearing in mind the continued low interest rates, it is highly gratifying that we were able to appreciably increase the ordinary income from fixed-income securities year-on-year while also booking stronger earnings from real estate and private equity than in the previous year. We were thus very successful in offsetting the loss of dividend income from the equity portfolio that we had liquidated in the previous year. Interest on funds withheld and contract deposits retreated to EUR 163.3 million (EUR 180.1 million).

Impairments of altogether just EUR 36.9 million (EUR 34.0 million) were taken. Of this amount, EUR 9.1 million (EUR 5.5 million) was attributable to alternative investments and EUR 2.3 million (EUR 2.1 million) to real estate funds. Scheduled depreciation on directly held real estate increased marginally to EUR 25.3 million (EUR 22.6 million), a reflection of our growing ongoing involvement in this area. The impairments were not opposed by any write-ups (EUR 0.0 million). The net balance of gains realised on disposals stood at EUR 100.8 million (EUR 343.3 million). This sharp decrease compared to the previous year reflects the extraordinarily high gains realised in the previous year from the liquidation of our portfolio of listed equities. A further factor is that as part of portfolio restructuring activities owing to the steeper US yield curve we realised not inconsiderable hidden losses. These were, however, more than offset by attractive realisations from the sale of high-yield bonds. In addition, we benefit from the rising interest rate level in our reinvestments.

We recognise a derivative for the credit risk associated with special life reinsurance treaties (ModCo) under which securities deposits are held by cedants for our account; the performance of this derivative in the period under review gave rise to unrealised losses of EUR 3.9 million (gain of EUR 3.2 million) recognised in income. In economic terms we assume

a neutral development for this item over time, and hence the volatility that can occur in specific quarters provides no insight into the actual business development.

Altogether, the unrealised gains in our assets recognised at fair value through profit or loss amounted to EUR 19.9 million. This compares with unrealised gains of EUR 22.1 million in the corresponding period of the previous year. Despite diminished returns from funds withheld and contract deposits we thus generated very healthy investment income. The key drivers were slightly higher ordinary income from

fixed-income securities as well as very good earnings from real estate and private equity. The net investment income of EUR 1,155.4 million was below the level of the comparable period (EUR 1,382.5 million), which had been boosted by extraordinary income of EUR 223.3 million from the disposal of the equity portfolio. Income from assets under own management accounted for an amount of EUR 992.1 million (EUR 1,202.4 million), producing a very pleasing annualised average return (excluding effects from ModCo derivatives) of 3.3%. We are thus well on track to achieve our expected minimum target of 2.7% for the full year.

### Net investment income

in EUR million	2018					2017	
	1.1. – 30.6.	1.7. – 30.9.	+/- previous year	1.1. – 30.9.	+/- previous year	1.7. – 30.9.	1.1. – 30.9.
Ordinary investment income <sup>1</sup>	632.5	358.9	+16.7%	991.4	+5.2%	307.5	942.6
Result from participations in associated companies	1.8	0.8	-84.1%	2.5	-75.5%	4.7	10.4
Realised gains/losses	53.4	47.5	-81.7%	100.8	-70.6%	259.9	343.3
Appreciation <sup>2</sup>	21.1	15.9	+45.5%	36.9	+8.8%	10.9	34.0
Change in fair value of financial instruments <sup>3</sup>	19.6	0.3	-97.2%	19.9	-10.1%	11.5	22.1
Investment expenses	56.3	29.3	+11.2%	85.6	+4.5%	26.3	82.0
Net investment income from assets under own management	629.8	362.3	-33.7%	992.1	-17.5%	546.4	1,202.4
Net investment income from funds withheld	113.8	49.5	-12.8%	163.3	-9.4%	56.8	180.1
<b>Total investment income</b>	<b>743.6</b>	<b>411.8</b>	<b>-31.7%</b>	<b>1,155.4</b>	<b>-16.4%</b>	<b>603.1</b>	<b>1,382.5</b>

<sup>1</sup> Excluding expenses on funds withheld and contract deposits

<sup>2</sup> Including depreciation/impairments on real estate

<sup>3</sup> Portfolio at fair value through profit or loss and trading

### Rating structure of our fixed-income securities<sup>1</sup>

Rating classes	Government bonds		Securities issued by semi-governmental entities <sup>2</sup>		Corporate bonds		Covered bonds/asset-backed securities	
	in %	in EUR million	in %	in EUR million	in %	in EUR million	in %	in EUR million
AAA	78.8	11,726.1	59.0	3,777.4	1.8	207.2	60.5	1,836.7
AA	12.1	1,805.5	27.2	1,744.7	14.3	1,672.9	22.7	687.5
A	5.0	740.2	5.7	365.0	31.9	3,716.4	10.9	329.8
BBB	2.2	323.6	1.4	91.8	43.9	5,119.3	4.5	136.3
< BBB	1.9	278.1	6.7	430.4	8.1	947.7	1.4	43.3
<b>Total</b>	<b>100.0</b>	<b>14,873.4</b>	<b>100.0</b>	<b>6,409.4</b>	<b>100.0</b>	<b>11,663.5</b>	<b>100.0</b>	<b>3,033.6</b>

<sup>1</sup> Securities held through investment funds are recognised pro rata with their corresponding individual ratings.

<sup>2</sup> Including government-guaranteed corporate bonds