

# 2017/18

## Statistics

Federal Financial  
Supervisory Authority

Reinsurance undertakings



# BaFin

Bundesanstalt für  
Finanzdienstleistungsaufsicht

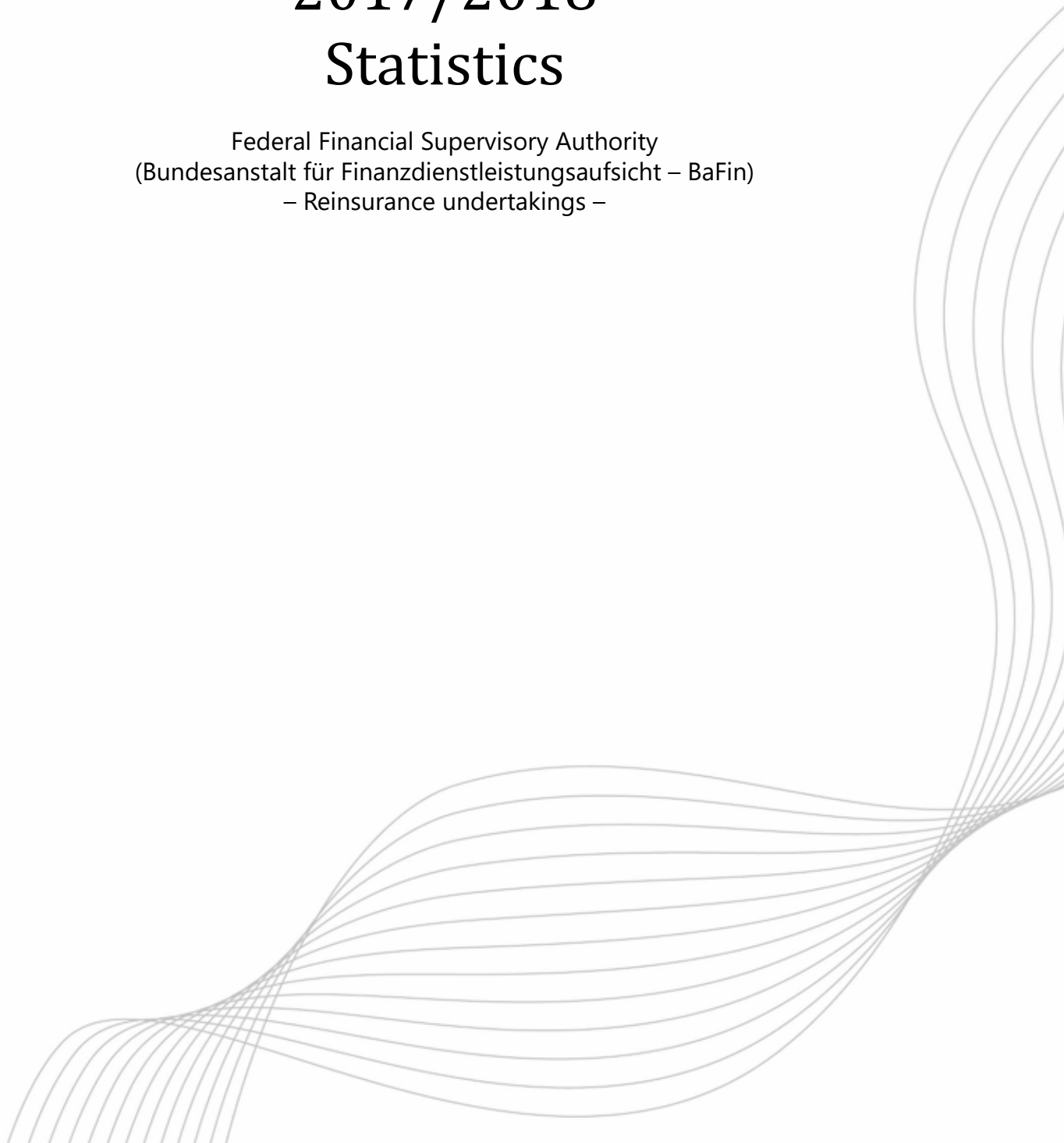




# 2017/2018

# Statistics

Federal Financial Supervisory Authority  
(Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin)  
– Reinsurance undertakings –



# Contents

<b>I. Reinsurance Supervision in 2018</b>	<b>6</b>
<b>1.1 Authorised reinsurance undertakings</b>	<b>7</b>
<b>1.2 Economic trends</b>	<b>8</b>
<b>II. Statistical evaluation for 2017</b>	<b>10</b>
<b>1 Premiums</b>	<b>12</b>
<b>2 Losses</b>	<b>14</b>
<b>3 Technical provisions</b>	<b>15</b>
<b>4 Investments</b>	<b>17</b>
<b>5 Solvency</b>	<b>17</b>



I

# Reinsurance Supervision in 2018





© trendobjects – stock.adobe.com

# 1 Reinsurance Supervision in 2018

end of the third quarter of 2018, BaFin thus supervised a total of 38 reinsurance undertakings and branch offices of reinsurance undertakings (see Table 1).

## 1.1 Authorised reinsurance undertakings

In 2018, one reinsurance undertaking was entirely wound up and removed from the commercial register. Another reinsurance undertaking in the process of being wound up was merged into a primary insurance undertaking. One reinsurance undertaking from the Czech Republic established a German branch office. As at the

**Table 1: Number of reinsurance undertakings under BaFin's supervision**

As at 31 December of the relevant year and 30 September 2018

	2018	2017	2016	2015	2014
<b>Reinsurance undertakings with business activities</b>	27	27	27	27	27
<b>Reinsurance undertakings without business activities</b>	3	5	5	5	6
<b>EEA branches</b>	7	6	6	6	6
<b>Third-country branch</b>	1	1	1	1	1

## 1.2 Economic trends

In the first half of 2018, the level of claims expenditures for reinsurers was significantly lower than in the first half of the previous year and the long-term average. Estimates put overall economic losses caused by natural disasters in the first half of 2018 at US\$33 billion worldwide (see Table 2 “Natural disasters in 2018 compared with the past ten years”), which is significantly lower than the previous year’s figure (US\$65 billion) and also below the average for the last thirty years (US\$68.3 billion).<sup>1</sup> Of the overall economic losses caused by natural disasters in the first half of 2018, losses of US\$17 billion were insured, which is also considerably lower than the previous year’s figure (US\$25.5 billion) and the average for the last ten years (US\$30.6 billion), but almost equal to the thirty-year average of US\$17.5 billion.

Of the insured losses caused by natural disasters in the first half of 2018, approximately US\$6.3 billion were attributable to winter weather damage in Europe and North America; see Table 3 “The five biggest natural disasters in the first half of 2018 measured by insured loss” on page 9. Winter storm Friederike alone, which swept across Western Europe in mid-January, caused overall economic losses of US\$2.7 billion, of which US\$2.1 billion were insured due to the high insurance density of windstorm coverage. Around two thirds of the losses occurred in Germany.

**Table 2: Natural disasters in 2018 compared with the past ten years**

Year	Number of events	Fatalities	Overall losses (US\$m)	Insured losses (US\$m)	Notable events
<b>2018 (1st half)</b>	? (430)	? (3,000)	? (33,000)	? (17,000)	Winter storm Friederike, hurricane Michael
<b>2017 (1st half)</b>	710 (380)	10,000 (5,540)	340,000 (65,000)	135,000 (25,500)	Hurricanes Harvey, Irma and Maria, earthquake in Mexico, wildfires in California
<b>2016</b>	750	8,700	175,000	50,000	Earthquakes in Japan, hurricane Matthew, forest fires in Canada
<b>2015</b>	730	25,400	103,000	32,000	Earthquake in Nepal, winter weather damage in the USA and Canada, winter storm Niklas, floods in the United Kingdom
<b>2014</b>	980	7,700	110,000	31,000	Cyclone Hudhud, winter weather damage in Japan, the USA and Canada, floods in India and Pakistan, Whitsun storm Ela
<b>2013</b>	920	21,000	140,000	39,000	Floods in Central Europe and Canada, hailstorms in Germany, storms Christian and Xaver, tornadoes in the USA
<b>2012</b>	920	10,000	173,000	65,000	Hurricane Sandy, drought in the USA, earthquake in Italy, severe weather and tornadoes in the USA, Hurricane Isaac
<b>2011</b>	820	27,000	380,000	105,000	Earthquakes in Japan and New Zealand, floods in Thailand, tornadoes in the USA, Hurricane Irene
<b>2010</b>	970	296,000	152,000	60,000	Earthquakes in Haiti, Chile and China, heatwave in Russia, floods in Pakistan, volcanic eruption in Iceland
<b>2009</b>	900	11,000	60,000	22,000	Winter storm Klaus, tornadoes in the USA, hail storms in Central Europe
<b>2008</b>	750	163,000	200,000	45,000	Hurricanes in the USA and the Caribbean, winter storm Emma

Source: Based on Munich Re NatCatSERVICE data

<sup>1</sup> Munich Re: Press release of 11 July 2018.



**Table 3: The five biggest natural disasters in the first half of 2018 measured by insured loss**

Date	Region	Event	Fatalities	Overall losses (US\$ m)	Insured losses (US\$ m)
18 January 2018	Western Europe	Winter storm Friederike	11	2,700	2,100
1 – 3 March 2018	USA	Winter storm	9	2,200	1,600
12 – 16 May 2018	USA	Severe weather	5	1,400	1,000
18 – 20 March 2018	USA	Severe weather, hail, tornado	–	1,300	1,000
2 – 3 January 2018	Europe	Winter storm Burglind	7	1,200	900

Source: Munich Re NatCatSERVICE.

The second half of the year usually brings higher losses. In 2017, hurricanes Harvey, Irma and Maria, among others, caused record losses for the economy as a whole of approximately US\$340 billion and for the insurance industry of around US\$135 billion. The second half of 2018 has also seen severe natural disasters, so far in particular the hurricanes Florence and Michael. According to experts' preliminary estimates, hurricane Michael alone, which swept across Florida's Gulf Coast in early October as a category 4 hurricane, caused losses of approximately US\$8 billion for the insurance industry.

The rather moderate amount of losses occurring during the first half of 2018 enhanced the reinsurers' resilience, which had been weakened by the record losses of 2017. No relief, however, came from the premium trend in 2018: in the traditional reinsurance cycle, severe natural disasters are usually followed by substantial premium increases to compensate for high claims expenditures. In spite of the record losses, however, the latest figures do not seem to follow this cycle. Whereas some of the regions and classes of insurance with high claims expenditures saw two-digit premium increases, premiums in other markets and insurance classes remained fairly stable. It seems that even the record losses of 2017 were not sufficient to cause a long-term change in premiums.

The unusual trend in premiums that followed the record losses of 2017 is due to an oversupply of capacity. Neither reinsurers nor investors in the alternative reinsurance market reduced capacity; in fact, they stepped up the capacity they hold.

The alternative reinsurance market (ART market) is still interesting for investors, in spite of the record losses in 2017. Factors contributing to the popularity of the alternative reinsurance market are not only the relatively attractive yields, but also the comparatively low correlation between insurance risk and market risk. The market for catastrophe bonds (insurance-linked securities – ILS) remained at a high level in 2018 as well. Until the end of the third quarter, ILS in the amount of US\$11.9 billion were issued (total in 2017: US\$12.6 billion). At US\$36.6 billion, the aggregate value of catastrophe bonds currently outstanding even set a new record.<sup>2</sup> According to Aon Benfield, the ART market had a volume of approximately US\$98 billion as at the end of the second quarter of 2018 and made up around 16.2% of the entire reinsurance market.<sup>3</sup> Collateralised reinsurance accounted for the largest share, followed by ILS.

<sup>2</sup> ARTEMIS: Q3 2018 Catastrophe Bond & ILS Market Report.

<sup>3</sup> AON Benfield: Reinsurance Market Outlook September 2018.

# II

## Statistical evaluation for 2017





The editorial deadline for the reinsurance statistics presented here was 17 October 2018. Subsequent assessments, additional reports and corrections to figures may lead to ex post changes. Any changes to prior-year figures in the following tables are due to subsequent corrections.

The time lag between the year under review, 2017, and the publication of BaFin's reinsurance statistics limits the informative value of this snapshot analysis and does not permit any conclusions to be drawn about the current situation.

The report on the statistics for financial year 2017 and 2016/2017 includes the data of 29 reinsurers (previous year: 31) and one branch of a third-country reinsurer (Transatlantic Re). The majority are stock corporations, one is a mutual insurance association (*Versicherungsverein auf Gegenseitigkeit*) and two are insurance undertakings under public law.

The data in the tables below are based on industry revenue. This figure is the total of the templates submitted by the reinsurance undertakings, calculated for each insurance segment. This not only allows for all the values to be reconstructed at any time, but also enables additional (consistent) data to be retrieved from the data sets if needed.

A disadvantage of this approach is that – depending on the templates actually submitted – the number of reporting reinsurance undertakings may differ from table to table. As far as the industry data are concerned, however, this does not have any significant impact, because these data are only published after all the relevant undertakings have submitted correct data, thus ensuring completeness at all times.

On 1 January 2016, "Solvency II", the new supervisory regime, entered into force. One of the advantages of Solvency II is the fact that reinsurance undertakings are now required to submit their reports much earlier than before. The reporting deadline for insurance and reinsurance undertakings is identical. The statistics on reinsurance undertakings are therefore prepared and published prior to the end of the year after the reporting year.

The statistical evaluation covers almost exclusively data that are based on the Solvency II supervisory regime. Nevertheless, BaFin continues to collect data (forms and statements under the Insurance Reporting Regulation (*Versicherungsberichterstattungs-Verordnung – BerVersV*) based on the German accounting principles under the Commercial Code (*Handelsgesetzbuch – HGB*), not least for statistical purposes. For the sake of completeness, these data – without explanations – will be published on BaFin’s website in the spring of 2019 in the usual format.

## 1 Premiums

Reinsurance coverage is offered not only by reinsurance undertakings, but also by primary insurers engaging in reinsurance business. The breakdown of the total gross inward reinsurance premiums between reinsurers and primary insurers is shown in Table 4 (“Gross premiums in reinsurance business”):

In the year under review, gross premiums written by reinsurance undertakings rose slightly to €59.7 billion. This means that premium income stagnated in the period from 2015 to 2017, which corresponds to the period of soft market conditions.

In the period from 2008 to 2015, however, gross premiums written rose by more than half. At the same time, the number of reporting reinsurance undertakings decreased from 41 undertakings in 2008 to 30 in reporting year 2017. This indicates that the reinsurance industry is becoming more concentrated: in 2017, the three reinsurance undertakings with the highest premium volumes reported more than three quarters of all premiums.

The sustained high level of premiums collected in 2017 is likely to have been driven by factors including the continued robust growth in demand in the primary insurance markets in emerging economies, especially for property and casualty insurance. Personal insurance companies in particular still had strong demand for reinsurance as a capital substitute, not least because of the sustained period of low interest rates.

Premium income for inward reinsurance business for primary insurers increased by 11.7% in the year under review. The proportion of the total inward reinsurance business accounted for by reinsurers thus decreased in 2017 by approximately 1 percentage point to 89.8%. Of the primary insurance undertakings that fall within the scope of the new supervisory regime, Solvency II, 94 engaged in active reinsurance, 14 of which were life insurers, 4 health insurers and 76 property/casualty insurers.

In 2017, reinsurance business accepted from domestic ceding insurers rose by around 5.8%. Gross premiums written amounted to €15.2 billion (previous year: €14.4 billion), whereas in 2002, the level of premiums was significantly higher at €21.7 billion.

Reinsurance business accepted from foreign ceding insurers, however, decreased slightly in 2017 (by 1.3%). Gross premiums written amounted to €44.6 billion. Overall, the share of reinsurance business accepted from foreign ceding insurers dropped from 75.9% in the previous year to 74.6% in 2017. Twelve years ago, the share of reinsurance business accepted from domestic ceding insurers accounted for almost half of the insurance business included in the statistics.

**Table 4: Gross premiums in reinsurance business**

Year	Gross premiums written (€m)		
	Reinsurance undertakings	Primary insurers (inward reinsurance business)	Total
2017	59,741.2	6,757.5	66,498.6
2016	59,510.6	6,049.4	65,560.0
2015	59,434.5	6,185.9	65,620.4
2014	52,478.5	5,684.9	58,163.4
2013	51,153.7	5,572.0	56,725.7

Measured in terms of gross premiums written, insurance business accepted from abroad by all domestic insurance undertakings (primary insurers and reinsurance undertakings that fall within the supervisory scope of Solvency I or Solvency II) in 2017 (€47.1 billion) again significantly exceeded insurance business ceded abroad (€16.4 billion). This means that, as in previous years, domestic insurers made available more capacity to the international reinsurance market than they used themselves. The positive contribution to Germany's balance of trade in services decreased slightly from €32.3 billion in the previous year to €30.7 billion in the year under review, 2017. These are preliminary figures based on the data collected under the German Commercial Code

(*Handelsgesetzbuch – HGB*), which are still subject to change.

Of the gross premiums written by reinsurers, €2.7 billion was attributable to facultative and €56.9 billion to obligatory reinsurance business in the year under review. At 76.3% (previous year: 76.5%), proportional reinsurance in the form of quota share and surplus treaties continued to make up the largest proportion of gross premiums written. These are preliminary figures based on the data collected under the German Commercial Code, which are still subject to change. Table 5 gives a breakdown of the reinsurers' gross premiums written by line of business under the Solvency II supervisory regime.

**Table 5: Gross premiums by lines of business**

Lines of business <sup>1)</sup>	Gross premiums written			
	2017		2016	
	in €m	%	in €m	%
Medical expenses	845.4	1.4	3,098.2	5.2
Income protection	1,294.0	2.2	1,211.3	2.0
Workers' compensation	224.1	0.4	137.7	0.2
Motor vehicle liability	6,776.3	11.3	6,100.1	10.3
Other motor	3,880.9	6.5	3,612.2	6.1
Marine, aviation and transport	1,640.9	2.7	1,771.0	3.0
Fire and other damage to property	12,582.7	21.1	12,641.8	21.2
General liability	4,318.8	7.2	4,378.6	7.4
Credit and suretyship	1,914.8	3.2	1,839.5	3.1
Legal expenses	382.7	0.6	316.7	0.5
Assistance	8.8	0.0	10.1	0.0
Miscellaneous financial loss	797.6	1.3	823.6	1.4
<b>Proportional reinsurance</b>	<b>34,667.0</b>	<b>58.0</b>	<b>35,940.9</b>	<b>60.4</b>
Health	290.6	0.5	283.2	0.5
Liability	1,928.8	3.2	1,854.5	3.1
Marine, aviation and transport	412.6	0.7	476.9	0.8
Property reinsurance	4,554.5	7.6	4,570.9	7.7
<b>Non-proportional reinsurance</b>	<b>7,186.4</b>	<b>12.0</b>	<b>7,185.5</b>	<b>12.1</b>
<b>Non-life</b>	<b>41,853.3</b>	<b>70.1</b>	<b>43,126.4</b>	<b>72.5</b>
Health	7,169.2	12.0	4,712.8	7.9
Life reinsurance	10,718.7	17.9	11,671.4	19.6
<b>Life</b>	<b>17,887.8</b>	<b>29.9</b>	<b>16,384.2</b>	<b>27.5</b>
<b>Total</b>	<b>59,741.2</b>	<b>100.0</b>	<b>59,510.6</b>	<b>100.0</b>

1) Lines of business as set forth in Annex I of Delegated Regulation (EU) 2015/35.

In 2016, the largest share of the reinsurers' premium income (€12.6 billion or 21.1% of contributions) was attributable to fire and other damage to property insurance, followed by life reinsurance (17.9%), non-proportional property reinsurance (12%), health insurance (12%) and motor vehicle liability insurance (11.3%). While the volume of premiums in life insurance dropped significantly by 8.2%, premium volumes in health insurance saw a strong increase. These fluctuations do not always mean that there were actual changes in premiums. Often they were due to changes in reporting under the new supervisory regime. In some cases, such changes were prompted by clarifications issued by BaFin.

In the year under review, the share of non-life insurance classes was 70.1% of the total volume of premiums, 58.0% of which was attributable to proportional reinsurance and 12.0% to non-proportional reinsurance. Life insurance classes accounted for 29.9% of all premiums.

Reinsurers ceded €8.9 billion (previous year: €9.1 billion) of their total gross premiums written of €59.7 billion (previous year: €59.5 billion) to retrocessionaires. As a result, the retrocession ratio amounted to 14.9% (previous year: 15.3%), which was accompanied by an increase of approximately 0.5% in reinsurers' retentions.

## 2 Losses

In 2017, the level of claims expenditures for reinsurers was significantly higher than the long-term average. In total, natural disasters caused overall economic losses of approximately US\$340 billion worldwide, which is significantly higher than the previous year's figure and also above the average for the last ten years (US\$170 billion).<sup>1</sup> Only 2011 was a costlier year, with the earthquake in Japan and the resulting nuclear disaster in Fukushima. Of the overall economic losses caused by natural disasters in 2017, losses in the amount of US\$135 billion were insured, which is also considerably higher than the previous year's figure (US\$50 billion) and the average for the last ten years (US\$49 billion). Moreover, this amount represents the highest insured losses ever recorded in the insurance industry.

The exceptionally high level of claims expenditures can be attributed to the hurricane season. After 12 years without severe hurricanes hitting the US mainland, three category 4 or 5 storms struck the USA in August and September. The hurricane trio of Harvey, Irma and Maria caused insured losses of US\$92 billion in the USA and the Caribbean, making it the second most expensive hurricane season after 2005 with Katrina, Wilma and Rita.

The high losses are reflected in the reinsurance undertakings' loss ratios. According to the data submitted in reporting template S.05.01, the reinsurers' gross loss ratio after settlement, measured as the ratio of expenses for claims incurred to premiums written, amounted to 72.6% in the year under review (previous year: 63.4%). The loss ratio for non-life insurance is more informative: on average, the reinsurance undertakings recorded a gross loss ratio of 71.6% (prior year: 61.1%). In non-proportional reinsurance, which is predominantly used for reinsuring peak risk, the gross loss ratio rose from 55.0% in 2016 to 84.6% in 2017. The net loss ratio for the non-life insurance classes as a whole climbed from 62.8% in 2016 to 72.2% in 2017.

The gross expense ratio also rose slightly in the year under review, 2017, and amounted to 28.0% (previous year: 23.8%).

Overall, the reinsurers' gross combined loss-expense ratio after settlement amounted to 100.6% in the year under review (previous year: 87.1%). On a net basis, the combined ratio deteriorated to 102.6% (previous year: 91.4%).

---

<sup>1</sup> Munich Re: Press release of 4 January 2018.

### 3 Technical provisions

Gross technical provisions amounted to €109.5 billion as at 31 December 2017. In terms of gross premiums written, this translated into a provision rate of 183.4% (prior year: 187.0%) for the business as a whole. For the composition of technical provisions in the year under review and in 2016, see Table 6.

At €83.1 billion, or 75.9% of total gross technical provisions, claims provisions were by far the most significant single item in the year under review. The provision rate, measured by the gross premiums of the non-life insurance classes, amounted to 198.7% (prior year: 192.6%).

In the year under review, the largest share of gross technical claims provisions was attributable to the following lines of business: non-proportional liability insurance at €20.7 billion (24.9% of reinsurers' total gross claims

**Table 6: Composition of technical provisions**

	2017		2016	
	in €m	%	in €m	%
<b>Non-life</b>				
Provisions calculated as a whole	66.5	0.1	-3.5	-0.0
Gross premium provisions (best estimate)	5,398.1	4.9	5,451.9	4.9
Gross claims provisions (best estimate)	83,148.4	75.9	83,059.8	74.6
Risk margin	3,236.5	3.0	3,327.0	3.0
Provision as the sum of best estimate and risk margin	91,783.1	83.8	91,838.7	82.5
Total non-life (gross)	91,849.6	83.9	91,835.2	82.5
Total non-life (net)	81,736.6	74.6	82,272.6	79.5
<b>Life</b>				
Provisions calculated as a whole	4.6	0.0	1.5	0.0
Best estimate (gross)	13,448.7	12.3	15,066.8	13.5
Risk margin	4,235.2	3.9	4,364.4	3.9
Provision as the sum of best estimate and risk margin	17,683.8	16.1	19,431.2	17.5
Total life (gross)	17,688.4	16.1	19,432.8	17.5
Total life (net)	19,587.3	19.3	21,220.4	20.5
<b>Total technical provisions (gross)</b>	<b>109,538.0</b>	<b>100.0</b>	<b>111,268.0</b>	<b>100.0</b>
<b>Total technical provisions (net)</b>	<b>101,323.9</b>	<b>100.0</b>	<b>103,493.0</b>	<b>100.0</b>

provisions), proportional general liability insurance at €20.6 billion (24.8%) and fire and other damage to property insurance at €11.8 billion (14.2%). Table 7 gives a breakdown of the reinsurers' gross claims provisions by line of business under the Solvency II supervisory regime.

Almost 40% of total gross provisions for claims outstanding was attributable to non-proportional reinsurance, whereas its share of premium income was only marginally more than one-sixth of non-life contributions. Non-proportional reinsurance is used, in particular, to reinsure peak risks and long-term liability risks, which makes it necessary to recognise large provisions.

The high market concentration in the reinsurance industry also becomes evident when looking at the provisions for claims outstanding. As at 31 December 2017, almost 80% of the total gross provisions for claims outstanding was attributable to the three largest reinsurance

undertakings and just under 90% was attributable to the five largest reinsurers.

Non-life insurance classes accounted for 83.9% of the reinsurers' technical provisions including premium provisions, risk margin and provision calculated as a whole. Life insurance classes accounted for 16.1% accordingly.

The technical provisions under Solvency II amounted to approximately 70% of the technical provisions under HGB accounting. This is because, firstly, due to the principle of prudence, some reinsurers' technical provisions under HGB include very large reserves and, secondly, Solvency II does not provide for an item equivalent to the HGB equalisation provision. Both aspects cause the reinsurers' own funds to increase considerably (see chapter 5).

**Table 7: Gross claims provisions by line of business**

Line of business <sup>1)</sup>	Gross claims provisions			
	2017		2016	
	in €m	%	in €m	%
Medical expenses	299.4	0.4	508.6	0.6
Income protection	1,035.3	1.2	1,108.1	1.3
Workers' compensation	951.9	0.0	1,148.9	1.4
Motor vehicle liability	7,710.0	9.3	6,932.1	8.3
Other motor	1,305.0	1.6	1,627.1	2.0
Marine, aviation and transport	3,039.9	3.7	3,598.5	4.3
Fire and other damage to property	11,778.8	14.2	10,454.7	12.6
General liability	20,616.8	24.8	20,890.4	25.2
Credit and suretyship	2,671.8	3.2	2,795.9	3.4
Legal expenses	381.6	0.5	365.6	0.4
Assistance	1.8	0.0	1.3	0.0
Miscellaneous financial loss	613.8	0.7	587.9	0.7
<b>Proportional reinsurance</b>	<b>50,406.1</b>	<b>60.6</b>	<b>50,019.0</b>	<b>60.2</b>
Health	2,261.9	2.7	2,567.3	3.1
Liability	20,677.1	24.9	21,443.7	25.8
Marine, aviation and transport	1,591.2	1.9	2,163.8	2.6
Property reinsurance	8,212.2	9.9	6,865.9	8.3
<b>Non-proportional reinsurance</b>	<b>32,742.3</b>	<b>39.4</b>	<b>33,040.7</b>	<b>39.8</b>
<b>Total</b>	<b>83,148.4</b>	<b>100.0</b>	<b>83,059.8</b>	<b>100.0</b>

1) Lines of business as set forth in Annex I of Delegated Regulation (EU) 2015/35.



## 4 Investments

As at 31 December 2017, investments held by reinsurance undertakings amounted to €349.6 billion in total (previous year: €343.3 billion). This is approximately equal to the fair value of investments under HGB accounting.

For the composition of investments in the 2016 and in 2017, see Table 8.

Almost two-thirds of the investments were attributable to affiliates and equity investments. For the insurance industry as a whole, however, this share is only around 17.0%. The reason for this lies in one of the characteristics of the German insurance industry: some of the major reinsurers in Germany perform, at the same time, the function of a holding company for an insurance group or financial conglomerate. The five biggest holding companies and financial conglomerates alone held approximately four-fifths of the reinsurers' total investments. Other major investments were corporate and government bonds, which represented a share of 13.3% and 12.9% of the total investments respectively. In contrast, reinsurance undertakings invested very little in shares (1.3%).

In 2017, there was a rise in investments in investment funds as well as loans and mortgages, whereas investments in corporate and government bonds decreased. These changes were not always the result of an actual restructuring of the undertakings' portfolios. Often they were due to changes in the reporting of investments

under the new supervisory regime. In some cases, such changes were prompted by clarifications issued by BaFin.

Given the vulnerability of insurance undertakings to unforeseeable (extreme) developments on the capital markets – in particular declines in the prices of shares and investment funds accompanied simultaneously by low interest-rate levels – BaFin is keeping a particularly close watch on the impact on the insurance undertakings' economic situation overall.

## 5 Solvency

As at 31 December 2017, the reinsurance undertakings had own funds amounting to approximately €212.5 billion (previous year: €209.4 billion). Table 9 (page 18) shows the composition of the reinsurers' own funds for the year under review and the previous year.

Approximately two thirds of own funds consist of the reconciliation reserve and one third of other own-fund items. Compared with the previous year, there was a slight increase in the reconciliation reserve and a corresponding decrease in subordinated capital.

**Table 8: Composition of investments**

Investment classes <sup>1)</sup>	2017		2016	
	in €m	%	in €m	%
Affiliates and equity investments	219,559.8	62.8	215,444.6	62.8
Shares	4,659.2	1.3	4,280.2	1.2
Government bonds	45,261.8	12.9	50,665.7	14.8
Corporate bonds	46,622.3	13.3	53,989.3	15.7
Investment funds	15,442.9	4.4	5,083.8	1.5
Other investments	10,524.9	3.0	11,329.6	3.3
<b>Total investments</b>	<b>342,070.9</b>	<b>97.9</b>	<b>340,793.4</b>	<b>99.3</b>
Loans and mortgages	7,487.8	2.1	2,477.8	0.7
<b>Total investments</b>	<b>349,558.7</b>	<b>100.0</b>	<b>343,271.2</b>	<b>100.0</b>

1) In accordance with the solvency statement and excluding the investments for index-linked and unit-linked contracts.

The reconciliation reserve ultimately represents the residual amount of the surplus of recognised assets in relation to the recognised liabilities that cannot be allocated to any own-fund item in accordance with the provisions of the HGB. It is the result of value differences between the commercial balance sheet and the solvency balance sheet. In the year under review, 30.6% of the reconciliation reserve was attributable to value differences in the technical provisions, while 63.9% resulted from value differences in investments. Due to the market-to-market or market-consistent valuation of investments and technical provisions, the value differences are also subject to daily market fluctuations. Annual fluctuations in the reconciliation reserve are therefore not unusual.

Although the other own-fund items are considerably more stable, the disclosure of equity under HGB provisions is nevertheless artificial and, essentially, alien to the system because it ultimately involves the disclosure of parts of the asset surplus, which as a whole is subject to market fluctuations.

As at 31 December 2017, own funds eligible to cover the minimum capital requirement (MCR) amounted to €199.3 billion (previous year: €196.7 billion), which is 93.8% of the own funds eligible to cover the solvency capital requirement (SCR).

Even though reinsurance undertakings only represented just under 8.5% of all insurers in terms of numbers, they nevertheless accounted for around 44.2% of the own funds of the entire insurance industry in 2017 (2016: 45.5%). As already mentioned above, in many cases this is due to the dual function of reinsurance undertakings: they also perform the function of a holding company for an insurance group or a financial conglomerate. In such cases, the reinsurance activities are frequently sub-

ordinated to the holding company function and this is reflected, among other things, in more than adequate capital resources from the point of view of the reinsurance activities.

As at 31 December 2017, the SCR for reinsurance undertakings amounted to approximately €63.1 billion (previous year: €61.2 billion). The MCR slightly increased from €20.1 billion in 2016 to €20.2 billion in the year under review. The MCR thus continues to account for approximately one third of the SCR.

Of the 30 reinsurance undertakings, 24 calculated their SCR using the standard formula. This corresponds to 80% of all reinsurance undertakings; across the insurance industry as a whole, 90% use the standard formula. This means that one in five reinsurance undertakings uses the option of an internal model approved by BaFin. These six undertakings account for roughly 90% of all premiums and 90% of all technical provisions. A representation of the composition of the SCR based on the standard formula modules is therefore not very meaningful.

Irrespective of this, the most important risk driver by far is market risk, which represents approximately three quarters of the basic SCR of the undertakings that used the standard formula. Underwriting risk for non-life insurance is also important, representing roughly one third of the basic SCR, which, in turn, is reduced by 22% by risk-mitigating diversification effects. All other risks are of secondary importance. The dominant role of the market risk is due to the great influence of holding companies in the reinsurance industry. In addition, as these are often larger holding companies, market risks are also the dominant risk when looking at the industry average for reinsurers.

**Table 9: Composition of own funds**

Own-fund items	2017		2016	
	in €m	%	in €m	%
Ordinary share capital	4,438.5	2.1	4,132.3	2.0
Capital reserves	42,924.8	20.2	42,813.0	20.4
Reconciliation reserve	144,899.7	68.2	141,256.0	67.5
Subordinated capital	18,883.3	8.9	21,020.8	10.0
Other items	1,312.8	0.6	134.5	0.1
<b>Eligible own funds to cover the SCR</b>	<b>212,459.2</b>	<b>100.0</b>	<b>209,356.6</b>	<b>100.0</b>

All in all, average SCR coverage amounted to approximately 336.9% as at 31 December 2017 (previous year: 342.3%). The coverage ratio was thus slightly below the industry average for all insurance undertakings, which achieved an average SCR coverage ratio of 345.6% in 2017. The MCR coverage ratio rose slightly from 981.1% in 2016 to 984.6% in 2017.

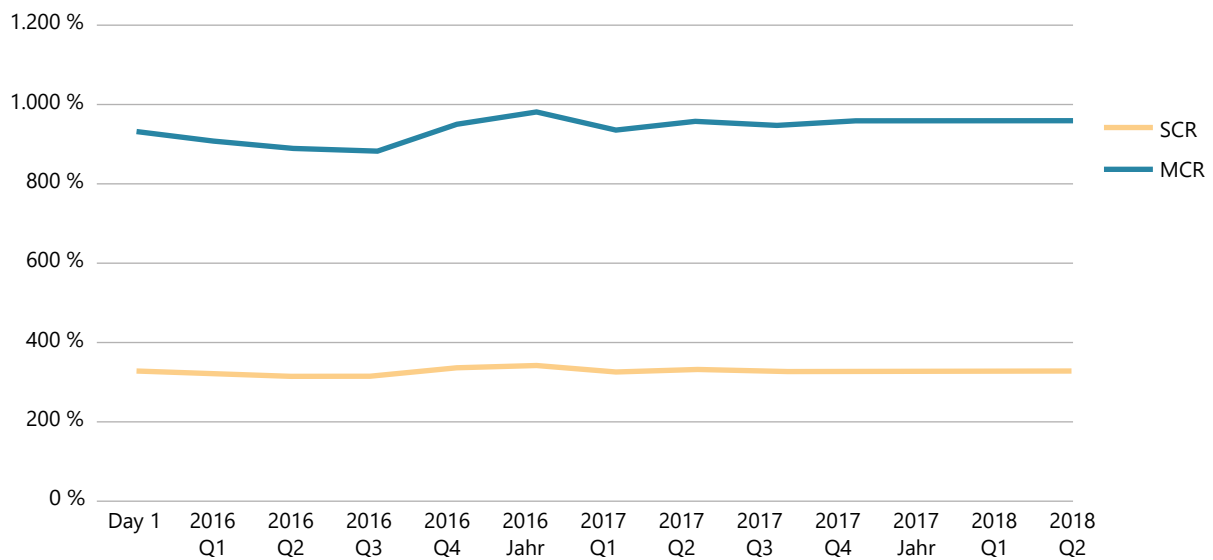
Over time, the range of coverage ratios remains relatively constant. This is also true for the average coverage ratios of reinsurance undertakings as shown in Figure 1.

In the period under review, the reinsurers' average SCR coverage ratio fluctuated within a relatively narrow range of between 314.6% and 342.4%.

The range of the coverage ratios within the reinsurance sector is considerable, especially with respect to the MCR. As at 31 December 2017, the reinsurers reported SCR coverage ratios between 124.6% and 559.7% and MCR coverage ratios between 122.2% and 2238.8%.

The wide range of the coverage ratios reflects the heterogeneous nature of the reinsurance sector, which is small in terms of the number of companies. In addition to reinsurers with regional and international operations, the sector also includes captive insurers, run-off platforms and some reinsurance undertakings that also perform the function of a holding company for an insurance group or a financial conglomerate. Ultimately, the function of the reinsurance undertaking also influences its capital resources.

**Figure 1: Quarterly development of the average coverage ratios**



# Imprint

## **Publisher**

Bundesanstalt für  
Finanzdienstleistungsaufsicht  
Federal Financial Supervisory Authority  
Communications (Group K)

Graurheindorfer Straße 108 | 53117 Bonn  
Marie-Curie-Straße 24 – 28 | 60439 Frankfurt am Main

Phone: +49(0)228 41 08-0  
Internet: [www.bafin.de](http://www.bafin.de)  
E-Mail: [poststelle@bafin.de](mailto:poststelle@bafin.de)

Bonn und Frankfurt am Main | November 2018  
ISSN 1611-910X

## **Editing**

Communications (Group K)

## **Copy deadline**

9. November 2018

## **Design**

werksfarbe.com, konzept + design, Frankfurt

## **Typesetting**

Hansen Kommunikation, Köln