Group Annual Report 2017
Munich Re

2017

WE DRIVE BUSINESS AS ONE

Munich RE

Key figures (IFRS)

Munich Re at a glance » Key figures (IFRS) – Munich Re at a glance (XLS, 38 KB)

		2017	2016	2015	2014	2013
Gross premiums written	€bn	49.1	48.9	50.4	48.8	51.1
Net earned premiums	€bn	47.2	47.1	48.3	47.4	49.2
Net expenses for claims and benefits	€bn	–41.6	–38.5	–38.7	–39.7	–39.9
Net operating expenses	€bn	–12.2	–12.3	–12.4	–12.0	–12.4
Operating result	€m	1,241	4,025	4,819	4,027	4,398
Taxes on income	€m	298	–760	–476	312	–108
Consolidated result	€m	392	2,581	3,122	3,170	3,333
Attributable to non-controlling interests	€m	17	1	15	18	29
Earnings per share	€	2.44	16.13	18.73	18.31	18.45
Dividend per share	€	8.60	8.60	8.25	7.75	7.25
Dividend payout	€m	1,290	1,333	1,329	1,293	1,254
Share price at 31 December	€	180.75	179.65	184.55	165.75	160.15
Munich Reinsurance Company's market capitalisation at 31 December	€bn	28.0	28.9	30.8	28.7	28.7
Carrying amount per share	€	185.19	200.86	188.40	178.13	146.15
Investments[1]	€bn	217.6	221.8	217.6	218.9	202.2
Insurance-related investments	€bn	9.7	9.6	9.2	8.5	7.3
Equity	€bn	28.2	31.8	31.0	30.3	26.2
Return on equity	%	1.3	8.1	10.0	11.3	12.5
Off-balance-sheet unrealised gains and losses[2]	€bn	15.0	17.3	16.0	17.4	8.7
Net technical provisions	€bn	205.8	202.2	198.5	198.4	187.7
Balance sheet total	€bn	265.7	267.8	268.9	265.6	254.3
Staff at 31 December		42,410	43,428	43,554	43,316	44,665

Reinsurance[3] » Key figures (IFRS) – Reinsurance (XLS, 36 KB)

		2017	2016	2015	2014	2013
Gross premiums written	€bn	31.6	31.5			
Investments (incl. insurance-related investments)[1]	€bn	85.8	91.9			
Net technical provisions	€bn	68.1	67.1			
Major losses (net)	€m	–4,314	–1,542	–1,046	–1,162	–1,689
Natural catastrophe losses	€m	–3,678	–929	–149	–538	–764
Combined ratio property-casualty	%	114.1	95.7	89.7	92.7	92.1

ERGO[3] » Key figures (IFRS) – ERGO (XLS, 35 KB)

		2017	2016	2015	2014	2013
Gross premiums written	€bn	17.5	17.4			
Investments (incl. insurance-related investments)[1]	€bn	141.4	139.4			
Net technical provisions	€bn	137.6	135.2			
Combined ratio property-casualty Germany	%	97.5	97.0	97.9	95.3	96.7
Combined ratio International	%	95.3	98.0			

1 Previous years' figures adjusted owing to IAS 8; see "Changes in accounting policies and other adjustments".
2 Including those apportionable to minority interests and policyholders.
3 Previous year's figures adjusted owing to a change in the composition of the reporting segments.

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More detailed lists of contents are provided on the pages separating the individual sections.

Due to rounding, there may be minor deviations in summations and in the calculation of percentages in this report.

This document is a translation of the original German version and is intended to be used for informational purposes only. While every effort has been made to ensure the accuracy and completeness of the translation, please note that the German original is binding.

Dr. Joachim Wenning
Chairman of Munich Reinsurance Company's Board of Management

Dear shareholders,

2017 was one of the most loss-affected years in the history of our Company. Hurricanes Harvey, Irma and Maria, as well as the earthquakes in Mexico, caused misery and destruction across the Caribbean, Central America and the southern USA. Munich Re is paying out over €3,000m for these events alone, and is thus helping to alleviate the plight of those affected, at least financially. Although this unusual accumulation of severe catastrophes meant that our original profit guidance for 2017 was no longer attainable, we were well positioned to absorb even such heavy losses.

These disasters have once again highlighted the importance and necessity of reinsurance cover, and Munich Re is committed to providing strong support for the insurance industry in all lines of business and throughout the world. Nevertheless, we need to change. With ever-shorter innovation cycles, increased competition in the reinsurance markets, persistently low interest rates, digitalisation sweeping through all areas of life and work, and disruptive new business models, our world is changing fast – as are the demands on our Company. We are transforming Munich Re in order to seize new opportunities, including those offered by digitalisation, and sustain our earnings power in the long term.

Munich Re is investing heavily in digital transformation. We have set up dedicated units to capture, structure, and analyse data, and we make these findings available to our business units. Munich Re already employs over 200 data specialists, and more than 300 staff work in innovation. And these numbers are set to rise. More and more of our experts are spending most or all of their time coming up with innovative solutions to meet existing and new requirements in their area of expertise. We are developing new digital business models – such as for the Internet of Things. We are the world leader in the rapidly growing cyber insurance market. And insurance start-ups see Munich Re as their go-to partner. We also have our own start-up, as it were, in the form of our purely digital insurer, nexible. We are investing heavily in digitalisation at ERGO, and are working to offer customers a seamless and modern customer experience – whether they choose to deal with us online, by telephone, or in person at one of our offices.

These are just a few examples of the profound digital transformation taking place in our Group. Our strategy is not to imitate the business models of data and internet companies – but rather to enhance our core business and push back its boundaries by adding digital elements. Reinsurance and insurance will continue to be the heart of our business.

At the same time as building digital competence, we are reducing complexity in other areas. Internal processes are being streamlined and made more efficient. We are reducing costs and lowering our headcount where we can do so without harming our business. This is how we are making Munich Re fit for the future.

We will halt the downward profit trend that we have seen in recent years – even adjusted for the major-loss expenditure in 2017 – and gradually increase our profitability. With this in mind, we have launched ambitious initiatives for profitable growth in our two fields of business and at our asset-management subsidiary, MEAG.

ERGO is making good progress with its Strategy Programme, having reached important milestones in 2017. ERGO is also delivering in terms of results: its profit of €273m surpassed our guidance for 2017, which we had already raised halfway through the year. But we still have a lot of hard work to do until the Strategy Programme is successfully completed. Our aim is still for ERGO to contribute at least €600m to the consolidated result for the year as from 2021, and lay the strategic foundations for a successful future.

The hurricanes in the USA and the Caribbean, the fierce wildfires in California, and the earthquakes in Mexico had a severe impact on our result in the reinsurance field of business. Property-casualty reinsurance, which usually generates most of Munich Re's profits in normal years, posted a loss in 2017. But – and this is the good news – prices for reinsurance business renewed at the start of the year increased as a result of the huge market losses. This positive development is likely to intensify later in the year when many other treaties come up for renewal in the markets affected by the catastrophes. We are confident that market conditions will continue to improve.

In addition, we want to grow profitability in reinsurance with our own initiatives. We will be resolute in seizing opportunities for profitable business. In some selected markets, we will increase our willingness to take on risk without compromising our underwriting principles. At the same time, we will vigorously pursue new markets in uninsured or under-insured risks. One good example of this is the partnership we struck with the World Bank and the World Health Organization last year to cover pandemic risk in developing countries.

As regards our long-term investment horizon, we are seeking to improve our investment result by expanding our investments in less liquid markets and slightly raising the risk profile of our portfolio without abandoning our tried-and-tested policy of gearing our investments to the structure of our liabilities. Munich Re remains a conservative investor – both in absolute terms and by market comparison. As Munich Re invests heavily in interest-bearing securities, decisions made by central banks are of great significance to us. We are still not feeling any tailwinds in this respect, but at least the headwinds have eased. Interest rates have started to rise again slowly, particularly in the US where we are a heavyweight in reinsurance. Accordingly, in 2018 we should see an end to the falling running yield in reinsurance overall.

We will continue to reward your investment in Munich Re by making high payouts, and increasing them where possible. You can rely on the Munich Re dividend, which we have not lowered for almost 50 years. Of course, we strive to continue this success story. Despite a financial year marked by large losses – and subject to the approval of the Supervisory Board and Annual General Meeting – Munich Re will pay an unchanged dividend of €8.60 per share.

Overall, we can look to the future with optimism. Munich Re is well on track to actively use digital transformation to provide our clients with better, more efficient and tailored solutions. At the same time, we are cutting costs and setting targeted impulses for profitable growth. We have the financial strength to expand through acquisitions, but especially through organic growth. We envisage generating a profit in the range of €2.1–2.5bn for the year 2018, which is a slight increase on our profit guidance for 2017.

Thank you – also on behalf of my 42,000 colleagues across the world – for the trust you place in Munich Re by investing in our Company.

Yours sincerely,

Joachim Wenning

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Bernd Pischetsrieder
Chairman of the
Supervisory Board

Ladies and Gentlemen,

In the 2017 financial year, the Supervisory Board fulfilled all the tasks and duties incumbent upon it by law and under the Articles of Association and the rules of procedure. We monitored the Board of Management in its conduct of the business, and gave advice on all matters of importance for the Group. No inspection measures in accordance with Section 111(2) sentence 1 of the German Stock Corporation Act (AktG) were required at any time.

With the exception of Peter Gruss and Renata Jungo Brüngger, all members of the Supervisory Board and of the committees took part in over half of the respective meetings. Peter Gruss chose to step down from the Supervisory Board in order to pursue a new role in Japan. Renata Jungo Brüngger only joined the Supervisory Board in 2017. As Supervisory Board meetings are arranged far in advance, Renata Jungo Brüngger was only able to participate in 50% of the meetings in her first year of membership.

Collaboration between Supervisory Board and Board of Management

The Board of Management involved the Supervisory Board in all important business transactions and decisions of fundamental significance for the Group. In our meetings, we discussed all reports from the Board of Management at length. Cooperation with the Board of Management was characterised in every regard by targeted and responsible action aimed at promoting the successful development of Munich Re. The Board of Management satisfied its reporting obligations towards the Supervisory Board in all respects, both verbally and in writing.

Outside of Supervisory Board meetings, the Board of Management informed us promptly about important events in the Group, in particular the impact of hurricanes Harvey, Irma and Maria, and the decision of the Board of Management of ERGO Group AG to end discussions concerning the sale of its traditional life insurance portfolio. The shareholder representatives and the employee representatives met regularly with the Chairman of the Board of Management for separate discussions in preparation for the meetings.

Between meetings, I met regularly with the Chairman of the Board of Management Nikolaus von Bomhard (until 26 April 2017) and Joachim Wenning (from 27 April 2017). We discussed individual questions of strategic orientation and risk management, as well as Munich Re's current business situation. Also between meetings, the Chairman of the Audit Committee, Henning Kagermann, remained in close contact with Jörg Schneider, the member of the Board of Management responsible for Group reporting.

Focal points of the meetings of the full Supervisory Board

There were six meetings of the Supervisory Board in the year under review. We regularly held in-depth discussions with the Board of Management about business performance and current topics, with a special focus on strategic considerations of the Board of Management with respect to the individual fields of business. The Board of Management reported regularly on Munich Re's investments, addressing the development of the global economy and financial markets in detail, as well as their impact on the Group's assets and earnings. The Board also supplied us with frequent updates on the implementation of the ERGO Strategy Programme. Following the rejection of the remuneration system at the 2017 Annual General Meeting, we addressed in detail the reasons for this decision in a number of meetings, and worked on a new remuneration system for the members of the Board of Management. Moreover, we took advantage of the opportunity to confer on matters involving the Board of Management even in the Board's absence. We also dealt with the following topics in the individual meetings in 2017:

The meeting on 14 March focused among other things on the Company and Group financial statements for 2016, the combined management report, and the motions for resolution by the 2017 Annual General Meeting. Furthermore, we conferred and took decisions regarding the extension of two appointments to the Board of Management and a change to the Board of Management, and established the personal objectives for the Board members' variable remuneration for 2017. We also made decisions concerning the Guideline on fringe benefits. In addition, we received updates on the Group-wide compliance management system. Representatives of the German Federal Financial Supervisory Authority (BaFin) routinely attended this meeting as guests.

The meeting on 25 April dealt with matters involving the Board of Management, specifically the evaluation of the individual Board members' annual performance for 2016 and their multi-year performance for 2014–2016. We also dealt with a self-assessment of the members of the Supervisory Board concerning their knowledge of specific fields that are important for the supervision of Munich Re. We found that the Supervisory Board as a whole possesses the appropriate diversity of qualifications, knowledge and experience to ensure that Munich Re is supervised in a professional manner, taking account of the company-specific characteristics.

On 26 April, directly prior to the Annual General Meeting, we heard the Board of Management's report on the present status of business performance in 2017. We also used the meeting to make last-minute preparations for the Annual General Meeting.

On 18 July, we were informed about the cyber insurance market and Munich Re's strategy in this area. In addition, we adopted a Communications Policy setting out basic rules for the Supervisory Board's communication with investors. Beyond this, we were briefed on the 2016 remuneration report in accordance with the German Remuneration Regulation for Insurance Companies (VersVergV) and adopted an amendment to the Guideline on fringe benefits.

On 19 October, we discussed corporate governance issues including the results of the annual efficiency review, the adoption of amendments to the Munich Re Fit and Proper Policy, and the resolution regarding the annual Declaration of Conformity with the German Corporate Governance Code. And, in the light of new non-financial reporting requirements, we decided to amend the allocation of responsibilities on the Supervisory Board. The Board of Management also reported on digitalisation and innovation initiatives at Munich Re.

After a comprehensive discussion, on 14 December we decided on the redesign of the structure of the remuneration system for the Board of Management, which takes effect as from 2018. We also made decisions on changes to the standard contract for Board of Management members and to the rules of procedure for the Supervisory Board. We discussed the Group's risk strategy against the backdrop of the yearly report on Munich Re's risk situation provided by the Group Chief Risk Officer. The Board reported on Group planning for 2018 to 2020. The Board also presented us with the Group human resources report for 2016/2017 and detailed the focal points of human resources work and workforce planning within the Group. Furthermore, there was a report on changes in the Life and Health Division.

Work of the committees

There are six Supervisory Board committees. These are assigned certain matters for resolution and also prepare the topics which are to be addressed and decided upon by the full Supervisory Board. At each Supervisory Board meeting, detailed information about the work of the committees was provided to the full Supervisory Board by the respective chairs of the committees.

Details of the tasks of the committees and their composition can be obtained on page 18 f. and from our website at www.munichre.com/supervisory-board.

The Personnel Committee held eight meetings in the period under review. It essentially prepared the resolutions on matters involving the Board of Management already mentioned in the report on the work of the full Supervisory Board. One of the main tasks here was to design a new remuneration system for the members of the Board of Management. It also dealt with seats held by members of the Board of Management on supervisory, advisory and similar boards, and with Group-wide succession planning, especially with respect to Board-level appointments.

The Supervisory Board set up a separate Remuneration Committee with effect from 1 January 2018, of which the Chairman of the Supervisory Board and one representative each of the shareholders and employees are members. Following the 2019 Supervisory Board election, the Committee is to be set up in such a way that the two shareholder representatives may not be members of the Supervisory Board for more than ten years. This enables us to comply with a key demand of our investors. As a result of the establishment of the Remuneration Committee, responsibility for all remuneration-related matters concerning members of the Board of Management has been transferred from the Personnel Committee to the Remuneration Committee. This has no effect on the remaining tasks of the Personnel Committee, such as the appointment and dismissal of Board members or the conclusion of contracts.

At its four meetings in 2017, the Standing Committee dealt with the preparation of the respective Supervisory Board meetings and topics of corporate governance. In addition, the Standing Committee carried out a review of the efficiency of the Supervisory Board's work in 2017, and determined that, overall, the reporting by the Board of Management and the work of the Supervisory Board was efficient and appropriate. Regular reports by the Chairman of the Board of Management covered changes to the shareholder structure and the status of the share buy-back programmes. The Committee also received the annual report on expenses for donations and sponsoring. It was also assigned specific tasks concerning the scrutiny of the non-financial reporting produced for the first time this year in accordance with the German act implementing the CSR Directive on the disclosure of non-financial and diversity information. In keeping with an applicable decision taken by the full Supervisory Board, the Standing Committee commissioned audit company Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft with the auditor's review of the separate non-financial (Group) statement.

The Audit Committee met six times in 2017, and two of these meetings were attended by the external auditor. The Committee discussed the Company and Group financial statements, the combined management report, the auditor's report and the Board of Management's proposal for the appropriation of the net retained profits for the 2016 financial year. The Audit Committee also considered the quarterly statements for 2017, and conducted a detailed review of the 2017 Half-Year Financial Report in conjunction with the auditor. The Committee heard regular reports on the key Solvency II figures and discussed the quarterly reporting to the Supervisory Authority in these meetings. Another key task of the Committee consisted of monitoring the Group's risk situation and risk management on an ongoing basis, and discussing its risk strategy: the Group Chief Risk Officer regularly provided detailed verbal input at several meetings of the Committee in addition to the quarterly written reports submitted. The Head of the Actuarial Function also provided a report in a meeting. Further issues discussed regularly were the internal control system and compliance topics. The Group Chief Auditor informed the members of the Committee in full about the outcome of the audits for 2016 and the audit planning for 2017. The Committee received regular updates on the current status of individual compliance issues and the progress of audits. In the absence of the Board of Management, the members of the Committee took advantage of the opportunity to confer amongst themselves or with the Group Chief Auditor, the Group Chief Compliance Officer, the Group Chief Risk Officer and the external auditor. Furthermore, the Audit Committee reviewed and monitored the auditor's independence. It regularly called for reports on the auditor's new activities beyond the auditing of the annual financial statements and on the utilisation of the statutory limit for awarding such contracts. The auditor presented the Audit Committee with explanations of the key audit matters for the 2017 financial year. Following a resolution by the full Supervisory Board, the Chair of the Committee commissioned KPMG with the audit for the 2017 financial year, and also commissioned the auditor's review of the Half-Year Financial Report 2017.

The Nomination Committee met once in 2017, and discussed suitable candidates for election to the Supervisory Board. In proposing its nomination, the Committee took account of the objectives set by the Supervisory Board for the composition of the Board and the set of criteria, among other things.

There was no need to convene the Conference Committee in the 2017 financial year.

Dialogue with investors

In my role as Chairman of the Supervisory Board, I held discussions with investors in 2017 and 2018. Following the rejection of the remuneration system for the members of the Board of Management at the Annual General Meeting in April 2017, these discussions often focused heavily on the remuneration system. The outcomes of these discussions were for the most part taken into consideration in the decision-making process and when drawing up the revised remuneration system proposal for the members of the Board of Management.

Corporate governance and Declaration of Conformity

The Supervisory Board pays close attention to good corporate governance. Together with the Board of Management, we therefore published the mandatory annual Declaration of Conformity pursuant to Section 161 of the German Stock Corporation Act (AktG) in November 2017. We again complied with all recommendations of the German Corporate Governance Code, and will continue to do so in future. We confirmed the assessment that all 20 members of the Supervisory Board are to be regarded as independent and that they do not have any relevant conflicts of interests.

Details of this can be found in the Corporate Governance Report on page 15 f.

Munich Re offered the members of the Supervisory Board specific training at an internal information event in 2017. Almost all members took the opportunity to learn more about selected topics related to investment, accounting and reinsurance.

Changes on the Board of Management

Nikolaus von Bomhard stepped down from the Board of Management and went into retirement at the end of the 2017 Annual General Meeting. Joachim Wenning took over as Chairman of the Board of Management on 27 April 2017. As a consequence of the change in management, the units belonging to the Group functions in the divisions for which Joachim Wenning and Jörg Schneider are responsible were reorganised in order to bring the functions related to the Group's business development closer to the Chairman of the Board of Management and, at the same time, achieve a greater concentration of the governance functions in the division for which the Chief Financial Officer is responsible.

Member of the Board of Management Ludger Arnoldussen stepped down from the Board of Management as of 26 April 2017. Hermann Pohlchristoph was appointed his successor, and took responsibility for the Germany, Asia Pacific and Africa Division and the Central Procurement and Services central divisions.

Member of the Board of Management Pina Albo stepped down from the Board of Management as of 31 December 2017. Until further notice, Peter Röder has responsibility for the Europe and Latin America Division in addition to the Global Clients and North America Division.

Changes on the Supervisory Board

Renata Jungo Brüngger, who had been appointed successor to Wolfgang Mayrhuber by an order of the Amtsgericht (Local Court) of Munich dated 3 January 2017, was elected to the Supervisory Board by the 2017 Annual General Meeting for the remainder of Wolfgang Mayrhuber's term of office. With effect from 1 January 2017, Henning Kagermann was appointed Wolfgang Mayrhuber's successor on the Personnel Committee, and Gerd Häusler as his successor on the Standing Committee.

Peter Gruss stepped down from the Supervisory Board with effect from 30 June 2017. Maximilian Zimmerer was appointed his successor by an order of the Amtsgericht (Local Court) of Munich dated 4 July 2017. The Supervisory Board will propose to the 2018 Annual General Meeting that Maximilian Zimmerer be elected to the Supervisory Board for the remainder of Peter Gruss's term of office.

Further information on corporate governance in general is available in the joint report of the Board of Management and Supervisory Board on page 14 ff.

Company and Group financial statements for 2017, Solvency II reporting and non-financial information

Auditor KPMG Bayerische Treuhandgesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, München duly audited the Company and Group financial statements and the combined management report as at 31 December 2017, and issued them with an unqualified auditor's opinion.

The respective reports and the Board of Management's proposal for appropriation of the net retained profits were submitted directly to the members of the Supervisory Board. At its meeting on 5 February 2018, the Audit Committee had the opportunity to confer in detail about the preliminary year-end figures as at 31 December 2017. On 13 March 2018, it prepared the Supervisory Board's resolution on the adoption of the Company financial statements and the approval of the Group financial statements. To this end, the Audit Committee examined in advance the Company and Group financial statements, the combined management report and the Board of Management's proposal for appropriation of the net retained profits. It discussed these at length with the external auditor present at the meeting, and gave detailed consideration to the auditor's reports. The Audit Committee paid particular attention to the key audit matters described in the auditor's opinion, including audit activity. The Chair of the Audit Committee briefed the full Supervisory Board about the outcome of its consultations at the balance sheet meeting. In its March meeting, the Audit Committee discussed the preliminary key figures under Solvency II reporting – and the solvency ratio under Solvency II in particular – and reported on this in the plenary session.

The full Supervisory Board also reviewed the Company and Group financial statements and the combined management report, and the proposal of the Board of Management for appropriation of the net retained profits. The auditor's reports were available to all members of the Supervisory Board and were discussed in detail at the balance sheet meeting of the Supervisory Board on 14 March 2018 in the presence of the external auditor. The auditor reported on the scope, the main points, and the key results of the audit, going into particular detail on the key audit matters (please refer to auditor's report on page 180 ff. for information) and the audit activity conducted. There were no reports of material weaknesses in the internal control system or the risk management system.

On the basis of this comprehensive examination, the Supervisory Board raised no objections concerning the outcome of the external audit. It approved the Company and Group financial statements on 14 March 2018. The financial statements were thus adopted. Having carefully weighed all relevant aspects, the Supervisory Board followed the proposal of the Board of Management for appropriation of the net retained profits.

The Standing Committee dealt with the separate non-financial (Group) statement on 5 February 2018. On 14 March 2018, the full Supervisory Board examined this statement, taking due consideration of the external audit, and approved the statement.

Words of thanks to the Board of Management and employees

The Supervisory Board wishes to thank all members of the Board of Management and staff worldwide for their work and dedication in an eventful and challenging financial year.

Munich, 14 March 2018

For the Supervisory Board

Bernd Pischetsrieder
Chairman

Corporate governance report[1]

Corporate governance stands for a form of responsible company management and control geared to long-term creation of value.

The German Corporate Governance Code contains the main legal rules to be observed by listed German companies. In addition, it includes recommendations and proposals based on nationally and internationally recognised standards of good and responsible management. We apply the highest standards to our operations and activities and therefore comply with all the recommendations and proposals of the German Corporate Governance Code. By adopting international guidelines such as the UN Global Compact, the Principles for Responsible Investment and the Principles for Sustainable Insurance, we further demonstrate our commitment to corporate responsibility.

Efficient practices on the Board of Management and Supervisory Board, good collaboration between these bodies and with the Group's staff, an organisational structure that fits the purpose of the Group, and efficient processes for conducting business are core elements of good corporate governance. They help to secure the confidence of investors, clients, employees and the general public in our corporate activities.

More information on corporate governance can be found at www.munichre.com/cg-en. There, you can also find the Statement on Corporate Governance in accordance with Sections 289f and 315d of the German Commercial Code (HGB) and the Declaration of Conformity by the Board of Management and Supervisory Board with the German Corporate Governance Code in accordance with Section 161 of the German Stock Corporation Act (AktG). The remuneration report can be found on page 27 ff. of the combined management report.

Corporate legal structure

Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München (Munich Reinsurance Company) has three governing bodies: the Annual General Meeting, the Board of Management and the Supervisory Board. Their functions and powers are defined by law, the Articles of Association, the Co-determination Agreement applicable to Munich Reinsurance Company, and by rules of procedure and internal guidelines. Employee co-determination on the Supervisory Board is governed by the Co-determination Agreement concluded pursuant to the German Act on the Co-Determination of Employees in Cross-Border Mergers (MgVG). There, the principle of parity co-determination on the Supervisory Board has been strengthened by taking into account staff employed in the rest of Europe.

The supervisory requirements for (re)insurance companies, especially the German Insurance Supervision Act (VAG) and the European supervisory regulations (Solvency II implementing rules) are placing additional demands on corporate governance. They include specific rules on various issues such as business organisation or the qualifications and remuneration of members of the Board of Management, Supervisory Board members and other individuals.

Annual General Meeting

The Annual General Meeting regularly reaches a resolution on the appropriation of profits and approval of the actions of the Board of Management and Supervisory Board. Besides this, the Annual General Meeting elects the shareholder representatives on the Supervisory Board and, in particular, votes on changes to the Articles of Association and on individual capital measures. Certain corporate contracts also require the approval of the Annual General Meeting to become effective.

The principle of "one share, one vote" applies at the Company's Annual General Meeting. With the aim of making it easier for shareholders to take part and exercise their voting rights, the Company offers the possibility of postal and electronic voting as well as online participation in the Annual General Meeting.

Board of Management

Pursuant to Article 16 of the Articles of Association, the Board of Management consists of at least two members; beyond this, the number of members is determined by the Supervisory Board. When appointing the Board of Management, the Supervisory Board pays due regard to diversity. In 2017, the Board of Management of Munich Reinsurance Company had nine members, two of whom were women.

The Board of Management is responsible for managing the Company, in particular for setting the Company's objectives and determining strategy. In doing so, it is obliged to safeguard Company interests and endeavour to achieve a sustainable long-term increase in the Company's value. It should take account of the interests of shareholders, employees, and other stakeholders of Munich Reinsurance Company. The Board of Management is responsible for effecting adequate risk management and risk control in the Company. It must ensure that statutory requirements and internal Company guidelines are abided by, and works to achieve their compliance by Group companies.

Compliance

The Company's Group Compliance division (GComp) manages the compliance activities of Munich Re (Group) through Group-wide terms of reference, monitoring their implementation by means of the compliance management system (CMS). The CMS is the methodical framework for the structured implementation of early warning, risk

1 In accordance with Section 3.10 of the German Corporate Governance Code.

control, consulting and supervision functions, as well as for the monitoring of legal frameworks.

At the instigation of the Board of Management, another channel has been established to complement the external, independent ombudsman and thus strengthen compliance within Munich Re: the compliance whistle-blowing portal. Staff members and third parties can use this portal to anonymously report any activity that may cause reputational damage, suspected criminal behaviour such as bribery and corruption, contraventions of antitrust laws, insider trading rules and data protection laws, and any other violations of applicable legislation.

Further information about compliance and the key features of the CMS can be found at www.munichre.com/en/compliance.

Collaboration between Board of Management and Supervisory Board

The Board of Management and the Supervisory Board cooperate closely for the benefit of the Company.

The Board of Management coordinates the Company's strategic approach with the Supervisory Board and discusses the current state of strategy implementation with it at regular intervals. The Board of Management reports regularly and as needed to the Supervisory Board about all questions relevant to the Company. Beyond this, the Board of Management reports to the Audit Committee on specific topics falling within the latter's scope of responsibility. The Supervisory Board has defined the Board of Management's information and reporting obligations in detail. Specific types of transaction, such as certain investments and divestments, require the Supervisory Board's consent. The Supervisory Board's approval is also required for sideline activities assumed by members of the Board of Management, and for important transactions involving members of the Board of Management or persons or undertakings closely associated with them.

Supervisory Board

Pursuant to Munich Reinsurance Company's Articles of Association, the Supervisory Board has 20 members. Half are representatives of the shareholders, elected by the Annual General Meeting. The other half are elected representatives of the Group's employees in the European Economic Area.

The Supervisory Board monitors the Board of Management and gives counsel where appropriate, but it is not authorised to take management action in place of the Board of Management. In accordance with a special rule applicable to (re)insurance companies, the Supervisory Board also appoints the external auditor for the Company and Group financial statements and for the Half-Year Financial Report.

Objectives of the Supervisory Board concerning its composition, diversity, independence and competences

In accordance with Section 5.4.1(2) of the German Corporate Governance Code, the Supervisory Board has set itself the following objectives concerning its composition and has defined requirements regarding the competencies of its members:

- The main criteria for selecting future members of the Supervisory Board are the professional knowledge, personal abilities and experience (especially of an international nature), independence, commitment to sustained corporate profitability, and enterprise of the nominated persons.

- The Supervisory Board should have at least sixteen independent members within the meaning of Section 5.4.2 of the German Corporate Governance Code, including at least eight shareholder representatives. Members of the Supervisory Board should have no relevant conflicts of interest.

- In selecting candidates, the Supervisory Board should pay due regard to diversity, especially in terms of age, internationality and gender. No change has been made to the objective of having at least 30% of Supervisory Board seats filled by women at the start of the next term of office. At the end of the year under review, 45% of the Supervisory Board seats were held by women. The Supervisory Board's objective has therefore already been exceeded at this juncture.

- When nominating candidates for election to the Supervisory Board in future, it should be borne in mind that, as a rule, no candidate should have been on the Supervisory Board for a continuous period of more than ten years at the time of election. Normally, Supervisory Board members should not serve on the Board for a continuous period of more than twelve years.

In addition, the Supervisory Board's rules of procedure provide for a recommended age limit of 70 for candidates.

The aforementioned objectives apply to the Supervisory Board as a whole. Shareholder and employee representatives will each contribute towards meeting these objectives.

The Supervisory Board is of the opinion that all 20 of its members are to be regarded as independent within the meaning of Section 5.4.2 of the German Corporate Governance Code. The shareholder structure was taken into account. The Supervisory Board is not aware of any business or personal relationship between a member and the Company, its governing bodies, a controlling shareholder or an entity affiliated with such a shareholder, as a result of which a major and not only temporary conflict of interest could arise. The Supervisory Board assumes that the employee representatives on the Supervisory Board elected in accordance with the Act on the Co-Determination of Employees in Cross-Border

Mergers and the Co-determination Agreement are independent as a matter of principle.

The Supervisory Board's Nomination Committee selects candidates for the shareholder representatives based on a defined set of criteria. Besides the objectives mentioned, these criteria include a good overall understanding of the Company's business model, sufficient time availability and specific skills and competence. Consequently, it must be ensured that the Supervisory Board as a whole possesses adequate knowledge, skills and experience with regard to markets, business processes, competitors, the requirements of reinsurance, primary insurance and investment, as well as having an adequate knowledge of risk management; accounting; financial control and management accounting, and internal auditing; asset liability management; legal and regulatory affairs; compliance; and taxation. The members must collectively be familiar with the sector in which the Company operates.

The set of criteria also includes other personal qualities of the Supervisory Board members, such as corporate and international experience, a strong commitment to corporate governance and to a sustainable corporate strategy and business policy geared to creating long-term value for shareholders, strategic and problem-solving skills, and competence in dealing with change. ↗

Additional requirements will be defined on a case-by-case basis for specific tasks to be handled by the Supervisory Board. The European Electoral Board, which is responsible for the election of the employee representatives, applies a corresponding set of criteria. In addition, the specific rules for co-determination apply.

The Supervisory Board is of the opinion that its composition meets the defined criteria and that it fulfils the competence profile.

Share trading and shares held by Board members

The Company has to be notified promptly of the acquisition or sale of Company shares (or financial instruments based on these) by members of the Board of Management and Supervisory Board and by specified persons closely related to or connected with them. This notification must take place for acquisition and sales transactions totalling €5,000 or more in a single calendar year.

Munich Reinsurance Company publishes information of this kind on its website without undue delay.

Responsibilities and seats held by the Board of Management

Board of Management	**Responsibilities**	**Seats**[1]
Dr. oec. publ. Joachim Wenning Labour Relations Director (until 26 April 2017) Chairman of the Board of Management (since 27 April 2017) Chairman of the Group Committee (since 27 April 2017)	Life (until 31 January 2017) Human Resources (until 26 April 2017) Since 27 April 2017: Group Holdings Group Strategy and M&A Group Communications Group Audit Economics, Sustainability & Public Affairs[3] Group Human Resources Group Executive Affairs	ERGO Group AG, Düsseldorf[2] (Chair)
Dr. jur. Nikolaus von Bomhard (until 26 April 2017) Chairman of the Board of Management Chairman of the Group Committee	Group Development[3] Group Holdings Group Communications Group Compliance Group Audit Group Human Resources	–
Giuseppina Albo (until 31 December 2017)	Europe and Latin America	IFG Companies, USA
Dr. rer. pol. Ludger Arnoldussen (until 26 April 2017)	Germany, Asia Pacific and Africa Central Procurement Services	–
Dr. rer. pol. Thomas Blunck	Special and Financial Risks (until 31 January 2017) Life and Health (since 1 February 2017) Capital Partners Digital Partners Reinsurance Investments	Munich Re Digital Partners Ltd., United Kingdom[2] (Chair)

See table on next page for footnotes

Board of Management	Responsibilities	Seats[1]
Dr. jur. Doris Höpke Labour Relations Director (since 27 April 2017)	Health (until 31 January 2017) Special and Financial Risks (since 1 February 2017) Human Resources (since 27 April 2017)	Apollo Munich Health Insurance Company Ltd., India Global Aerospace Underwriting Managers Ltd. (GAUM), United Kingdom New Reinsurance Company Ltd., Switzerland[2] (Chair)
Dr. rer. nat. Torsten Jeworrek Chairman of the Reinsurance Committee	Reinsurance Development Corporate Underwriting Claims Accounting, Controlling and Central Reserving for Reinsurance Information Technology Geo Risks Research/Corporate Climate Centre (until 31 July 2017)	ERGO Digital Ventures AG, Düsseldorf[2] ERGO International AG, Düsseldorf[2]
Hermann Pohlchristoph (since 27 April 2017)	Germany, Asia Pacific and Africa Central Procurement Services	ERGO International AG, Düsseldorf[2]
Dr. rer. pol. Markus Rieß	Primary insurance/ERGO Third Party Asset Management	DKV Deutsche Krankenversicherung AG, Cologne[2] (Chair) ERGO Beratung und Vertrieb AG, Düsseldorf[2] ERGO Deutschland AG, Düsseldorf[2] (Chair) ERGO Digital Ventures AG, Düsseldorf[2] (Chair) ERGO International AG, Düsseldorf[2] (Chair) MEAG MUNICH ERGO Kapitalanlagegesellschaft mbH, Munich[2] (Chair)
Dr. rer. pol. Peter Röder	Global Clients and North America Europe and Latin America (since 1 January 2018)	EXTREMUS Versicherungs-AG, Cologne Munich Re America Corporation, USA[2] (Chair) Munich Reinsurance America Inc., USA[2] (Chair)
Dr. jur. Jörg Schneider Chief Financial Officer	Financial and Regulatory Reporting Group Controlling Corporate Finance M&A (until 26 April 2017) Integrated Risk Management Group Legal Group Taxation Investor and Rating Agency Relations Group Compliance (since 27 April 2017)	MEAG MUNICH ERGO Kapitalanlagegesellschaft mbH, Munich[2]

1 As at 31 December 2017; seats held on supervisory boards of German companies and memberships of comparable bodies of German and foreign business enterprises.
2 Own Group company within the meaning of Section 18 of the German Stock Corporation Act (AktG).
3 Including responsibility for environmental, social and governance (ESG) issues.

Supervisory Board and seats held by members of the Supervisory Board

Supervisory Board[1]	Membership of committees	Seats[2]
Dr. Ing. E.h. Dipl. Ing. Bernd Pischetsrieder Chairman Former Chairman of the Board of Management of Volkswagen AG Member since 17 April 2002, last re-elected 30 April 2014	Standing Committee Personnel Committee Audit Committee Nomination Committee Conference Committee Remuneration Committee (since 1 January 2018)	Daimler AG, Stuttgart[4] Tetra Laval Group, Switzerland
Marco Nörenberg Deputy Chairman Employee of ERGO Group AG Member since 22 April 2009, last re-elected 30 April 2014	Standing Committee Conference Committee	ERGO Group AG, Düsseldorf[3]
Prof. Dr. oec. Dr. iur. Dr. rer. pol. h.c. Ann-Kristin Achleitner Scientific Co-Director of the Center for Entrepreneurial and Financial Studies (CEFS) at the Technical University of Munich Member since 3 January 2013, last re-elected 30 April 2014	Audit Committee Nomination Committee Remuneration Committee (since 1 January 2018)	Deutsche Börse AG, Frankfurt[4] Linde AG, Munich[4] Engie S.A. (formerly GDF SUEZ S.A.), France[4]
Clement B. Booth Member of the Board of Directors of Hyperion Insurance Group, United Kingdom Member since 27 April 2016		Hyperion Insurance Group Ltd., United Kingdom[4]
Frank Fassin Regional Section Head Financial Services, ver.di North Rhine-Westphalia Member since 22 April 2009, last re-elected 30 April 2014		ERGO Group AG, Düsseldorf[3] Provinzial NordWest Holding AG, Münster
Dr. jur. Benita Ferrero-Waldner Partner in the law firm of Cremades & Calvo Sotelo, Spain Member since 12 February 2010, last re-elected 30 April 2014		Gas Natural Fenosa, Spain[4]
Christian Fuhrmann Head of Divisional Unit, Munich Reinsurance Company Member since 22 April 2009, last re-elected 30 April 2014	Audit Committee	
Prof. Dr. rer. nat. Dr. h.c. Ursula Gather Rector of TU Dortmund University Member since 30 April 2014		
Prof. Dr. rer. nat. Peter Gruss President and CEO of OIST Graduate University, Japan Member from 22 April 2009 until 30 June 2017		
Gerd Häusler Chairman of the Supervisory Board of BayernLB (until 12 April 2018) Member since 30 April 2014	Standing Committee	Auto1 N.V., Netherlands BayernLB Holding AG, Munich (Chair)

See table on next page for footnotes

Supervisory Board[1]	Membership of committees	Seats[2]
Dr. iur. Anne Horstmann Employee of ERGO Group AG Member since 30 April 2014	Audit Committee	ERGO Group AG, Düsseldorf[3]
Ina Hosenfelder Employee of ERGO Group AG Member since 30 April 2014		
Renata Jungo Brüngger Member of the Board of Management of Daimler AG Member since 3 January 2017		
Prof. Dr. rer. nat. Dr. Ing. E.h. Henning Kagermann President of acatech – German Academy of Science and Engineering Member since 22 July 1999, last re-elected 30 April 2014	Standing Committee Personnel Committee Audit Committee Nomination Committee Conference Committee	Deutsche Bank AG, Frankfurt[4] Deutsche Post AG, Bonn[4] KUKA AG, Augsburg[4]
Beate Mensch Trades Union Secretary, ver.di, Hessen Member since 30 April 2014		Commerzbank AG, Frankfurt[4]
Ulrich Plottke Employee of ERGO Group AG Member since 30 April 2014		ERGO Group AG, Düsseldorf[3]
Andrés Ruiz Feger Employee of Munich Re, Sucursal en España, Spain Member since 22 April 2009, last re-elected 30 April 2014	Standing Committee	
Gabriele Sinz-Toporzysek Employee of ERGO Beratung und Vertrieb AG Member since 30 April 2014		ERGO Beratung und Vertrieb AG, Düsseldorf[3]
Dr. phil. Ron Sommer Chairman of the Supervisory Board of MTS OJSC, Russia Member since 5 November 1998, last re-elected 30 April 2014		PrJSC MTS, Ukraine (Chair) Sistema PJSFC, Russia[4] Tata Consultancy Services Ltd., India[4]
Angelika Wirtz Employee of Munich Reinsurance Company Member since 30 April 2014	Personnel Committee Conference Committee Remuneration Committee (since 1 January 2018)	
Dr. iur. Maximilian Zimmerer Member of the Supervisory Board of Munich Reinsurance Company Member since 4 July 2017		Investmentaktiengesellschaft für langfristige Investoren TGV, Bonn (Chair) Möller & Förster GmbH & Co. KG, Hamburg (Chair of Advisory Council)

1 As at 31 December 2017.
2 Seats held on supervisory boards of German companies and memberships of comparable bodies of German and foreign business enterprises.
3 Own Group company within the meaning of Section 18 of the German Stock Corporation Act (AktG).
4 Listed on the stock exchange.

Combined management report

2

This report combines the management reports of
Munich Reinsurance Company and Munich Re (Group).

Group

Munich Re is one of the world's leading risk carriers and provides both insurance and reinsurance under one roof. This enables the Group to cover large stretches of the value chain in the risk market. Almost all reinsurance units operate under the uniform brand of Munich Re. ERGO Group AG (ERGO) is active in nearly all lines of life, health and property-casualty insurance. Munich Re's investments worldwide are managed by MEAG, which also offers its expertise to private and institutional investors outside the Group. The Munich Health field of business was disbanded on 1 February 2017. For up-to-date information about Munich Re, visit www.munichre.com.

A core guiding principle for Munich Re is acting in a far-sighted and responsible manner in the interests of both the Group and society. We have based our Group-wide corporate responsibility strategy on the shared-value approach. This means that, in our business operations, we bring together economic and social progress to counter the most significant global challenges. We are therefore concentrating on mitigating the consequences of climate change; improving access to healthcare for all levels of society worldwide; and increasing risk awareness within our Group, among our staff, clients, and shareholders, and in society.

We have the relevant abilities, resources and risk expertise to originate new, increasingly digital solutions. In close cooperation with recognised partners, we generate added value through our business solutions and initiatives. Our voluntary commitments, such as the ten principles of the United Nations Global Compact, the Principles for Responsible Investment, and the Principles for Sustainable Insurance are the foundations of our corporate responsibility approach. In our insurance business and investment management, we proactively embrace environmental and social factors, as well as governance aspects. We have built up a Group-wide environmental management system and our operations have been carbon-neutral since 2015. With our social involvement, we fulfil our role as a good corporate citizen, focusing on projects related to our core business. All information on our endeavours is available from our corporate responsibility portal at www.munichre.com/cr-en. ↗

In our estimation, the talent and performance of our staff are the keystones to Munich Re's long-term success. Our international and diversity-focused human resources work sets great store in a corporate and leadership culture which promotes motivation and innovation in our highly qualified staff members. More information can be obtained at www.munichre.com/employees.

As at 31 December 2017, our Group employed 42,410 (43,428) staff members worldwide, 28.6% (28.5%) of whom worked in reinsurance and 71.4% (71.5%) at ERGO.

The non-financial reporting requirements of the European Union's Corporate Social Responsibility (CSR) Directive have been transposed into the German Commercial Code (HGB) and apply as of the 2017 financial year. The following have been identified as aspects to be reported for Munich Re (Group) and Munich Reinsurance Company within the meaning of the legal requirements:

- Munich Re as an employer of choice and diversity as a strategic success factor
- Anti-corruption and bribery
- Corporate responsibility (CR) in insurance and investments

The CR in insurance and CR in investment sections include information on the statutory aspects of environmental protection, social factors and human rights. The combined non-financial statement prepared in accordance with sections 289b(3) and 315b(3) of the German Commercial Code (HGB) can be found at www.munichre.com/cg-en in the information on corporate governance.

Group structure

The reinsurance companies of the Group operate globally and in virtually all classes of business. We offer a full range of products, from traditional reinsurance to innovative solutions for risk assumption. Our companies conduct their business from their respective headquarters and via a large number of branches, subsidiaries and affiliated companies. The reinsurance group also includes specialty primary insurers, whose business requires special competence in finding appropriate solutions. These primary insurers have the words "Risk Solutions" added to their logo.

Segmentation

In ERGO, we combine all Munich Re's primary insurance activities. Some 69% (69%) of gross premiums written by ERGO derive from Germany, and 31% (31%) from international business – mainly from central and eastern European countries. ERGO has also extended its activities to Asian markets such as India, China, Singapore and Thailand. In addition, responsibility for international health primary insurance business was transferred from Munich Health to ERGO International as of 1 February 2017.

Munich Reinsurance Company and ERGO Group AG are under unified control within the meaning of the German Stock Corporation Act (AktG). The relevant statutory regulations, control agreements and Group directives govern the distribution of responsibilities and competences for key decisions between Group management and ERGO. Control and profit-transfer agreements are in place with many Group companies, especially between ERGO Group AG and its subsidiaries.

Reinsurance

In reinsurance, we operate in life, health and property-casualty business. Under reinsurance, we also include specialised primary insurance activities that are handled by the reinsurance organisation and business from managing general agencies (MGAs). Munich Re does business with over 4,000 corporate clients from more than 160 countries.

As reinsurers, we write our business in direct collaboration with primary insurers, but also via brokers and increasingly within the framework of exclusive, strategic partnerships. In addition to traditional reinsurance business, we participate in insurance pools, public-private partnerships, business in specialist niche segments, and also as a primary insurer. Through our operating field Risk Solutions, we offer our clients in industrial and major-project business a wide range of specialised products, customised insurance solutions and services, which we manage from within our reinsurance organisation. Our clients thus have direct access to the expertise, innovative strength and capacity of a leading global risk carrier. Thanks to our capital management know-how, we are a sought-after partner for products geared to our clients' balance-sheet, solvency and rating-capital requirements, as well as their risk models.

Focus of life and health reinsurance operations

Our international life business is written in the Life and Health Division. This is split into three geographical regions and one international unit that develops specialised solutions for capital market risks. The focus of the division's business activities is on traditional reinsurance solutions that concentrate on the transfer of mortality risk. Moreover, we have been increasingly active in the market for living benefits products. These include products such as occupational disability, long-term care, and critical illness, which have seen increased demand. We also offer capacity for longevity risks. Until now, we have concentrated our efforts in this field on the United Kingdom.

Besides assuming underwriting risks, we support our clients in developing new life insurance products. Moreover, we offer clients a wide range of increasingly digital services, from medical expertise to automated risk assessment and claims handling solutions.

In addition, we continuously expand our tailor-made structured concepts for clients seeking to optimise their capitalisation, liquidity, or key performance indicators.

Demand for reinsurance is also growing with regard to the capital market risks often embedded in savings products. We provide our clients with comprehensive advice on product design while offering hedging for embedded options and guarantees linked to the capital markets. Our own exposure is transferred back to the capital markets.

In order to ensure proximity to our clients, we are represented in many markets with local subsidiaries and branches. We write the main portion of our business via our Canadian branch and our subsidiary in the USA. We service the European markets from our operations in Germany, the United Kingdom, Spain and Italy. At the same time, we have a strong local presence in Australia and South Africa, and in all important growth markets in Latin America and Asia. Since 2017, we also have a branch in India. Asian business is centrally managed by a dedicated branch in Singapore, which underlines the strategic importance of this region for life reinsurance.

The reinsurance business managed by Munich Health was transferred to the Life and Health Division as of 1 February 2017, and the reinsurance units of Munich Health were pooled with the life reinsurance units of the Life and Health Division. This enables us to leverage numerous synergies.

The property-casualty reinsurance divisions

Global Clients and North America handles our accounts with major international insurance groups, globally active Lloyd's syndicates and Bermuda companies. It also pools our know-how in the North American market and is responsible for our property-casualty subsidiaries in this region and for international special-lines business such as workers' compensation. The three major US-based subsidiaries are Munich Reinsurance America, Inc. (Munich Re, US), The Hartford Steam Boiler Inspection and Insurance Company (HSB), and American Modern Insurance Group, Inc. (American Modern). Munich Re, US writes property-casualty reinsurance business and niche primary insurance business. The primary insurers HSB and American Modern specialise in products for which in reinsurance understanding of the exposure and client proximity are paramount.

Our Europe and Latin America Division is responsible for property-casualty business with our clients from Europe (except Germany), Latin America and the Caribbean. Business Units – for example, in London, Madrid, Paris and Milan – afford us market proximity and regional competence. In the South American markets, our Brazilian subsidiary Munich Re do Brazil Resseguradora S.A. and our branch office in Bogotá help to ensure client proximity.

The Germany, Asia Pacific and Africa Division conducts property-casualty business with our clients in Germany, Africa, Asia, Australia, New Zealand and the Pacific Islands. In 2017, we enhanced the regional set-up of our existing branches in Mumbai, Beijing, Sydney and Singapore in order to take greater advantage of the business opportunities available in the rapidly growing Asia-Pacific insurance market. Our branch in Seoul also offers client proximity in this region, and our new composite branch office in Tokyo is now operational. In the African market, we are represented by our subsidiary Munich Reinsurance Company of Africa Ltd., headquartered in Johannesburg, and by other liaison offices. All these branches and other liaison offices, with their commitment and local presence, guarantee our competitiveness in these key growth markets.

The Special and Financial Risks Division (SFR) is in charge of the classes of credit, marine, aviation and space, agriculture, enterprise, and other selected contingency risks. The Corporate Insurance Partner unit, which is dedicated to industrial clients and is part of Risk Solutions, also belongs to this division. Great Lakes Insurance SE, which is also assigned to this division, is a further key component of the risk solution strategy. It has its headquarters in Munich and a large branch office in London. It enables us to unlock business potential in niche primary insurance business which is close to reinsurance.

ERGO

Munich Re's second pillar is primary insurance business.

German, international, and direct and digital business are bundled in three separate units – ERGO Deutschland AG, ERGO International AG, and ERGO Digital Ventures AG – under the umbrella of ERGO Group AG. Traditional German business is concentrated in ERGO Deutschland AG. ERGO International AG manages the Group's international business. The third pillar, ERGO Digital Ventures AG, is responsible for all of the Group's digital and direct activities. Responsibility for the new ERGO Mobility Solutions unit has been assigned to ERGO Digital Ventures since 2017, given the growing significance of automotive financial services.

Via ERGO, we offer products in all the main classes of insurance: life insurance, German health insurance, and in nearly all lines of property-casualty insurance, as well as travel insurance and legal protection insurance. With these products – in combination with the provision of assistance, other services and individual consultancy – we cover the needs of private and corporate clients. ERGO serves over 35 million (mainly private) clients in more than 30 countries, with the focus on Europe and Asia. Up-to-date information on ERGO can be found at www.ergo-group.com.

With ERGO Versicherung AG, our primary insurance arm is one of Germany's largest providers of property and legal protection insurance. As a specialist in capital-market-oriented insurance, ERGO Vorsorge Lebensversicherung AG is shaping change in the area of private provision and biometric risk products. ERGO Lebensversicherung AG and Victoria Lebensversicherung AG are responsible for running off our traditional life insurance portfolio. DKV Deutsche Krankenversicherung AG is a leading provider and specialist in the healthcare market, catering for privately and statutorily insured individuals alike with its broad range of supplementary covers. The specialist travel insurer ERV is a market leader internationally as well as in Germany. In Germany, ERGO's own sales company, ERGO Beratung und Vertrieb AG, bundles the various sales channels under one roof. As part of the ERGO Strategy Programme, ERGO merged its tied agents' organisations into a single sales organisation (ERGO tied agents' organisation) as of 1 January 2017. ERGO Pro's structured sales force will be developed further as a separate area of responsibility. The cooperation with UniCredit Bank AG in Germany was terminated as at 31 December 2017. As part of the Group's Strategy Programme, responsibility for ERGO's broker and partner sales channels was transferred to the life and health and property-casualty product divisions in 2016 to increase proximity to product providers.

Under the aegis of ERGO Digital Ventures AG, ERGO Direkt Versicherungen is the online centre of competence with responsibility for direct business and provides the expertise in digital marketing that is becoming increasingly important across the market. In Europe and Asia, ERGO is represented by life and property insurers and specialised travel and legal protection insurers.

Of ERGO's European companies, those in Austria, Poland, the Baltic states and Greece have a particularly strong market presence. In Greece, ERGO became the market leader for property-casualty insurance in 2016 after acquiring a primary insurer there. As experienced experts, our legal protection insurers number among the leading players in each of their markets.

In Asia, ERGO is represented through partnerships in joint ventures in the rapidly growing markets of India and China, and in other countries. In India, HDFC ERGO continues to perform very pleasingly. In China, ERGO China Life – a joint venture with the state-owned financial investor SSAIH – is tapping into the potential of the major provinces of Shandong and Jiangsu. And in Thailand, too, our investment is performing well.

The international health primary insurance business managed by Munich Health was transferred to ERGO International from 1 February 2017.

Our brands

Munich Re (Group)

Reinsurance

- The Hartford Steam Boiler Inspection and Insurance Company
- New Reinsurance Company Ltd.
- American Modern Insurance Group, Inc.

ERGO

- German and international insurance companies
- ERGO Direkt
- Vorsorge Lebensversicherung
- D.A.S. Rechtsschutz-versicherung
- Deutsche Krankenversicherung
- Europäische Reiseversicherung
- Nexible

Asset management

MEAG MUNICH ERGO AssetManagement

The diagram does not show all companies of the Group or give a precise representation. A detailed list of shareholdings can be found on page 170 ff.

Remuneration report

The remuneration report describes the structure of the remuneration system for the Board of Management and Supervisory Board in the past financial year, and contains detailed information on the individual remuneration of the members of the Board of Management and Supervisory Board.

It also includes a description of the new remuneration system for the Board of Management, which was implemented as at 1 January 2018 and will be put to the vote at the 2018 Annual General Meeting.

Remuneration of the members of the Board of Management in 2017

The full Supervisory Board decides on the remuneration system for the Board of Management, and reviews it regularly. The Personnel Committee of the Supervisory Board, comprising the Chairman of the Supervisory Board, one shareholder representative and one employee representative, prepared the resolutions for the full Supervisory Board in the year under review.

The previous remuneration system for the Board of Management was already geared to providing incentives for Munich Re's long-term and sustainable success and to bringing the interests of the members of the Board of Management into line with those of our shareholders. It met the relevant company and supervisory law requirements, including those of the German Corporate Governance Code.

The remuneration system for the Board of Management comprised fixed and variable components as well as the occupational retirement scheme. Details can be found in the following table:

Structure of the remuneration system for the Board of Management

Component	Share[1]	Assessment basis/ parameters	Corridor	Precondition/criteria for payment	Payment
Basic remuneration plus remuneration in kind/ fringe benefits	**30%**	Function, responsibility, length of service on Board	Fixed	Contractual stipulations	Monthly
Variable remuneration	**70%**	Corporate performance Performance of divisional unit Personal performance			
30% annual performance (for 100% achievement of objectives, performance evaluation)		Group objective Business-field objectives Divisional objectives Personal objectives Overall performance	**0–200%** (fully achieved = 100%)	Achievement of annual objectives and evaluation of overall performance	**In the second year, on condition that 50% of the net amount paid out is invested by the Board member in Munich Re shares that must be held for at least a four-year period**
70% multi-year performance (for 100% achievement of objectives, performance evaluation)		Objectives for the fields of business – Reinsurance – ERGO Personal objectives Overall performance	**0–200%** (fully achieved = 100%)	Achievement of three-year objectives and evaluation of overall performance	**In the fourth year, on condition that 25% of the net amount paid out is invested by the Board member in shares that must be held for at least a two-year period**
Pension					
Defined contribution plan		Target overall direct remuneration[2]	Pension contribution	> Retirement > Insured event > Premature termination	

1 For variable remuneration, the share shown was based on 100% achievement of objectives/performance evaluation.
2 Target overall direct remuneration comprised basic remuneration plus variable remuneration based on 100% achievement of objectives/performance evaluation.

Fixed remuneration

The fixed components of remuneration comprised basic remuneration plus remuneration in kind and fringe benefits such as company cars, insurance policies and healthcare. The payroll tax on the remuneration in kind and fringe benefits was borne by Munich Re.

Variable remuneration

The variable remuneration component was geared to the overall performance of the Group and defined divisional units, and to the personal performance of the individual members of the Board of Management.

The amount of variable remuneration depended on the extent to which the annually set objectives for annual and multi-year performance were met, and how the overall performance component was assessed.

In evaluating the overall performance of the Board of Management as a whole and of its individual members, performance criteria not included in the agreed objectives were also taken into consideration in particular, and could be assessed as either positive or negative. In addition, the Supervisory Board was able to address developments that were beyond the influence of Board members during the appraisal period.

Annual objectives, multi-year objectives, overall performance evaluation and investment in shares together formed a well-balanced and economic – i.e. strongly risk-based – incentive system, with great importance being attached to ensuring that the targets set for the members of the Board of Management did not have undesirable effects. During the one and three-year appraisal periods, no adjustments were made to the objectives and no guaranteed variable remuneration components were granted.

Details of the assessment bases for the annual and multi-year performance are provided in the following tables.

Variable remuneration based on annual performance

Category of objective	Share[1]	Assessment basis	Parameters
Collective contribution to corporate success	**40–60%**		
Group objective		Derived from key performance indicators in external reporting and other important portfolio and performance data	Return on risk-adjusted capital, RORAC[2]
Business-field objectives			
– Reinsurance		Value-based economic performance indicators: – Property-casualty reinsurance – Life reinsurance	Components of economic earnings[3]: – Value added – Value added by new business – Change in the value of in-force business
– ERGO		Value-based economic performance indicator	Economic earnings[3]
Individual contribution to corporate success	**20–40%**		
Divisional objectives		Value-based economic performance indicators: – Property-casualty reinsurance – Life reinsurance	Components of economic earnings[3]: – Value added – Value added by new business – Change in the value of in-force business
Personal objectives		Personal objectives per Board member	Special focal points such as – Pricing and cycle management – Client management – Innovation initiatives
Overall performance evaluation	**20%**	Overall performance of individual Board members and of the Board of Management as a whole	Assessment by Supervisory Board taking into account Section 87 of the Stock Corporation Act (AktG) and the German Corporate Governance Code

1 The objectives were weighted individually according to the responsibilities of the individual Board members.
2 Further information on RORAC is provided on page 51.
3 Further information on economic earnings is provided on page 50.

Variable remuneration based on multi-year performance

Category of objective	Share[1]	Assessment basis	Parameters
Collective contribution to corporate success	**50–60%**		
Business-field objectives (three-year average)			
– Reinsurance		Value-based economic performance indicators: – Property-casualty reinsurance – Life reinsurance	Components of economic earnings[2]: – Value added – Value added by new business – Change in the value of in-force business
– ERGO		Value-based economic performance indicator	Economic earnings[2]
Individual contribution to corporate success	**20–30%**		
Personal objectives (three-year period)		Personal objectives per Board member	Special focal points such as – Strategic goals – Client focus – Innovation initiatives – Digitalisation initiatives
Overall performance evaluation	**20%**	Overall performance of individual Board members and the Board of Management as a whole	Assessment by Supervisory Board taking into account Section 87 of the Stock Corporation Act (AktG) and the German Corporate Governance Code (incl. corporate responsibility and compliance requirements)

1 The objectives were weighted individually according to the responsibilities of the individual Board members.
2 Further information on economic earnings is provided on page 50.

Targets and achievement of objectives for variable remuneration

The financial and personal objectives set for the members of the Board of Management up to 2017 were very granular and formulated very clearly to ensure that they were objective, and could be measured and monitored. They included commercially sensitive information that was highly relevant for the market and the competition, and covered clients' interests. That is why we did not publish specific targets on the basis of the previous remuneration system. To enhance the transparency of the remuneration report, the overall achievement of objectives for each remuneration component is now also published in the remuneration tables in accordance with the German Corporate Governance Code.

Limit to variable remuneration (malus)

The remuneration system for the Board of Management was designed in such a way that, owing to the "overall performance" component, a negative contribution to profits led to a reduction in variable remuneration on an annual and multi-year basis. Moreover, the financial multi-year objectives were conceived such that the result of an adverse year caused the overall achievement of objectives to drop to zero. Hence, owing to the decline in the result for 2017, which was attributable to hurricane losses, no bonus for the Group objective for annual performance was paid and three multi-year bonus schemes were significantly impacted. On account of the flexible bonus policy, it was also possible for no variable remuneration to be paid at all. In addition, the malus principle also involved the obligation on members of the Board of Management to invest in Company shares, as a result of which part of the bonus paid was placed at risk again and thus linked to the interests of shareholders.

According to the contracts of employment for members of the Board of Management appointed for the first time as from 1 January 2017, all variable remuneration components not already paid out are forfeited in the event of termination of a Board member's contract by the Company for good cause or in the event of relinquishment by a Board member of their appointment to the Board of Management without good cause.

Continued payment of remuneration in the case of incapacity to work

In the case of temporary incapacity to work due to illness or for another cause beyond the Board member's control, the remuneration is paid until the end of the contract of employment. The Company may terminate the contract prematurely if Board members are incapacitated for a period of longer than 12 months and it is probable that they will be permanently unable to fully perform the duties conferred on them (permanent incapacity to work). In this event, the Board member will receive a disability pension.

Other remuneration

Stock option plans

No stock option plans or similar incentive schemes are in place for the Board of Management.

Remuneration for other board memberships

In the case of seats held on other boards, remuneration for board memberships must be paid over to the Company. Exempted from this is remuneration for memberships explicitly classified by the Supervisory Board as private.

Severance cap and change of control

Members of the Board of Management appointed before 1 January 2017 have no contractual right to severance payments. If the Board member's activities are terminated prematurely by the Company without good cause, payments due may not exceed the equivalent of two years' total remuneration (three years' total remuneration in the event of acquisition of a controlling interest or change of control within the meaning of Section 29(2) of the Securities Acquisition and Takeover Act – WpÜG) and may not cover more than the remaining period of the employment contract if this is shorter. If the employment contract is terminated for good cause on grounds that are within the Board member's control, no payments are made to the Board member. The calculation is based on overall remuneration for the past financial year and, where appropriate, on the probable overall remuneration for the current financial year.

Members of the Board of Management appointed for the first time after 1 January 2017 whose contracts are terminated by the Company without good cause have a contractual right to a severance payment. Such payments may not exceed the equivalent of two years' total remuneration, and are limited to the remaining term of the Board member's contract if this term is shorter. Total annual remuneration is calculated on the basis of basic annual remuneration and variable remuneration paid out for the prior full financial year before the contract was terminated; remuneration in kind, other fringe benefits and contributions to occupational retirement schemes are not taken into account. Payments received by a Board member during a period of notice and after termination of the appointment are offset against any severance payment. There will be no right to severance payments in the event of extraordinary termination of the Board member's contract for good cause.

As a matter of principle, the Company ensures that severance payments are related to performance achieved over the whole period of activity.

Pensions

Up to and including 2008, the members of the Board of Management were members of a defined benefit plan, providing for payment of a fixed pension amount.

As of 2009, newly appointed members of the Board have become members of a defined contribution plan. For this plan, the Company provides a pension contribution for each calendar year (contribution year) during the term of the employment contract. It uniformly amounts to 25.5% of the target overall direct remuneration (= basic remuneration + variable remuneration on the basis of 100% achievement of objectives). The amount of the pension contribution takes into consideration the peer group (including DAX 30 companies) and the pension contributions for the employee groups below the level of the Board of Management. The pension contributions for the members of the Board of Management are paid over to an external pension insurer. The insurance benefits that result from the contribution payments constitute the Company's pension commitment to the Board member.

Board members appointed before 2009 were transferred to the new system. They kept their pension entitlement from the defined benefit plan (fixed amount in euros) existing at the date of transfer, which was maintained as a vested pension. For their service years as of 1 January 2009, they receive an incremental pension benefit based on the defined contribution plan.

The Supervisory Board determines the relevant target pension level for pension commitments from defined benefit plans and defined contribution plans – also considering length of service on the Board – and takes account of the resultant annual and long-term cost for the Company.

The members of the Board of Management are also members of the Munich Re pension scheme, which is a defined contribution plan.

Benefits on termination of employment

Board members appointed before 2006 who are entitled to an occupational pension, disability pension, or reduced occupational pension on early retirement receive a pension in the amount of their previous monthly basic remuneration for a period of six months after retiring or leaving the Company.

Occupational pension

Board members appointed for the first time before 1 April 2012 are entitled to an occupational pension on retiring from active service with the Company after reaching the age of 60. Board members appointed for the first time as from 1 April 2012 are entitled to an occupational pension on retiring from active service with the Company after reaching the age of 62. All members of the Board of Management must retire from active service no later than at the end of the calendar year in which they turn 67.

Benefit:
- In the case of defined contribution plans: Annuity based on the policy reserve or payment of the policy reserve as a lump sum.
- In the case of a combination between defined benefit plans and defined contribution plans: Vested pension from the defined benefit plan and annuity from the policy reserve under the defined contribution plan or payment of a lump sum.

Disability pension

Disability in this respect means that the member of the Board of Management is likely to be unable, or has already been unable, to exercise his or her position for six months without interruption, as a result of illness, injury, or infirmity beyond what is normal for his or her age. The entitlement to a disability pension does not arise until expiry of remuneration payment obligations or continuation of remuneration payment obligations after a mutual agreement to terminate the employment contract, as a result of non-extension or revocation of their appointment to the Board or where the contract of employment has been terminated by the Company due to permanent incapacity.

Benefit:
- In the case of defined contribution plans: 80% of the insured occupational pension up to the age of 59 or 61, with subsequent occupational pension.

- In the case of a combination of defined benefit and defined contribution plans: Vested pension from the defined benefit plan and 80% of the insured occupational pension benefit up to age 59, with subsequent occupational pension based on the defined contribution plan.

Reduced occupational pension on early retirement
Board members appointed before 1 January 2017 are entitled to a reduced occupational pension on early retirement if the contract of employment is terminated as a result of non-extension or revocation of their appointment without the Board members having given cause for this through a gross violation of their duties or having requested it. This applies where the Board members have already passed the age of 50, have been in the employment of the Company for more than ten years when the contract terminates, and have had their appointment to the Board of Management extended at least once.

Benefit:
- In the case of defined contribution plans: Annuity based on the policy reserve or payment of the policy reserve as a lump sum at the date the pension benefit is claimed.
- In the case of a combination of defined benefit and defined contribution plans: Entitlement of between 30% and 60% of pensionable basic remuneration, reduced by 2% for each year or part thereof short of the Board member's 65th birthday; the Company pays the difference between the monthly occupational pension and the monthly incremental pension from the external insurance.

Members of the Board of Management appointed for the first time after 1 January 2017 do not have any entitlement to a reduced occupational pension on early retirement.

Vested benefits for occupational pension, disability pension and surviving dependants
Vested benefits are paid upon the Board member reaching the age of 60 or 62, in the case of disability, or in the event of the Board member's death.

Vested benefits under the German Company Pension Act (BetrAVG):
Board members have vested benefits under the German Company Pension Act if they leave the Company before reaching the age of 60 or 62 and the pension commitment has existed for at least five years previously.

Benefit:
- In the case of defined contribution plans: Annuity based on the policy reserve or payment of the policy reserve as a lump sum at the date the insured event occurs.
- In the case of a combination of defined benefit and defined contribution plans: The entitlement under the vested pension is a proportion of the vested pension based on the ratio of actual service with the Company to the period the Board member would have worked for the Company altogether up to the fixed retirement age (m/n-tel process, Section 2(1) of the Company Pension Act). The entitlement from the incremental pension comprises the pension benefits fully financed under the insurance contract up to the occurrence of the insured event based on the pension contributions made up to the date of leaving the Company – Section 2(5a) of the Company Pension Act. This entitlement is paid out as an annuity or a lump sum.

Provision for surviving dependants
In the event of the death of a Board member during active service, the surviving dependants continue to receive the previous monthly basic remuneration for a period of six months if the deceased was appointed to the Board of Management before 2006. In the case of Board members appointed for the first time as from 2006, the previous monthly basic remuneration is paid to the beneficiaries for a period of three months. If the Board member's death occurs after retirement, the surviving dependants receive the previous monthly occupational pension for a period of three months, provided the marriage/registration of the civil partnership took place and/or the child was born before the Board member started drawing the occupational pension. Surviving spouses and registered civil partners normally receive a pension amounting to 60% of the defined benefit or insured occupational pension; single orphans receive 20% and double orphans 40%. The total amount may not exceed the occupational pension of the Board member. If the Board member's occupational pension was reduced owing to early retirement, benefits for surviving dependants are based on the reduced occupational pension.

Total remuneration of the Board of Management

The level of the target overall direct remuneration for the individual members of the Board of Management is set by the full Supervisory Board, acting on recommendations from the Supervisory Board's Personnel Committee (from 2018: the Remuneration Committee). Criteria for the appropriateness of remuneration are the respective Board member's duties, the Board member's personal performance, the performance of the Board as a whole, and the financial situation, performance and future prospects of Munich Re. Other criteria are the relevant comparative benchmarks for Board remuneration and the prevailing remuneration structure at Munich Reinsurance Company. The Supervisory Board takes account of the level of Board salaries in relation to the level of salaries paid to senior managers and to general staff members over a period of time, and also determines how senior managers and general staff (pay-scale and non-pay-scale employees) are to be classified for the purpose of this comparison. The consideration of what level of remuneration is appropriate also takes into account data from peer-group companies (including those in the DAX 30). The median remuneration of the DAX 30 companies is used as a reference for the overall remuneration amount of the Chairman of the Board of Management. New Board members are placed at a level which allows sufficient potential for development of the remuneration in the first three years.

Board of Management remuneration is disclosed under two different sets of rules, namely German Accounting Standard No. 17 (DRS 17, revised 2010) and the German Corporate Governance Code. There are therefore deviations in individual remuneration components and total remuneration.

Board of Management remuneration under DRS 17

Under DRS 17, remuneration for annual performance in 2017 is shown as the provisions set aside for that purpose taking into account the relevant additional/reduced expenditure for the previous year, since the performance on which the remuneration is based has been completed as at the balance sheet date and the requisite Board resolution is already foreseeable. Under DRS 17, remuneration for multi-year performance 2014–2016 is recognised in the year of payment, i.e. in 2017.

Fixed and variable remuneration components

The members of Munich Reinsurance Company's Board of Management received remuneration totalling €19.8m (23.1m) for fulfilment of their duties in respect of the parent company and its subsidiaries in the financial year. Remuneration therefore declined by around €3.3m year on year, mainly because the achievement rate for the Group result is 0% owing to the 2017 hurricane losses and because the result of the assessment for the reinsurance field of business was lower year on year both on an annual and multi-year basis. The remuneration received by the individual members of the Board of Management is shown in the table below.

Remuneration of individual Board members as per DRS 17 (revised 2010)
(in accordance with Section 285 sentence 1 (9a) sentences 5–8 of the German Commercial Code (HGB) and Section 314(1) (6a) sentences 5–8 of the German Commercial Code)

Name	Financial year	Basic remuneration	Remuneration in kind/fringe benefits	Annual performance[1]	Multi-year performance[2]	Other	Total
		€	€	€	€	€	€
Nikolaus von Bomhard (until 26 April 2017)	**2017**	**420,000**	**11,664**	**205,535**	**1,767,920**		**2,405,119**
	2016	1,260,000	35,783	840,887	1,901,200		4,037,870
Joachim Wenning[3] (Chairman of the Board of Management since 27 April 2017)	**2017**	**1,045,000**	**128,254**	**339,533**	**872,200**		**2,384,987**
	2016	615,000	139,039	511,489	903,070		2,168,598
Giuseppina Albo[3] (until 31 December 2017)	**2017**	**615,000**	**127,420**	**–29,293**	**177,166**		**890,293**
	2016	555,000	21,959	364,293			941,252
Ludger Arnoldussen[4] (until 26 April 2017)	**2017**	**205,000**	**13,811**	**51,287**	**862,400**		**1,132,498**
	2016	615,000	90,384	325,572	903,070		1,934,026
Thomas Blunck	**2017**	**615,000**	**31,466**	**294,290**	**872,200**		**1,812,956**
	2016	615,000	31,700	402,459	949,620		1,998,779
Doris Höpke	**2017**	**615,000**	**32,105**	**276,203**	**366,275**		**1,289,583**
	2016	555,000	33,356	519,462			1,107,818
Torsten Jeworrek	**2017**	**885,000**	**36,179**	**323,627**	**1,264,690**		**2,509,496**
	2016	885,000	37,801	601,187	1,410,465		2,934,453
Hermann Pohlchristoph (since 27 April 2017)	**2017**	**410,000**	**29,940**	**138,332**			**578,272**
	2016						
Markus Rieß[5]	**2017**	**976,250**	**140,167**	**615,614**		**750,000**	**2,482,031**
thereof for Munich Reinsurance Company		337,500	49,342	180,023		750,000	1,316,865
	2016	976,250	115,717	567,351		1,500,000	3,159,318
thereof for Munich Reinsurance Company		337,500	39,677	229,744		1,500,000	2,106,921
Peter Röder	**2017**	**615,000**	**30,278**	**218,522**	**872,200**		**1,736,000**
	2016	615,000	35,034	389,554	921,690		1,961,278
Jörg Schneider	**2017**	**885,000**	**41,782**	**401,251**	**1,250,480**		**2,578,513**
	2016	885,000	37,011	593,055	1,354,605		2,869,671
Total	**2017**	**7,286,250**	**623,066**	**2,834,901**	**8,305,531**	**750,000**	**19,799,748**
	2016	7,576,250	577,784	5,115,309	8,343,720	1,500,000	23,113,063

1 At the time of preparation of this report, no Supervisory Board resolution had yet been passed on the amounts to be paid for the 2017 annual performance. The amounts shown for annual performance remuneration are based on estimates, i.e. the relevant provisions and the additional/reduced expenditure for 2016. The amounts shown for the 2016 annual performance comprise the respective provision for 2016 and the relevant additional/reduced expenditure for 2015. The actual bonus payments for 2016 can be seen in the remuneration tables "Remuneration paid in accordance with the German Corporate Governance Code" on page 38 ff.
2 The amounts paid out in 2017 were for multi-year performance 2014–2016, those paid out in 2016 were for 2013–2015.
3 Remuneration in kind/fringe benefits for 2017 including expenditure for security (Wenning) and anniversary payments (Albo).
4 As compensation for a post-contractual non-competition agreement, Ludger Arnoldussen was paid a total of €1,515,000 for the period May to December 2017.
5 The compensation components that Markus Rieß received for his work at ERGO Group AG are included in the remuneration.
Remuneration in kind/fringe benefits for 2017 including expenditure for security.
Other: Compensation, payable in four equal instalments, for the forfeited variable remuneration from the previous employer.

The variable remuneration amounts payable are listed in the table below.

Amounts payable for variable remuneration of the individual Board members in the event of 100% performance evaluation as per DRS 17 (revised 2010), corridor 0–200%

Name	Set in	for	Annual bonus/ performance [1, 3] €	Multi-year bonus/ performance [2, 3] €	Total amounts payable €
Nikolaus von Bomhard[4] (until 26 April 2017)	**2017**	**2018**	**–**	**–**	**–**
	2016	2017	294,000	686,000	980,000
Joachim Wenning (Chairman of the Board	**2017**	**2018**	**667,500**	**1,557,500**	**2,225,000**
of Management since 27 April 2017)	2016	2017	731,500	1,706,833	2,438,333
Giuseppina Albo[5] (until 31 December 2017)	**2017**	**2018**	**–**	**–**	**–**
	2016	2017	–	–	–
Ludger Arnoldussen[4] (until 26 April 2017)	**2017**	**2018**	**–**	**–**	**–**
	2016	2017	143,500	334,833	478,333
Thomas Blunck	**2017**	**2018**	**322,500**	**752,500**	**1,075,000**
	2016	2017	430,500	1,004,500	1,435,000
Doris Höpke	**2017**	**2018**	**322,500**	**752,500**	**1,075,000**
	2016	2017	430,500	1,004,500	1,435,000
Torsten Jeworrek	**2017**	**2018**	**465,000**	**1,085,000**	**1,550,000**
	2016	2017	619,500	1,445,500	2,065,000
Hermann Pohlchristoph[6] (since 27 April 2017)	**2017**	**2018**	**303,750**	**708,750**	**1,012,500**
	2017	2017	259,000	604,333	863,333
Markus Rieß[7]	**2017**	**2018**	**191,250**	**446,250**	**637,500**
thereof for Munich Reinsurance Company			191,250	446,250	637,500
	2016	2017	592,125	1,381,625	1,973,750
thereof for Munich Reinsurance Company			236,250	551,250	787,500
Peter Röder	**2017**	**2018**	**322,500**	**752,500**	**1,075,000**
	2016	2017	430,500	1,004,500	1,435,000
Jörg Schneider	**2017**	**2018**	**465,000**	**1,085,000**	**1,550,000**
	2016	2017	619,500	1,445,500	2,065,000
Total	**2017**	**2018**	**3,060,000**	**7,140,000**	**10,200,000**
	2016/2017	2017	4,550,625	10,618,124	15,168,749

1 The remuneration set for the annual component for 2017 is payable in 2018, that for 2018 in 2019.
2 The remuneration set for the multi-year component for 2017 is payable in 2020, that for 2018 in 2022.
3 Information on the assessment bases and parameters for the amounts set for 2017 is available on page 28 f., and for the amounts set for 2018 on page 41 ff.
4 The amounts set for 2017 were granted pro rata temporis for a period of four months.
5 The entitlement to variable remuneration was forfeited owing to departure.
6 The amounts set for 2017 were granted pro rata temporis for a period of eight months.
7 The compensation components that Markus Rieß receives for his work at ERGO Group AG are included in the remuneration agreed for 2017. Owing to changes to the remuneration system, ERGO Group AG will no longer grant Markus Rieß any variable target amounts with effect from 2018.

Pension entitlements

Personnel expenses of €6.4m (6.5m) were incurred in the financial year to finance the pension entitlements for active members of the Board of Management. Of these, €1.3m was apportionable to defined benefit plans and around €5.1m to defined contribution plans. As a consequence of the risk transfer to an external pension insurer under the defined contribution system, the visible pension costs since 2009 are noticeably higher. The Company accepts this increase in order to avoid higher costs in future and to eliminate long-term pension-specific risks. The following defined benefits, present values, contribution rates and personnel expenses result for the individual members of the Board of Management:

Pension entitlements

		Defined benefit plan		
Name	Financial year	Defined benefit[1]	Present value of defined benefit as at 31 December	Provisions for personnel expenses[2]
		€/year	€	€
Nikolaus von Bomhard[3] (until 26 April 2017)	**2017**	**407,100**	**17,641,804**	**0**
	2016	407,100	16,653,577	287,233
Joachim Wenning[4, 5] (Chairman of the Board of Management since 27 April 2017)	**2017**	**–**	**16,414**	**1,164**
	2016	–	9,596	1,253
Giuseppina Albo[6] (until 31 December 2017)	**2017**	**–**	**1,962**	**1,872**
	2016	–	4,458	2,297
Ludger Arnoldussen[7] (until 26 April 2017)	**2017**	**157,500**	**4,439,347**	**388,255**
	2016	157,500	4,003,478	357,138
Thomas Blunck[4, 5]	**2017**	**120,000**	**3,581,907**	**178,062**
	2016	120,000	3,184,449	160,734
Doris Höpke[4, 5]	**2017**	**–**	**10,664**	**507**
	2016	–	8,816	598
Torsten Jeworrek[4, 8]	**2017**	**171,000**	**6,303,340**	**212,254**
	2016	171,000	5,709,959	193,904
Hermann Pohlchristoph[4, 9] (since 27 April 2017)	**2017**	**–**	**5,740**	**628**
	2016	–	–	–
Markus Rieß[4, 10]	**2017**	**–**	**42,116**	**10,944**
thereof for Munich Reinsurance Company		–	42,116	10,944
	2016	–	14,319	10,370
thereof for Munich Reinsurance Company		–	14,319	10,370
Peter Röder[4, 8]	**2017**	**90,000**	**3,082,126**	**112,941**
	2016	90,000	3,124,511	104,070
Jörg Schneider[4, 8]	**2017**	**275,000**	**11,170,862**	**356,081**
	2016	275,000	10,320,861	328,896
Total	**2017**	**1,220,600**	**46,296,282**	**1,262,708**
	2016	1,220,600	43,034,024	1,446,493

See table on next page for footnotes

Pension entitlements

Name	Financial year	Pension contribution rate for target overall direct remuneration	Entitlement as at 31 December	Defined contribution plan: Present value of entitlement as at 31 December	Defined contribution plan: Personnel expenses
		%	€/year	€	€
Nikolaus von Bomhard[3] (until 26 April 2017)	**2017**	**17.00**	**247,690**	**9,659,613**	**238,000**
	2016	17.00	222,085	7,639,349	714,000
Joachim Wenning[4, 5] (Chairman of the Board of Management since 27 April 2017)	**2017**	**25.50**	**162,812**	**–**[11]	**888,250**
	2016	25.50	132,163	–[11]	522,750
Giuseppina Albo[6] (until 31 December 2017)	**2017**	**25.50**	**50,198**	**–**[11]	**522,750**
	2016	25.50	33,081	–[11]	471,750
Ludger Arnoldussen[7] (until 26 April 2017)	**2017**	**14.75**	**72,100**	**2,991,029**	**100,792**
	2016	14.75	93,956	3,912,302	302,375
Thomas Blunck[4, 5]	**2017**	**16.25**	**123,421**	**4,974,648**	**333,125**
	2016	16.25	109,650	4,471,819	333,125
Doris Höpke[4, 5]	**2017**	**25.50**	**58,488**	**–**[11]	**522,750**
	2016	25.50	40,733	–[11]	471,750
Torsten Jeworrek[4, 8]	**2017**	**19.50**	**206,002**	**8,537,140**	**575,250**
	2016	19.50	182,894	7,601,747	575,250
Hermann Pohlchristoph[4, 9] (since 27 April 2017)	**2017**	**25.50**	**8,269**	**–**[11]	**324,700**
	2016	–	–	–	–
Markus Rieß[4, 10]	**2017**	**25.19**	**48,557**	**883.284**[12]	**743,125**
thereof for Munich Reinsurance Company		25.50	18,382	–[11]	286,875
	2016	25.19	27,236	527.660[12]	743,125
thereof for Munich Reinsurance Company		25.50	10,365	–[11]	286,875
Peter Röder[4, 8]	**2017**	**20.25**	**143,058**	**5,781,036**	**415,125**
	2016	20.25	126,480	5,349,033	415,125
Jörg Schneider[4, 8]	**2017**	**16.50**	**170,676**	**7,251,118**	**486,750**
	2016	16.50	151,171	6,356,425	486,750
Total	**2017**		**1,291,271**	**40,077,868**	**5,150,617**
	2016		1,119,449	35,858,335	5,036,000

1 In the case of Board members transferred from the old system to the new, the amount corresponds to the value of the annual vested pension at 31 December 2008.
2 Expenses for defined benefit plan, including provision for continued payment of salary for surviving dependants.
3 Left the Board as at 26 April 2017; has received a pension since 1 May 2017.
4 Entitled to occupational pension in the event of termination of employment owing to incapacity to work.
5 Entitled to a reduced occupational pension on early retirement in the event of premature or regular termination of employment.
6 Left the Board as at 31 December 2017; entitled to a pension with effect from 1 December 2024.
7 Left the Board as at 26 April 2017; entitled to a reduced occupational pension on early retirement with effect from 1 May 2019.
8 Entitled to a reduced occupational pension on early retirement in the event of premature termination of employment, and to an occupational pension in the event of regular termination of employment.
9 Entitled to vested benefits under the Company Pension Act in the event of premature or regular termination of employment.
10 Entitled to vested benefits under the Company Pension Act in the event of regular termination of employment.
11 Defined contribution plan within the meaning of IAS 19: Employee Benefits, so no present value shown.
12 Munich Reinsurance Company: see footnote 11; ERGO Group AG: no defined contribution plan within the meaning of IAS 19, so present value shown.

Board of Management remuneration under the German Corporate Governance Code

As required by the provisions of the German Corporate Governance Code, the following tables show the benefits granted and remuneration paid out to individual members of the Board of Management in the year under review.

The basic remuneration, remuneration in kind/fringe benefits and pension expenses (sum of personnel expenses for defined benefit plans and defined contribution plans) are in accordance with German Accounting Standard No. 17 (DRS 17). There are some deviations with regard to variable remuneration for annual and multi-year performance.

The following tables show the benefits granted and the remuneration paid out in accordance with the German Corporate Governance Code:

Benefits granted in accordance with the German Corporate Governance Code

	Nikolaus von Bomhard Chairman of the Board of Management (leaving date: 26 April 2017)				Joachim Wenning Board member (until 26 April 2017) Chairman of the Board of Management (since 27 April 2017)			
€	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)	2016
Basic remuneration	420,000	420,000	420,000	1,260,000	1,045,000	1,045,000	1,045,000	615,000
Remuneration in kind/fringe benefits	11,664	11,664	11,664	35,783	128,254	128,254	128,254	139,039
Total	**431,664**	**431,664**	**431,664**	**1,295,783**	**1,173,254**	**1,173,254**	**1,173,254**	**754,039**
One-year variable remuneration								
Annual performance 2016				882,000				430,500
Annual performance 2017	294,000	0	588,000		731,500	0	1,463,000	
Multi-year variable remuneration								
Multi-year performance 2016–2018				2,058,000				1,004,500
Multi-year performance 2017–2019	686,000	0	1,372,000		1,706,833	0	3,413,666	
Other								
Total	**1,411,664**	**431,664**	**2,391,664**	**4,235,783**	**3,611,587**	**1,173,254**	**6,049,920**	**2,189,039**
Pension expenses	238,000	238,000	238,000	1,001,233	889,414	889,414	889,414	524,003
Total remuneration	**1,649,664**	**669,664**	**2,629,664**	**5,237,016**	**4,501,001**	**2,062,668**	**6,939,334**	**2,713,042**

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	Giuseppina Albo Board member (leaving date: 31 December 2017)				Ludger Arnoldussen[2] Board member (leaving date: 26 April 2017)			
€	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)	2016
Basic remuneration	615,000	615,000	615,000	555,000	205,000	205,000	205,000	615,000
Remuneration in kind/fringe benefits	127,420	127,420	127,420	21,959	13,811	13,811	13,811	90,384
Total	**742,420**	**742,420**	**742,420**	**576,959**	**218,811**	**218,811**	**218,811**	**705,384**
One-year variable remuneration								
Annual performance 2016				388,500				430,500
Annual performance 2017[1]	–	–	–		143,500	0	287,000	
Multi-year variable remuneration								
Multi-year performance 2016–2018[1]				–				1,004,500
Multi-year performance 2017–2019[1]	–	–	–		334,833	0	669,666	
Other								
Total	**742,420**	**742,420**	**742,420**	**965,459**	**697,144**	**218,811**	**1,175,477**	**2,140,384**
Pension expenses	524,622	524,622	524,622	474,047	489,047	489,047	489,047	659,513
Total remuneration	**1,267,042**	**1,267,042**	**1,267,042**	**1,439,506**	**1,186,191**	**707,858**	**1,664,524**	**2,799,897**

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	Thomas Blunck Board member				Doris Höpke Board member			
€	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)	2016
Basic remuneration	615,000	615,000	615,000	615,000	615,000	615,000	615,000	555,000
Remuneration in kind/fringe benefits	31,466	31,466	31,466	31,700	32,105	32,105	32,105	33,356
Total	**646,466**	**646,466**	**646,466**	**646,700**	**647,105**	**647,105**	**647,105**	**588,356**
One-year variable remuneration								
Annual performance 2016				430,500				388,500
Annual performance 2017	430,500	0	861,000		430,500	0	861,000	
Multi-year variable remuneration								
Multi-year performance 2016–2018				1,004,500				906,500
Multi-year performance 2017–2019	1,004,500	0	2,009,000		1,004,500	0	2,009,000	
Other								
Total	**2,081,466**	**646,466**	**3,516,466**	**2,081,700**	**2,082,105**	**647,105**	**3,517,105**	**1,883,356**
Pension expenses	511,187	511,187	511,187	493,859	523,257	523,257	523,257	472,348
Total remuneration	**2,592,653**	**1,157,653**	**4,027,653**	**2,575,559**	**2,605,362**	**1,170,362**	**4,040,362**	**2,355,704**

Continued on next page

	Torsten Jeworrek Board member				Hermann Pohlchristoph Board member (joined: 27 April 2017)			
€	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)	2016
Basic remuneration	885,000	885,000	885,000	885,000	410,000	410,000	410,000	–
Remuneration in kind/fringe benefits	36,179	36,179	36,179	37,801	29,940	29,940	29,940	–
Total	**921,179**	**921,179**	**921,179**	**922,801**	**439,940**	**439,940**	**439,940**	**–**
One-year variable remuneration								
Annual performance 2016				619,500				–
Annual performance 2017	619,500	0	1,239,000		259,000	0	518,000	
Multi-year variable remuneration								
Multi-year performance 2016–2018				1,445,500				–
Multi-year performance 2017–2019	1,445,500	0	2,891,000		604,333	0	1,208,666	
Other								
Total	**2,986,179**	**921,179**	**5,051,179**	**2,987,801**	**1,303,273**	**439,940**	**2,166,606**	**–**
Pension expenses	787,504	787,504	787,504	769,154	325,328	325,328	325,328	–
Total remuneration	**3,773,683**	**1,708,683**	**5,838,683**	**3,756,955**	**1,628,601**	**765,268**	**2,491,934**	**–**

	Markus Rieß Board member Total[3]				thereof for Munich Reinsurance Company			
€	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)	2016
Basic remuneration	976,250	976,250	976,250	976,250	337,500	337,500	337,500	337,500
Remuneration in kind/fringe benefits	140,167	140,167	140,167	115,717	49,342	49,342	49,342	39,677
Total	**1,116,417**	**1,116,417**	**1,116,417**	**1,091,967**	**386,842**	**386,842**	**386,842**	**377,177**
One-year variable remuneration								
Annual performance 2016				592,125				236,250
Annual performance 2017	592,125	0	1,184,250		236,250	0	472,500	
Multi-year variable remuneration								
Multi-year performance 2016–2018				1,381,625				551,250
Multi-year performance 2017–2019	1,381,625	0	2,763,250		551,250	0	1,102,500	
Other[4]	750,000	750,000	750,000	1,500,000	750,000	750,000	750,000	1,500,000
Total	**3,840,167**	**1,866,417**	**5,813,917**	**4,565,717**	**1,924,342**	**1,136,842**	**2,711,842**	**2,664,677**
Pension expenses	754,069	754,069	754,069	753,495	297,819	297,819	297,819	297,245
Total remuneration	**4,594,236**	**2,620,486**	**6,567,986**	**5,319,212**	**2,222,161**	**1,434,661**	**3,009,661**	**2,961,922**

	Peter Röder Board member				Jörg Schneider Board member			
€	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)	2016
Basic remuneration	615,000	615,000	615,000	615,000	885,000	885,000	885,000	885,000
Remuneration in kind/fringe benefits	30,278	30,278	30,278	35,034	41,782	41,782	41,782	37,011
Total	**645,278**	**645,278**	**645,278**	**650,034**	**926,782**	**926,782**	**926,782**	**922,011**
One-year variable remuneration								
Annual performance 2016				430,500				619,500
Annual performance 2017	430,500	0	861,000		619,500	0	1,239,000	
Multi-year variable remuneration								
Multi-year performance 2016–2018				1,004,500				1,445,500
Multi-year performance 2017–2019	1,004,500	0	2,009,000		1,445,500	0	2,891,000	
Other								
Total	**2,080,278**	**645,278**	**3,515,278**	**2,085,034**	**2,991,782**	**926,782**	**5,056,782**	**2,987,011**
Pension expenses	528,066	528,066	528,066	519,195	842,831	842,831	842,831	815,646
Total remuneration	**2,608,344**	**1,173,344**	**4,043,344**	**2,604,229**	**3,834,613**	**1,769,613**	**5,899,613**	**3,802,657**

1 Albo: The entitlement to variable remuneration not paid out was forfeited owing to departure.
2 Arnoldussen: Compensation for a post-contractual non-competition agreement totalling €1,515,000 for the period May to December 2017.
3 Rieß: Remuneration also includes compensation components and pension expenses for work at ERGO Group AG.
4 Rieß: Compensation, payable in four equal instalments, for the forfeited variable remuneration from the previous employer.

Remuneration paid in accordance with the German Corporate Governance Code

€	Nikolaus von Bomhard Chairman of the Board of Management (leaving date: 26 April 2017) 2017	2016	Overall performance evaluation in %	Joachim Wenning Board member (until 26 April 2017) Chairman of the Board of Management (since 27 April 2017) 2017	2016	Overall performance evaluation in %
Basic remuneration	420,000	1,260,000		1,045,000	615,000	
Remuneration in kind/fringe benefits	11,664	35,783		128,254	139,039	
Total	**431,664**	**1,295,783**		**1,173,254**	**754,039**	
One-year variable remuneration						
Annual performance 2016[1]		917,280	104		443,415	103
Annual performance 2017[2]	146,706		50	365,019		50
Multi-year variable remuneration						
Multi-year performance 2014–2016[1]		1,767,920	88		872,200	89
Multi-year performance 2015–2017[3]	1,370,740		68	606,032		62
Other						
Total	**1,949,110**	**3,980,983**		**2,144,305**	**2,069,654**	
Pension expenses	238,000	1,001,233		889,414	524,003	
Total remuneration	**2,187,110**	**4,982,216**		**3,033,719**	**2,593,657**	

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€	Giuseppina Albo Board member (leaving date: 31 December 2017) 2017[4]	2016	Overall performance evaluation in %	Ludger Arnoldussen Board member (leaving date: 26 April 2017) 2017[5]	2016	Overall performance evaluation in %
Basic remuneration	615,000	555,000		205,000	615,000	
Remuneration in kind/fringe benefits	127,420	21,959		13,811	90,384	
Total	**742,420**	**576,959**		**218,811**	**705,384**	
One-year variable remuneration						
Annual performance 2016[1]		357,420	92		370,230	86
Annual performance 2017[2]	–		–	76,643		53
Multi-year variable remuneration						
Multi-year performance 2014–2016[1]		177,166	89		862,400	88
Multi-year performance 2015–2017[3]	–		–	609,952		62
Other						
Total	**742,420**	**1,111,545**		**905,406**	**1,938,014**	
Pension expenses	524,622	474,047		489,047	659,513	
Total remuneration	**1,267,042**	**1,585,592**		**1,394,453**	**2,597,527**	

See table on next page for footnotes

→	Thomas Blunck Board member			Doris Höpke Board member		
€	2017	2016	Overall performance evaluation in %	2017	2016	Overall performance evaluation in %
Basic remuneration	615,000	615,000		615,000	555,000	
Remuneration in kind/fringe benefits	31,466	31,700		32,105	33,356	
Total	**646,466**	**646,700**		**647,105**	**588,356**	
One-year variable remuneration						
Annual performance 2016[1]		430,500	100		431,235	111
Annual performance 2017[2]	320,723		75	342,248		80
Multi-year variable remuneration						
Multi-year performance 2014–2016[1]		872,200	89		366,275	69
Multi-year performance 2015–2017[3]	606,032		62	439,132		55
Other						
Total	**1,573,221**	**1,949,400**		**1,428,485**	**1,385,866**	
Pension expenses	511,187	493,859		523,257	472,348	
Total remuneration	**2,084,408**	**2,443,259**		**1,951,742**	**1,858,214**	

→	Torsten Jeworrek Board member			Hermann Pohlchristoph Board member (joined: 27 April 2017)		
€	2017	2016	Overall performance evaluation in %	2017	2016	Overall performance evaluation in %
Basic remuneration	885,000	885,000		410,000	–	
Remuneration in kind/fringe benefits	36,179	37,801		29,940	–	
Total	**921,179**	**922,801**		**439,940**	**–**	
One-year variable remuneration						
Annual performance 2016[1]		613,305	99		–	
Annual performance 2017[2]	334,530		54	138,332		53
Multi-year variable remuneration						
Multi-year performance 2014–2016[1]		1,264,690	89		–	
Multi-year performance 2015–2017[3]	878,746		62	–		
Other						
Total	**2,134,455**	**2,800,796**		**578,272**	**–**	
Pension expenses	787,504	769,154		325,328	–	
Total remuneration	**2,921,959**	**3,569,950**		**903,600**	**–**	

See table on next page for footnotes

	Markus Rieß				
	Board member				
	Total[6]		thereof for Munich Reinsurance Company		
€	2017	2016	2017	2016	Overall performance evaluation in %
Basic remuneration	976,250	976,250	337,500	337,500	
Remuneration in kind/fringe benefits	140,167	115,717	49,342	39,677	
Total	**1,116,417**	**1,091,967**	**386,842**	**377,177**	
One-year variable remuneration					
Annual performance 2016[1]		702,554		266,963	113
Annual performance 2017[2]	497,625		141,750		60
Multi-year variable remuneration					
Multi-year performance 2014–2016[1]		–		–	
Multi-year performance 2015–2017[3]	974,562		144,187		94
Other[7]	750,000	1,500,000	750,000	1,500,000	
Total	**3,338,604**	**3,294,521**	**1,422,779**	**2,144,140**	
Pension expenses	754,069	753,495	297,819	297,245	
Total remuneration	**4,092,673**	**4,048,016**	**1,720,598**	**2,441,385**	

	Peter Röder			Jörg Schneider		
	Board member			Board member		
€	2017	2016	Overall performance evaluation in %	2017	2016	Overall performance evaluation in %
Basic remuneration	615,000	615,000		885,000	885,000	
Remuneration in kind/fringe benefits	30,278	35,034		41,782	37,011	
Total	**645,278**	**650,034**		**926,782**	**922,011**	
One-year variable remuneration						
Annual performance 2016[1]		447,720	104		638,085	103
Annual performance 2017[2]	198,030		46	371,081		60
Multi-year variable remuneration						
Multi-year performance 2014–2016[1]		872,200	89		1,250,480	88
Multi-year performance 2015–2017[3]	606,032		62	969,549		68
Other						
Total	**1,449,340**	**1,969,954**		**2,267,412**	**2,810,576**	
Pension expenses	528,066	519,195		842,831	815,646	
Total remuneration	**1,977,406**	**2,489,149**		**3,110,243**	**3,626,222**	

1 In the 2016 Annual Report, the amounts to be paid for the 2016 annual performance and multi-year performance 2014–2016 were recognised on the basis of the reserves, as no Supervisory Board resolution had yet been passed on the actual bonus amounts to be paid. The 2017 Annual Report shows the actual amounts set by the Supervisory Board and to be paid out for 2016.
2 At the time of preparation of this report, no Supervisory Board resolution had yet been passed on the amounts to be paid for the 2017 annual performance; the amount shown is based on estimates and the relevant provisions posted.
3 At the time of preparation of this report, no Supervisory Board resolution had yet been passed on the amounts to be paid for the 2015–2017 multi-year performance; the amount shown is based on estimates and the relevant provisions posted.
4 Albo: The entitlement to variable remuneration not paid out was forfeited owing to departure.
5 Arnoldussen: Compensation for a post-contractual non-competition agreement totalling €1,515,000 for the period May to December 2017.
6 Rieß: Remuneration also includes compensation components and pension expenses for work at ERGO Group AG.
7 Rieß: Compensation, payable in four equal instalments, for the forfeited variable remuneration from the previous employer.

Remuneration of the members of the Board of Management from 2018

Separate Remuneration Committee from 2018

The Supervisory Board set up a separate Remuneration Committee with effect from 1 January 2018, of which the Chairman of the Supervisory Board and one representative each of the shareholders and employees are members. Following the 2019 Supervisory Board election, the Committee is to be set up in such a way that the two shareholder representatives may not be members of the Supervisory Board for more than ten years. This enables us to comply with a key demand of our shareholders. As a result of the establishment of the Remuneration Committee, responsibility for all remuneration-related matters concerning members of the Board of Management has been transferred from the Personnel Committee to the Remuneration Committee. This has no effect on the remaining tasks of the Personnel Committee, such as the appointment and dismissal of Board members or the conclusion of contracts.

New remuneration system from 2018

The Supervisory Board agreed a new remuneration system effective from 1 January 2018, partly because the remuneration system for the members of the Board of Management was rejected at the 2017 Annual General Meeting. The new remuneration system complies with legal requirements as did the previous system, takes account of the major issues raised in the previous year and is much leaner, less complex and easier to comprehend. The major reduction in complexity, paired with externally accepted indicators, means that the Company will be able to disclose the assessment bases and evaluations for the Board of Management's remuneration in a more transparent manner in future, and therefore better meet the requirements of shareholders and their representatives.

The new remuneration system for the Board of Management will be put to the vote at the Annual General Meeting on 25 April 2018.

The structure of the remuneration system for the members of the Board of Management with effect from 2018 is shown below. A particular focus is on the changes compared with the previous remuneration system, and reasons are given in each particular case.

Remuneration continues to comprise fixed (non-performance-related) and variable (performance-related) components and a company pension scheme. Details are included in the following table:

Structure of the remuneration system for the members of the Board of Management from 2018

Component	Share[1]	Assessment basis/ parameters	Corridor	Performance evaluation	
Basic remuneration plus remuneration in kind/ fringe benefits	**50%**	Function, responsibility, Length of service on Board	Fixed		
Variable remuneration	**50%**	Corporate performance Result of divisional unit Personal performance			
30% annual bonus (for 100 % performance evaluation) **Bonus scheme spanning one calendar year**		IFRS consolidated result	Linear scaling **0–200%** (fully achieved = 100 %)	Achievement of annual objective	**Evaluation of overall performance:** Adjustment of achievement figures by the Supervisory Board, taking into account – individual and collective management performance; – financial situation, performance and future prospects of the Company. Loading/reduction of up to 20 percentage points.
70% multi-year bonus (for 100 % performance evaluation) **Bonus scheme spanning five calendar years**		Total shareholder return (TSR) of Munich Re shares compared with a defined peer group (Peer group: Allianz, Axa, Generali, Hannover Re, SCOR, Swiss Re, Zurich Insurance Group)	Linear scaling **0–200%**	Performance of Munich Re shares compared with peer group	
Pension					
Defined contribution plan		Target overall direct remuneration[2]	Pension contribution	> Retirement > Insured event > Premature termination	

1 For the variable remuneration, the share shown presupposes 100% performance evaluation.
2 Target overall direct remuneration comprises basic remuneration plus variable remuneration based on 100% performance evaluation.

Fixed remuneration

Fixed remuneration comprises basic remuneration plus the remuneration in kind and fringe benefits (including company cars and insurance policies) previously granted. The payroll tax on the remuneration in kind and fringe benefits will continue to be borne by Munich Re.

The share of basic remuneration in the target overall direct remuneration will be increased from 30% to 50%. The higher weighting of the basic remuneration ensures a greater balance in the composition of the overall remuneration, which is also a requirement under Solvency II. In accordance with Solvency II, fixed and variable remuneration components must be in balance, so that the fixed component represents a sufficiently high proportion of the total remuneration and enables the undertaking to apply a fully flexible bonus policy, including the possibility of paying no variable remuneration at all. The reduction in the variable component is designed to avoid providing Board members with the incentive to take excessive risk in order to achieve a higher bonus. Moreover, variable remuneration, which is geared solely to financial objectives and will in future only take qualitative aspects into consideration as part of the overall performance evaluation, will become significantly more volatile than was previously the case with qualitative objectives. Individual investors have also been increasingly requesting a strengthening of fixed remuneration. For these reasons, it seems appropriate to raise basic remuneration.

Variable remuneration

Assessment bases and link to corporate strategy

Variable remuneration has been completely revamped. It continues to comprise an annual and multi-year component, both of which are related to the future (as was previously the case). The assessment bases used, however, differ from those in the previous remuneration system. One of the main reasons for this is that disclosure of the financial objectives set for members of the Board of Management – which was requested by investors for the sake of greater transparency – was previously out of the question owing to its relevance for the competition and impact on clients' interests. The assessment bases of the new remuneration system do not have these disadvantages.

Going forward, the exact target for the IFRS consolidated result used for the annual bonus, and the respective figures for a 0% and 200% achievement of objectives (linear scaling) will be communicated externally. The target cannot be adjusted retroactively. After the assessment period has ended, the IFRS consolidated result achieved and the corresponding achievement of this objective will also be disclosed. As regards the total shareholder return (TSR) of Munich Re's shares used for the multi-year bonus, which is measured in relative terms in comparison with the peer group, the specific values for assessing the achievement will not be available until the end of the plan period. The values used for 0% and 200% of the linear scaling will be communicated externally prior to the 2018 Annual General Meeting. After assessing this achievement, this too will be communicated together with the comparable values for the peer group. This ensures comprehensive transparency regarding the financial objectives.

As only one financial indicator each is used in the annual and multi-year bonus, the variable remuneration component is easier to understand. The Company has deliberately decided in favour of this simpler method in order to reduce the complexity of the previous remuneration system. The IFRS consolidated result and TSR on Munich Re's shares in comparison with the peer group are two ambitious and exacting indicators promoting long-term corporate strategy. Both indicators can be influenced by the Board of Management.

Munich Re's business strategy is geared to profitable growth and successful positioning among our competitors. As an established result aggregate and relevant key figure for the capital market, the IFRS consolidated result takes account of high and stable earnings power in the annual variable remuneration component. The target for the IFRS consolidated result is based on annual planning figures, which in turn reflect Munich Re's business strategy.

Based on its long-term strategic orientation and economic management of the Group, Munich Re is convinced of its ability to sustainably create value for its shareholders in the form of TSR. TSR takes account of dividend payments as well as share price performance. A multi-year component based on an increase in TSR in comparison with our peer group makes up the largest portion of the new variable remuneration for the Board of Management. From Munich Re's point of view, the relative TSR is well suited for bringing in line the interests of shareholders and of the members of the Board of Management. As TSR is measured over a period of several years, it reflects Munich Re's sustainable and long-term performance not only in absolute terms, but also in relative terms. After all, above-average TSR development in comparison with the peer group is not conceivable in the long term without simultaneously generating good results and creating value for our shareholders. Surpassing the performance of our peer group can be in the interests of shareholders – even in a weak market environment.

As soon as the information on the achievement of objectives is available, as part of the overall performance evaluation the Supervisory Board can take into consideration both in the annual and multi-year bonus the performance of the individual members of the Board of Management and the Board of Management as a whole, along with Munich Re's financial situation, performance and future prospects. This is done by means of a loading or reduction of up to 20 percentage points on the relevant objective achieved.

In evaluating overall performance, in particular financial and non-financial criteria for the individual member's performance and the performance of the respective divisional unit/division and the field of business need to be taken into consideration. Other aspects, such as those relating to periods prior to the appraisal period in question, may also be taken into account. For this purpose, the Supervisory Board has compiled a set of criteria with the following examples of bonus-malus aspects:

Annual and multi-year bonus: Criteria for the evaluation of overall performance

Individual management performance	– Result of division/divisional unit, contribution to overall performance – Personal performance (qualitative and/or quantitative) – ESG (environmental, social and governance) criteria – Employee satisfaction – Consideration of special market circumstances or unexpected developments – Implementation of strategy, improvements in organisation and processes, innovation – Conduct (leadership, role model function, adherence to guidelines/compliance requirements, cooperation with colleagues and Supervisory Board)
Collective management performance	– Result of field of business (reinsurance and/or primary insurance) – ESG (environmental, social and governance) criteria – Employee satisfaction – Reaction to special market circumstances and unforeseeable developments
Financial situation, performance and future prospects of the Company	– Financial situation of the Company – Short-term and long-term profit prospects – Market environment (interest rates, situation in the industry, etc.)

Further key aspects can also be taken into consideration.

Transparency is provided with regard to whether and for what loadings or reductions were made and what they amounted to.

The evaluation of overall performance can also take into account factors that influence business development but are not reflected in the IFRS consolidated result and TSR. Therefore, in light of the aim of keeping the remuneration system simple and transparent, no further financial assessment bases are needed.

Targets for the annual bonus

The aim of the annual bonus is to achieve a high IFRS consolidated result. A target of €2,300m was set for 2018, with the following linear scaling for the 0–200% target corridor:

€1,600m = 0% achievement of objective
€2,300m = 100% achievement of objective
€3,000m = 200% achievement of objective

The target chosen for 2018 is a challenging objective for the members of the Board of management given the prevailing low-interest-rate policies and fierce competition in the reinsurance markets.

Targets for the multi-year bonus

The objective of the multi-year bonus is the sustainable performance of Munich Re's shares in terms of TSR in comparison with the peer group. The companies in the peer group were selected based on comparable business activities and size. Furthermore, they must be listed on the stock exchange and subject to similar accounting standards as Munich Re, which is why the peer group only includes European primary insurance and reinsurance companies. The peer group comprises Allianz, Axa, Generali, Hannover Re, SCOR, Swiss Re and Zurich Insurance Group. It is the same peer group as for the analysts' conference.

The multi-year bonus spans five calendar years. In the first calendar year, the initial TSR is established, and at the end of the scheme, the end TSR is computed and compared in order to determine achievement of the objective. The calculations are made on the basis of reporting date figures.

The figures used for target assessment (scaling) will be decided by the Supervisory Board at its meeting in March 2018. As the editorial deadline for the Annual Report precedes the Supervisory Board meeting, this information could not be included in the remuneration report. However, it will be made available on the Munich Re website on 16 March 2018.

Deferral

The run time of the flexible and deferred multi-year bonus takes account of the nature and time horizon of the Company's business activities. The TSR in the multi-year bonus fully reflects the sustainable and long-term performance of Munich Re's shares, so that a further multi-year deferral period – which in turn is geared to share price performance – is neither expedient nor necessary. In the case of the annual bonus, a deferral period does not offer any significant added value either, as the annual bonus makes up only 15% of overall remuneration.

Limit to variable remuneration (malus) and clawback

Given that the Supervisory Board can take into account a loading or discount of up to 20 percentage points on both the annual bonus and the multi-year bonus in order to reflect the achievements of the individual members of the Board of Management and the Board of Management as a whole, it has the option of reducing variable remuneration in the case of negative result contributions.

According to the employment contracts for members of the Board of Management appointed for the first time after 1 January 2017, all unpaid variable remuneration components are forfeited in the event of termination of a Board member's contract by the Company for good cause or in the event of relinquishment by a Board member of their appointment to the Board of Management without good cause.

In addition, all employment contracts of the members of the Board of Management provide for the right of the Company to implement any requirements by the supervisory authority to limit, cancel or not pay out variable remuneration in relation to the member of the Board of Management.

Contractual clawback provisions requiring reimbursement of variable remuneration components already paid out are triggered in the event of a serious breach of duty. With effect from 2018, all employment contracts of the members of the Board of Management include a provision according to which, in particular pursuant to Section 93 of the German Stock Corporation Act (AktG), a member of the Board of Management is required to reimburse the Company for any damage attributable to them as a result of a breach of duty. The contractual indemnity provision protects the Company; it is designed to safeguard the Company's assets in the event of a serious breach of duty. In the Company's view, an additional clawback provision for bonuses already paid is therefore not required.

Upper remuneration limits

The target corridor of 0–200% defines an upper limit for variable remuneration paid to members of the Board of Management. Any higher achievement of objectives is capped at 200%; in this case, there is therefore also no loading as a result of the overall performance evaluation. In addition, there are caps on the maximum amounts of total remuneration and its variable components in accordance with the German Corporate Governance Code.

Share ownership of the members of the Board of Management

Unlike previously, members of the Board of Management are no longer obliged to invest in Company shares under the new remuneration system. There are several reasons for this:

The TSR used in the multi-year bonus reflects the performance of Munich Re's shares, which ensures that the interests of the Board of Management are in line with those of our shareholders. From the Company's point of view, the steadily increasing requirements under insider trading law regarding the purchase and sale of shares as well as the rising number of investigations – also in connection with share-based remuneration components – are compelling arguments against remuneration based on an obligation to purchase shares. The reputational damage that may ensue for a company is huge (even if the legal proceedings are terminated) and may also have a negative effect on shareholders.

In addition, the members of the Board of Management appointed prior to 2017 already hold a large number of Company shares. Moreover, all members of the Board of Management are obliged under the 2017 annual performance plan and all or individual multi-year performance plans (2015–2017, 2016–2018 and 2017–2019) to continue to invest in Company shares over the next few years.

Share ownership of the members of the Board of Management

Members of the Board of Management	Number of shares on 29.12.2017[1]	XETRA Closing price on 29.12.2017[1]	Total value of shares on 29.12.2017[1]	Total value of shares in % of basic remuneration for 2017
		€	€	%
Joachim Wenning[2]	10,202	180.75	1,844,011.50	176
Giuseppina Albo[3] (until 31 December 2017)	3,525	180.75	637,143.75	104
Thomas Blunck	4,062	180.75	734,206.50	119
Doris Höpke	2,528	180.75	456,936.00	74
Torsten Jeworrek	12,361	180.75	2,234,250.75	252
Hermann Pohlchristoph (joined: 27 April 2017)	0	–	–	–
Markus Rieß[4]	1,435	180.75	259,376.25	27
Peter Röder	6,370	180.75	1,151,377.50	187
Jörg Schneider	6,965	180.75	1,258,923.75	142

1 Last trading day in 2017.
2 The basic remuneration that Joachim Wenning received for 2017 is calculated on the basis of the basic remuneration for a period of four months as a full member of the Board of Management and eight months as Chairman of the Board of Management.
3 Where shares held by Giuseppina Albo are still subject to minimum holding periods, these continue to apply despite her departure from the Company.
4 As regards the overall value of the shares in relation to basic remuneration, the basic remuneration that Markus Rieß received for his work at ERGO Group AG was also taken into consideration.

Pensions
There have been no changes to the pensions for members of the Board of Management compared with 2017.

Other
No guaranteed variable remuneration (sign-on bonuses/recruitment bonuses)
As a matter of principle, the Company does not pay guaranteed variable remuneration to members of the Board of Management. We only pay sign-on/recruitment bonuses in exceptional cases and on production of corresponding evidence if a new member of the Board of Management forfeits a bonus by a previous employer. Compensation for forfeiting variable remuneration components paid by a previous employer is in any case limited to the first year of employment. Payment is effected in several instalments, and is tied to prerequisites for disbursement.

Severance cap and change of control
Members of the Board of Management appointed before 1 January 2017 have no contractual right to severance payments. If the Board member's activities on the Board are terminated prematurely by the Company without good cause, payments due may not exceed the equivalent of two years' total remuneration (three years' total remuneration in the event of acquisition of a controlling interest or change of control within the meaning of Section 29(2) of the Securities Acquisition and Takeover Act – WpÜG) and may not cover more than the remaining period of the employment contract if this is shorter. If the employment contract is terminated for good cause on grounds that are within the Board member's control, no payments are made to the Board member. The calculation is based on overall remuneration for the past financial year and, if necessary, on the probable overall remuneration for the current financial year.

Members of the Board of Management appointed for the first time after 1 January 2017 whose contracts are terminated by the Company without good cause have a contractual right to a severance payment. Such payments may not exceed the equivalent of two years' remuneration, and are restricted by the remaining term of the Board member's contract if this term is shorter. Annual remuneration is calculated on the basis of annual basic remuneration and variable remuneration paid out for the prior full financial year before the contract was terminated; remuneration in kind, other fringe benefits and contributions to occupational retirement schemes are not taken into account. Payments received by a Board member during a period of notice after termination of the appointment are offset against any severance payment. There will be no right to severance payments in the event of extraordinary termination of the Board member's contract by the Company for good cause.

As a matter of principle, the Company ensures that severance payments are related to performance achieved over the whole period of activity.

Amount of remuneration
As previously, the level of the target overall direct remuneration for the members of the Board of Management is set by the Supervisory Board, taking into account the responsibilities and performance of each member of the Board of Management, the performance of the full Board of Management and the financial situation, performance and future prospects of Munich Re. It takes into consideration whether the remuneration is standard practice and appropriate compared with other companies of the peer group (including DAX 30 companies). The target overall direct remuneration for the Chairman of the Board of Management is based on the median remuneration paid to the chairs of the boards of management of DAX 30 companies. In addition, the Supervisory Board takes into account the level of the salaries paid to the Board of Management in relation to the level of salaries paid to senior managers and to general staff members over time.

Pay ratios
In 2017, the ratio of the target overall direct remuneration of the Chairman of the Board of Management to the average target overall direct remuneration of all Company employees (excluding the Board of Management) was 37. The ratio of the average target overall direct remuneration of all members of the Board of Management to the average target overall direct remuneration of all employees (excluding the Board of Management) was 23.

External consultants
Munich Re did not use the services of external consultants to draft and implement the remuneration system of the Board of Management effective from 2018.

Concluding remarks of the Supervisory Board
In the Supervisory Board's view, the remuneration system of the Board of Management applying with effect from 2018 is appropriate, sustainable and transparent. The remuneration paid is linked to the Company's business strategy and results, and to the performance of Munich Re's shares, taking into particular consideration the interests of both the Company and its shareholders. Besides this, the new remuneration system brings about the transparency requested by shareholders and their representatives with regard to the targets and achievement of objectives, and takes account of the criticism expressed about the previous remuneration system. The Supervisory Board therefore calls upon all shareholders to approve the new remuneration system.

Total remuneration of the Supervisory Board

Remuneration of the members of the Supervisory Board in 2017

In the year under review, each member of the Supervisory Board received fixed annual remuneration of €90,000. The Chairman of the Supervisory Board received annual remuneration of €180,000, and the Deputy Chairman received annual remuneration of €135,000.

Members of the Audit Committee each received an additional €45,000; members of the Standing Committee each received an extra €13,500; and members of the Personnel Committee each received an additional €27,000.

The chairs of these committees receive double the amounts stated for members. No additional remuneration is paid for serving on the Nomination Committee or the Conference Committee.

Members of the Supervisory Board receive a daily attendance fee of €1,000 for meetings of the Supervisory Board and its committees – with the exception of the Conference Committee.

Remuneration of the members of the Supervisory Board in 2018

The proposed remuneration for serving on the Remuneration Committee, which was set up with effect from 1 January 2018, will be submitted to the 2018 Annual General Meeting for a resolution. According to this proposal, its members are to receive an extra €27,000 for their work on this committee. For members of the Supervisory Board that are on the Remuneration Committee and the Personnel Committee, the fees for serving on the Personnel Committee also cover their membership on the Remuneration Committee.

No further change to the remuneration of the members of the Supervisory Board is envisaged for 2018.

Remuneration of the members of the Supervisory Board from 2019

A proposal to increase the remuneration for members of the Supervisory Board with effect from 1 January 2019, which has remained unchanged since 2014, will be submitted to the 2018 Annual General Meeting. Additional legal requirements have an immediate impact on the requirement profiles and specific activities of the members of the Supervisory Board. Examples comprise the EU regulation on statutory audits which came into force in 2016, the German Audit Reform Act, the EU market abuse regulation and the Corporate Social Responsibility Directive Implementation Act which came into force in 2017. Moreover, these extended obligations of the Supervisory Board members will result in increased liability risks. To take account of the increased requirements, in particular of the Chairman of the Supervisory Board and the members of the Audit Committee, the remuneration of the Chairman of the Supervisory Board and the members of the Audit Committee is to be raised.

As a result, the annual remuneration for members of the Supervisory Board is to be increased from €90,000 to €100,000. The Chairman of the Supervisory Board is to receive annual remuneration of €220,000 in future, and the Deputy Chairman is to be paid €150,000. The members of the Audit Committee are to receive an additional €55,000, and the members of the Standing Committee are to be paid an additional €15,000. The members of the Personnel Committee and the Remuneration Committee are to receive an additional €30,000. For members of the Supervisory Board serving on both committees, the compensation for serving on the Personnel Committee also covers their membership on the Remuneration Committee. The chairs of these committees are to continue to receive double the amounts stated for members. As previously the case, no remuneration is to be paid for serving on the Nomination Committee or the Conference Committee. If there are several meetings on the same day, the attendance fee of €1,000 per meeting will continue to be paid only once. The remuneration of members of the Supervisory Board will continue to exclude variable remuneration components and pension benefits.

Once these adjustments have been made, the remuneration of the members of the Supervisory Board will be at the same level as that of comparable DAX 30 companies.

Remuneration of the Supervisory Board members[1]

Name	Financial year	In accordance with Article 15 of the Articles of Association – Fixed remuneration: Annual €	Committee work €	Attendance fees €	Total €	For membership of supervisory boards at Munich Reinsurance Company subsidiaries, in accordance with the companies' respective articles of association – Fixed remuneration: Annual €	Committee work €	Attendance fees €	Total €
Bernd Pischetsrieder	**2017**	**180,000**	**126,000**	**17,000**	**323,000**				
Chairman	2016	180,000	126,000	15,000	321,000				
Marco Nörenberg	**2017**	**135,000**	**13,500**	**6,000**	**154,500**	**35,000**	**–**	**–**	**35,000**
Deputy Chairman	2016	135,000	13,500	6,000	154,500	35,000	–	–	35,000
Ann-Kristin Achleitner	**2017**	**90,000**	**45,000**	**13,000**	**148,000**				
	2016	90,000	33,750	11,000	134,750				
Clement B. Booth	**2017**	**90,000**	**–**	**6,000**	**96,000**				
	2016	67,500	–	3,000	70,500				
Frank Fassin	**2017**	**90,000**	**–**	**5,000**	**95,000**	**35,000**	**–**	**–**	**35,000**
	2016	90,000	–	6,000	96,000	35,000	–	–	35,000
Benita Ferrero-Waldner	**2017**	**90,000**	**–**	**5,000**	**95,000**				
	2016	90,000	–	6,000	96,000				
Christian Fuhrmann	**2017**	**90,000**	**45,000**	**12,000**	**147,000**				
	2016	90,000	45,000	12,000	147,000				
Ursula Gather	**2017**	**90,000**	**–**	**6,000**	**96,000**				
	2016	90,000	–	5,000	95,000				
Peter Gruss (until 30 June 2017)	**2017**	**45,000**	**–**	**–**	**45,000**				
	2016	90,000	–	6,000	96,000				
Gerd Häusler	**2017**	**90,000**	**13,500**	**6,000**	**109,500**				
	2016	90,000	–	6,000	96,000				
Anne Horstmann	**2017**	**90,000**	**45,000**	**12,000**	**147,000**	**52,500**	**7,500**	**–**	**60,000**
	2016	90,000	45,000	11,000	146,000	52,500	7,500	–	60,000
Ina Hosenfelder	**2017**	**90,000**	**–**	**6,000**	**96,000**				
	2016	90,000	–	6,000	96,000				
Renata Jungo Brüngger	**2017**	**90,000**	**–**	**3,000**	**93,000**				
(since 3 January 2017)	2016	–	–	–	–				
Henning Kagermann	**2017**	**90,000**	**130,500**	**17,000**	**237,500**				
	2016	90,000	103,500	12,000	205,500				
Beate Mensch	**2017**	**90,000**	**–**	**6,000**	**96,000**				
	2016	90,000	–	6,000	96,000				
Ulrich Plottke	**2017**	**90,000**	**–**	**6,000**	**96,000**	**35,000**	**17,500**	**–**	**52,500**
	2016	90,000	–	6,000	96,000	35,000	17,500	–	52,500
Andrés Ruiz Feger	**2017**	**90,000**	**13,500**	**6,000**	**109,500**				
	2016	90,000	13,500	6,000	109,500				
Gabriele Sinz-Toporzysek	**2017**	**90,000**	**–**	**6,000**	**96,000**	**15,000**	**–**	**–**	**15,000**
	2016	90,000	–	6,000	96,000	15,000	–	–	15,000
Ron Sommer	**2017**	**90,000**	**–**	**6,000**	**96,000**				
	2016	90,000	–	6,000	96,000				
Angelika Wirtz	**2017**	**90,000**	**27,000**	**10,000**	**127,000**				
	2016	90,000	27,000	8,000	125,000				
Maximilian Zimmerer (since 4 July 2017)	**2017**	**45,000**	**–**	**2,000**	**47,000**				
	2016	–	–	–	–				
Total[2]	**2017**	**1,935,000**	**459,000**	**156,000**	**2,550,000**	**172,500**	**25,000**	**–**	**197,500**
	2016	1,822,500	407,250	143,000	2,372,750	172,500	25,000	–	197,500

1 Plus value-added tax (USt) in each case, in accordance with the relevant Articles of Association.
2 The previous year's figures do not include the remuneration of members who left the Supervisory Board in the 2016 financial year.

Macroeconomic and industry environment

Global economic growth accelerated significantly in 2017. The economy in the USA, the eurozone and Japan continued to gain momentum. China's growth rate remained high, and Brazil and Russia recovered from their recessions. Inflation rates in the developed economies were higher on average than in the previous year, but remained moderate overall.

Capital markets

Monetary policy divergence across the world increased in 2017. The US Federal Reserve continued its rate-hiking cycle, and also refrained from fully reinvesting expiring bonds in order to gradually reduce its portfolio. By contrast, the European Central Bank (ECB) stuck to its low-interest-rate policy and asset purchase programme. However, it scaled back the volume of its monthly bond purchases and announced a further reduction from January 2018 onwards.

Yields on ten-year government bonds

%	31.12.2017	31.12.2016
USA	2.4	2.4
Germany	0.4	0.2

The low-interest-rate environment worldwide continued to pose a significant challenge for insurers' investment activity. Yields on ten-year German government bonds reached a new record level of 0.6% in July, following speculation about an imminent end to the ECB's expansionary monetary policy, but fell back again to 0.4% by the end of the year. Yields on government bonds remained at a relatively low level in the USA as well – despite strong economic growth and key-interest-rate increases. This was partly attributable to persistently weak core inflation.

At the beginning of the year, fears of potential electoral gains by nationalist parties and a renewed crisis in the eurozone led to a widening of the yield differential between German government bonds and those of other eurozone countries. Yet after the French presidential elections and electoral reform in Italy, the yield differential narrowed again over the course of the year.

Equity markets

	31.12.2017	31.12.2016
DJ EuroStoxx 50	3,504	3,291
Dow Jones Index	24,719	19,763

The equity markets saw marked increases in prices, and volatility was very low. The EURO STOXX 50 climbed by around 6% in the period under review. The US Dow Jones Index rose by around 25% – driven by the expectation that many companies would benefit from the tax reform adopted at the end of the year.

Throughout the year, the euro exchange rate increased significantly against most important currencies. At the end of December 2017, the euro was up year on year by around 14% against the US dollar, 6% against the Canadian dollar and 4% against the pound sterling. Compared with 2016, the average annual value of the euro against the US dollar was up by only 2% for 2017. It was roughly the same against the Canadian dollar, but saw an appreciable increase of around 7% against the pound sterling. Further information on exchange rates can be found in the notes to the consolidated financial statements on page 115.

Insurance industry

According to provisional estimates, the German insurance industry's premium income increased slightly in 2017. Premium volume growth in property-casualty business and health insurance was robust. By contrast, life insurance saw a slight decline.

The market environment in property-casualty reinsurance changed in 2017. Global demand for reinsurance was supported by robust growth in major primary insurance markets in both industrialised and emerging countries.

During the renewals of property-casualty reinsurance treaties in the first half of the year, prices fell only slightly. The inflow of alternative capital remained strong and was responsible for the fact that there was more than enough capacity on the reinsurance market. The competitive environment remained difficult overall, not least because of the continuing robust capital base held by reinsurance companies. The second half of the year was marked by huge lossses, especially on account of the hurricanes in North America and the Caribbean, earthquakes in Mexico and forest fires in California. In 2017, economic losses from natural catastrophes thus hit the second-highest level ever recorded. In the renewals at 1 January 2018, prices saw across-the-board increases, although these were of moderate intensity, also against the background of slightly rising interest-rate levels.

Important tools of corporate management

Munich Re's management philosophy – Based on value creation

The aim of Munich Re's entrepreneurial thinking and activity is to analyse risks from every conceivable angle and to assess and diversify them, creating lasting value for shareholders, clients, and staff in relation to the risks assumed. This is the aim of our active capital management and the consistent application of value and risk-based management systems.

The framework for any business activity is our risk strategy, from which we derive various limitations and reporting thresholds. A key element is our economic capital resources, which we determine in accordance with the Solvency II supervisory regime. We observe a range of important additional conditions. They include national accounting regulations, tax aspects, liquidity requirements, supervisory parameters, and rating agency requirements.

Our value-based management is characterised by the following aspects:

- Risk capital, i.e. the capital required to cover the risks, is the basis of our value- and risk-based management. The capital requirement corresponds to the solvency capital requirement under Solvency II, as determined on the basis of our certified internal risk model. Information on the internal risk model is provided on page 69 ff.
- Consequently, business activities are assessed not only according to their earnings potential, but also relative to the extent of the risks assumed. Only the risk-return relationship reveals how beneficial an activity is from the point of view of our shareholders.
- With value-based corporate management tools, we ensure an economic valuation and the comparability of alternative initiatives.
- We clearly assign responsibilities and specify the levers for adding value for both management and staff.

On the one hand, the often complex economic realities should be reflected as closely as possible in order to emphasise added value as the Group's overriding guiding principle, on the other hand target figures should be simple and easy to understand for investors, staff, and the public.

The Group's corporate management tools

Our key corporate management tools at Group level are economic earnings and the IFRS consolidated result.

Economic earnings

The starting point for value-based management is the economic value added in a fixed period which we determine based on the key corporate management tool of economic earnings. These correspond with the change in eligible own funds under Solvency II, adjusted for items that do not represent economic value added in the period – such as capital measures, and the change in regulatory restrictions.

Economic earnings	=	Eligible own funds 31 Dec.	–	Eligible own funds 1 Jan.	±	Capital measures, etc.

In particular, economic earnings comprise the contribution to profits from our new business, and changes in the value of in-force business against the previous year's assessment. The development of eligible own funds is also considered because of the effect of changed capital market parameters on the assets and liabilities sides of the Solvency II balance sheet.

In applying the uniform Group performance-measurement model of economic earnings in the individual fields of business, we use conceptually consistent value-based and risk-capital-based measurement approaches that are individually geared to the characteristics of each of the respective businesses. They include the value added by property-casualty reinsurance and the excess return from our investment activity (asset-liability management). In life and health reinsurance, we apply value added by new business and the change in value of in-force business, which are based on the Solvency II balance sheet. The management tool economic earnings is used directly for ERGO, as no adjustments for this field of business are necessary. Group corporate management is designed to put us in a position to maximise value creation while observing subsidiary parameters.

IFRS consolidated result

The IFRS consolidated result is a performance measure derived from our external accounting. It serves as an important cross-line criterion for investors, analysts and the general public to assess corporate performance. With its standardised measurement basis, the IFRS consolidated result can be compared to the results of our market competitors and is thus a management tool used in Munich Re's financial reporting.

Other tools of corporate management

Return on risk-adjusted capital (RORAC)

Munich Re's value orientation is also reflected in the after-tax return on risk-adjusted capital (RORAC). RORAC is a mixture of accounting ratios and economic indicators. It relates the performance indicator customary in the capital markets (IFRS consolidated result) – which we adjust to eliminate the risk-free return after tax on additional available economic equity – to the necessary capital requirement.

The numerator in the formula comprises the published IFRS net income after deduction of risk-free interest after tax (interest rate x [1 – tax rate]) generated on capital not subject to risk within the given risk tolerance. The latter refers to the additional available economic equity. This corresponds to the surplus of eligible own funds reduced by the subordinated liabilities over the solvency capital requirement multiplied by 1.75. Any excess of liabilities over assets is not taken into consideration.

$$\text{RORAC}^{1} = \frac{\text{Net income} - \text{Interest rate} \times (1 - \text{Tax rate}) \times \text{Additional available economic equity}}{\text{Capital requirement}}$$

Combined ratio

The combined ratio is regularly posted for property-casualty business. Calculated as the percentage ratio of the sum of expenses for claims and benefits plus operating expenses to earned premiums (all of which are net, i.e. after reinsurance cessions), the combined ratio is the sum of the loss ratio and the expense ratio. A combined ratio of 100% means that premium income was exactly sufficient to cover claims and costs. Expenses for claims and benefits mainly include paid claims, the change in claims provisions, and the bulk of other underwriting expenses.[2] Operating expenses chiefly comprise the costs arising in the acquisition of new business and for the ongoing administration of insurance contracts.

For us, the combined ratio by itself is not a sufficiently informative performance measure. It is only of limited suitability for comparing the financial performance of competitors owing to differing calculation methods and portfolio mixes. Generally, we aim to keep the combined ratio as low as possible by means of good underwriting and claims management.

1 We use the figures set at the beginning of the period in order to calculate RORAC.
2 Expenses for claims and benefits not taken into account in the calculation of the combined ratio are set out on page 122 in the notes to the consolidated financial statements.

Business performance

Board of Management's overall assessment of the business performance and situation of the Group

We were unable to meet our profit guidance of €2.0–2.4bn for the year. Due to the significant impact of natural catastrophe claims, our consolidated profit was €392m (2,581m). This is in line with the expectations we published in the Quarterly Statement as at 30 September 2017, where we forecast that the Group would generate only a small profit for the year. The extraordinarily high levels of property damage from Hurricanes Harvey, Irma and Maria led to a result of –€476m (2,025m) in property-casualty reinsurance, and the combined ratio deteriorated to 114.1% (95.7%) of net earned premiums. In life and health reinsurance, we posted a technical result of €428m (561m). This figure is just below the profit of €450m we forecast at the start of the year, and is actually higher than the reduced target of €400m projected in August. The segment was impacted by high expenditure for the recapture of long-term reinsurance treaties, but this recapture will enable us to improve our result in future years. With a consolidated result of €273m (41m), the ERGO field of business surpassed the increased target range of €200–250m we had projected in our Half-Year Financial Report. A significantly improved technical result in Germany and abroad, and lower expenditure, contributed to this gratifying result.

Business performance of the Group and overview of investment performance

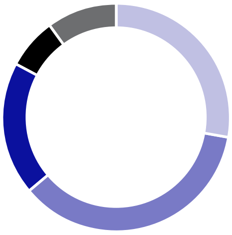
Key figures[1]

		2017	Prev. year	Change
				%
Gross premiums written	€bn	49.1	48.9	0.5
Combined ratio				
Reinsurance property-casualty	%	114.1	95.7	
ERGO Property-casualty Germany	%	97.5	97.0	
ERGO International	%	95.3	98.0	
Technical result	€m	–292	2,715	–
Investment result	€m	7,611	7,567	0.6
Result from insurance-related investments	€m	443	326	35.8
Operating result	€m	1,241	4,025	–69.2
Taxes on income	€m	298	–760	–
Risk-adjusted capital (RORAC)	%	1.5	10.9	
Economic earnings	€bn	0.5	2.3	–75.8
Return on equity (RoE)[2]	%	1.3	8.1	
Consolidated result	€m	392	2,581	–84.8
Investments	€bn	217.6	221.8	–1.9
Insurance-related investments	€bn	9.7	9.6	1.1
Net technical provisions	€bn	205.8	202.2	1.7
Equity	€bn	28.2	31.8	–11.3

1 Previous year's figures adjusted owing to changes in segment allocation and IAS 8.
2 The RoE is calculated on the basis of the consolidated result, including the result attributable to non-controlling interests. To calculate the average equity for the year under review, we use the figures as at 31 December 2016 (€31.8bn), 31 March 2017 (€32.2bn), 30 June 2017 (€30.1bn), 30 September 2017 (€27.8bn) and 31 December 2017 (€28.2bn) as a basis.

Premium volume increased slightly in the year under review, mainly driven by large-volume treaties, the expansion of reinsurance business with existing clients, and growth in ERGO's property-casualty and health business. Negative currency translation effects and the sale of ERGO Italia had a contrary effect.

Group premium income



Life and health reinsurance	28%	(28%)
Property-casualty reinsurance	36%	(36%)
ERGO Life and Health Germany	19%	(19%)
ERGO Property-casualty Germany	7%	(7%)
ERGO International	10%	(10%)

Owing to the high claims expenditure from natural catastrophes, the return on risk-adjusted capital (RORAC) for the full financial year was only 1.5% (10.9%), and the return on equity (RoE) amounted to 1.3% (8.1%).

Economic earnings were attributable to factors from new and in-force business deriving from underwriting, and to the effects of changes in capital market parameters. As regards the capital market environment, reinsurance business was impacted by negative effects from foreign currencies; in contrast, there were positive effects for reinsurance and ERGO alike from the slight increase in risk-free interest rates in the eurozone, reduced risk spreads for fixed-interest securities, and higher share prices. In property-casualty reinsurance, operational value creation was hit by the high major-loss expenditure, but remained positive for the Group's other segments.

The consolidated result for 2017 was significantly below the level of the previous year, chiefly on account of the substantial decline in the technical result owing to the high natural catastrophe losses. The investment result (excluding insurance-related investments) remained basically stable.

The revaluation of balance-sheet items in foreign currencies at period-end exchange rates led to a currency result of –€294m (485m), which is recognised in the "other non-operating result". The figure was adversely impacted in particular by the revaluation of the euro against the US dollar.

In the year under review, our effective tax rate was –315.0% (22.7%). The US tax reform had a positive one-off effect of €79m.

Information on events after the balance sheet date can be found in the notes on page 169.

Investment mix

	Carrying amounts		Unrealised gains/losses[1]		Fair values	
€m	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year
Land and buildings, including buildings on third-party land	5,121	4,444	2,744	2,413	7,865	6,857
Investments in affiliated companies, associates and joint ventures	2,216	1,711	959	903	3,008	2,445
Loans	54,702	54,684	10,788	13,591	65,490	68,276
Other securities available for sale	143,845	149,059	10,883	11,573	143,845	149,059
Thereof: Fixed-interest	126,486	133,234	7,622	8,649	126,486	133,234
Thereof: Non-fixed-interest	17,359	15,826	3,261	2,924	17,359	15,826
Other securities at fair value through profit or loss	1,979	2,695	0	0	1,979	2,695
Thereof: Derivatives	1,538	2,207	0	0	1,538	2,207
Deposits retained on assumed reinsurance	5,690	5,240	0	0	5,690	5,240
Other investments	4,009	3,918	0	0	4,009	3,918
Total	**217,562**	**221,752**	**25,374**	**28,480**	**231,885**	**238,490**

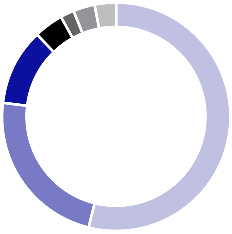
1 Including on- and off-balance-sheet unrealised gains and losses.

The carrying amount of our investment portfolio decreased mainly on account of the value-impairing effect of rising interest rates and the development of exchange rates on our fixed-interest securities.

Higher interest-rate levels and the realisation of valuation reserves were chiefly responsible for the decline in net unrealised gains on loans and other fixed-interest securities available for sale.

Fixed-interest portfolio by economic category[1]

Total: €199bn (210bn)



Government bonds[2]	54%	(53%)
Thereof: Inflation-linked bonds	8%	(9%)
Covered bonds	23%	(24%)
Corporate bonds	11%	(11%)
Cash positions/other	4%	(4%)
Structured products (credit structures)	2%	(2%)
Bank bonds	2%	(3%)
Policy and mortgage loans	3%	(3%)

1 Presentation essentially shows fixed-interest securities and loans, including deposits and cash at banks, at fair value. The approximation is not fully comparable with IFRS figures.
2 Including other public-sector issuers and government-guaranteed bank bonds.

In the year under review, we expanded our portfolio of corporates and government bonds, but lowered our investments in covered bonds, bank bonds, and credit structures.

Over half of our fixed-interest portfolio was invested in government bonds at the reporting date. The vast majority of these continue to come from countries with a high credit rating. Our portfolio of German and US government bonds at fair value was equivalent to 13.8% (14.3%) and 8.7% (9.6%) of the portfolio of interest-bearing securities. Government bonds from Italy and Spain each accounted for around 1.6% (1.7%) and 2.3 (1.7%) of the portfolio of interest-bearing securities. We did not hold bonds from Cyprus or Ukraine. In the year under review, we invested above all in Spanish, Australian and Finnish government bonds, and reduced our bond holdings mainly from issuers in Germany and Turkey. The purchase of government bonds from emerging markets, which accounted for 8.7% of our government bond portfolio, is part of our balanced investment strategy.

The emphasis of our commitment in covered bonds remained on German securities, with around 37%. We also held bonds from France (20%) and the United Kingdom (9%) in our portfolio.

The regional weighting of corporate bonds in our portfolio is 36% for the USA and 36% for the eurozone.

Our portfolio of government bonds, covered bonds and corporate bonds had a good rating structure: as at 31 December 2017, some 83% of securities were rated AAA to A.

Our investment in bank bonds is limited, and was further reduced in the course of the year. The share in our overall portfolio of interest-bearing securities was 2% at the reporting date. Financial instruments from states in southern Europe made up 2% of this portfolio. Most of our bank bonds were senior bonds (84%), i.e. bonds that are not subordinated or subject to loss participation. Subordinated bonds and loss-bearing bonds made up 16% of our bank bond holdings.

The portfolio of structured credit products at fair values declined as a result of sales, and totalled 2% of the overall portfolio as at the reporting date. This asset class involves securitised receivables (asset-backed securities or mortgage-backed securities), e.g. securitisations of real estate finance, consumer credit or student loans. Around 52% of our credit structures have a rating of AAA.

The carrying amount of our equity portfolio (before taking derivatives into account, and including investments in affiliated companies, associates and joint ventures at fair value) rose in the course of the year due to purchases and positive stock-market developments. The equity-backing ratio amounted to 7.3% (6.0%); including derivatives, it totalled 6.7% (4.9%). Besides this, we protect ourselves against accelerated inflation in an environment of continuing low interest rates by holding inflation-linked bonds with a fair value of €8.5bn (10.0bn). Real assets like shares, property, commodities, and investments in infrastructure, renewable energies and new technologies also serve as protection against inflation. Additionally, our investments in real assets have a positive diversification effect on the overall portfolio.

Investment result[1]

	2017	Return[2]	Prev. year	Return[2]
	€m	%	€m	%
Regular income	6,438	2.7	6,663	2.8
Write-ups/write-downs of non-derivative investments	–241	–0.1	–400	–0.2
Gains/losses on the disposal of non-derivative investments	2,494	1.1	2,603	1.1
Net balance of derivatives	–470	–0.2	–713	–0.3
Other income/expenses	–609	–0.3	–586	–0.2
Total	**7,611**	**3.2**	**7,567**	**3.2**

1 Details of the result by type of investment are shown on page 157 in the notes to the consolidated financial statements.
2 Return in % p.a. on the average market value of the investment portfolio at the quarterly reporting dates. The overall investment portfolio used to determine the return for 2017 (3.2%) is calculated as the mean value of the investment portfolios (carrying amounts) as at 31 December 2016 (€221,752m), 31 March 2017 (€222,709m), 30 June 2017 (€217,808m), 30 September 2017 (€217,450m) and 31 December 2017 (€217,562m), and the off-balance-sheet unrealised gains and losses (excluding owner-occupied property) as at 31 December 2016 (€16,738m), 31 March 2017 (€14,853m), 30 June 2017 (€13,977m), 30 September 2017 (€13,863m) and 31 December 2017 (€14,323m).

Owing to the ongoing low reinvestment yield, the amount of regular income fell slightly against the previous year. Our reinvestment yield was 1.9% (1.8%). Due to the low levels of interest rates in the year under review, yields on new investments remained lower than the average return on our existing portfolio of fixed-interest investments.

We recorded lower net write-downs of non-derivative investments, both on our equity portfolio and on fixed-interest securities.

Net gains on disposal were slightly lower than in the previous year, and chiefly came from our portfolio of fixed-interest securities.

We posted a negative balance from write-ups and write-downs of derivatives and on the disposal of derivatives. In primary insurance, positive stock-market developments led to losses on our equity derivatives. In reinsurance, we reduced the volume of our hedging derivatives, and therefore recorded lower losses from positive stock-market developments than in the previous year.

Our portfolio of physical equities benefited significantly from market developments in the financial year. The total return on our equity portfolio including equity derivatives increased to 8.0% (2.6)%.

By contrast, the rise in interest rates seen in the year under review had an adverse impact on the result from interest-rate derivatives. We posted losses in particular from ERGO's interest-rate hedging programme, which provides protection against low interest rates for long-term interest-rate guarantees in life insurance.

Result from equities and equity derivatives[1]

€m	2017	Prev. year
Regular income	606	556
Write-downs	–133	–323
Realised gains/losses	886	440
Result from equities	**1,359**	**672**
Change in on-balance-sheet unrealised gains and losses in equity (gross)	337	478
Result from equity derivatives	–363	–777
Total	**1,333**	**373**

1 To calculate the total annualised returns on our portfolio equity, we calculate the ratio of the total result shown in the table and the mean value of the following figures: Equity portfolio (carrying amounts) at 31 December 2016 (€15,826m), 31 March 2017 (€17,048m), 30 June 2017 (€16,055m), 30 September 2017 (€16,799m) and 31 December 2017 (€17,359m).

Reinsurance – Life and health

Key figures

		2017	Prev. year	Change
				%
Gross premiums written	€m	13,726	13,637	0.7
Share of gross premiums written in reinsurance	%	43.5	43.3	
Technical result incl. result from reinsurance treaties with insufficient risk transfer	€m	428	561	–23.7
Investment result	€m	865	686	26.1
Operating result	€m	708	635	11.4
Consolidated result	€m	596	515	15.7

The figures for 2017 and the previous year include the reinsurance units of our health business which were taken over from Munich Health on 1 February 2017 and merged with the Life division.

Premium

We write the majority of our business in non-euro currencies, with 38% of premium generated in Canadian dollars and 21% in US dollars. Exchange-rate fluctuations therefore have a significant impact on premium development. If exchange rates had remained unchanged, our premium income would have increased by 1.9%. Premium growth was mainly due to several large-volume treaties that were written in Australia, Asia and Canada. Demand for financially motivated reinsurance also remained high.

In many of our most important markets, we experienced persistently high competition. Besides this, persistently low interest rates continued to have an adverse impact on our clients' business development, and therefore also curbed demand for traditional reinsurance. Nevertheless, we were very satisfied with the development of new business in Asia and North America.

Result

The technical result did not follow on from the very good result from the previous year.

The result is adversely impacted by the extraordinary recapture of loss-making US contracts in the second and third quarters. The recaptures create value and make sense from an economic perspective, as they improve the results for future years and also reduce uncertainty of performance. The cost of the recaptures was offset in part by some further special effects.

Across all markets, claims expenditure in life reinsurance was within the expected bounds. This applies in particular to mortality business in the USA. By contrast, claims expenditure in Australian disability business saw an increase across the full year, caused in particular by longer benefit periods. It was compensated for by lower claims expenditure in European markets and in Canada.

Health reinsurance closed the year with a loss in the single-digit millions caused by reserve strengthening in the USA.

The result from the part of the business that is not posted in the technical result as a consequence of insufficient risk transfer remained very satisfying, and at €51m (41m) surpassed the level of previous year owing to business expansion.

The investment result increased by €179m year on year, mainly due to an improved net balance of derivatives, in particular from equity derivatives.

Our individual core markets

Based on premium volume, over half (around 60%) of our global life and health reinsurance business is written in North America, where Canada (approximately 40%) ranks before the USA (about 20%). Around a fifth of our premium comes from Europe, with approximately 10% generated in the United Kingdom and about 5% in Germany. Further substantial shares derive from Asia (around 10%) and Australia/New Zealand (approximately 5%). We are also well positioned in Africa and Latin America, but due to the small size of the markets their share of our global business is modest (about 5% in total).

Our Canadian branch Munich Re, Toronto posted stable premium income of €5.0bn (5.0bn). Premium volume is mainly determined by a few large-volume treaties. The unit maintained its leading market position, and again posted a very good technical result – thus accounting for a disproportionately large contribution to the overall result.

In the USA, gross premium volume saw a slight decrease to €2.8bn (2.9bn). We are one of the most important reinsurers in this market, which is the largest worldwide. As expected, the technical result was slightly below the level of the previous year. This was because of the adverse impact on results of the recapture of loss-making contracts and negative reserving effects in health business, which could only be partly compensated for by positive special effects. After the negative impact of several large claims in the previous year, claims expenditure in life reinsurance returned to a level in line with expectations. We are very satisfied with new business development, both in terms of volume and profitability.

Premium income in Europe declined slightly to €2.3bn (2.4bn), of which €1.2bn (1.3bn) was from the United Kingdom, and a further €381m (407m) was from Germany. The decline in the United Kingdom is attributable to currency translation effects. Adjusted for these effects, premium volume would have remained largely stable, with longevity business accounting for a growing share of the premium. The technical result continued to develop at a very pleasing level.

In Asia, our premium income climbed to €1.4bn (1.3bn). New business continued to develop very well. Thanks to ↗ our broad diversification, we are in a position to benefit from the growth potential in the region. The technical result was good, and in line with expectations.

At our subsidiary Munich Reinsurance Company of Australasia Ltd., which writes our life reinsurance business in Australia and New Zealand, premium income increased to €850m (729m). This was due to a large-volume treaty written in the third quarter of 2016 that was not recognised in the income statement in full until 2017. Nevertheless, we apply a very restrictive underwriting policy in the Australian market, as large parts of the disability business still do not meet our profitability requirements. Given that claims expenditure in this area was above expectations – due in particular to the duration of benefits – we posted a negative technical result.

Reinsurance – Property-casualty

Key figures

		2017	Prev. year	Change
				%
Gross premiums written	€m	17,843	17,826	0.1
Share of gross premiums written in reinsurance	%	56.5	56.7	
Loss ratio	%	80.6	63.3	
Thereof: Major losses	Percentage points	25.8	9.1	
Expense ratio	%	33.5	32.4	
Combined ratio	%	114.1	95.7	
Technical result	€m	-1,261	1,859	–
Investment result	€m	1,895	1,589	19.2
Operating result	€m	-635	2,284	–
Consolidated result	€m	-476	2,025	–

Premium

Premium income in property-casualty reinsurance increased slightly by 0.1% compared with the previous year. Changes in exchange rates had a negative impact on premium development. Approximately 11% of the portfolio is written in euros and 89% in foreign currency, of which 54 percentage points is in US dollars and 13 percentage points in pounds sterling. If exchange rates had remained the same, premium volume would have risen by 1.9% year on year.

The development of our premium volume was driven by opposing trends in the portfolio. A reduction in treaty shares across all lines of business and regions and the targeted withdrawal from unprofitable business (especially large proportional treaties in China) led to a significant erosion of gross premiums written. This erosion was offset by selective underwriting of attractive new business and organic growth of our business with existing clients. As in previous years, these business opportunities arose worldwide, especially in North America, and in all lines of business, above all casualty and property reinsurance, and aviation.

The 2017 renewals again took place in a highly competitive market environment, not least because there continued to be sufficient reinsurance capacity in all classes of business. Prices declined, but to a much lesser degree than in previous years' renewals, confirming the signs of stabilisation previously seen in the marketplace. In a few markets, we were able to selectively exploit business opportunities that offered adequate margins. Overall, we are adhering to our profit-oriented underwriting policy.

Result

The consolidated result and the operating result in property-casualty reinsurance decreased compared with the previous year. Expenditure for major losses was up on the previous year, and the technical result declined compared with an especially good prior-year figure. Adjusted for commissions, Munich Re's customary review of provisions resulted in a reduction in the claims provisions for prior years of around €870m for the full year, which is equivalent to around 5.2 percentage points of the combined ratio. This positive development related to almost all lines in our portfolio. The safety margin in the provisions remained unchanged year on year.

Major losses totalled €4,314m (1,542m) in 2017, after retrocession and before tax. This amount includes run-off profits and losses for major claims from previous years, and is equivalent to 25.8% of net earned premium. Due to high natural catastrophe losses, major-loss expenditure was significantly higher than in the previous year, and also exceeded our major-loss expectation of 12% of net earned premium.

Aggregate losses from natural catastrophes totalled €3,678m (929m) for the full year. This figure is equivalent to 22.0% (5.5%) of net earned premium, and significantly exceeds the expected level of 8% of net earned premium. Hurricanes Harvey, Irma and Maria, which caused massive destruction in the Caribbean and the USA in August and September, were by far the most expensive loss events of the year. The overall cost of these events for Munich Re amounted to €2.7bn after retrocession. In addition, a series of major wildfires broke out in California in October and December; we expect our loss expenditure from these events to total nearly €500m. Further extensive losses (€270m) resulted from two earthquakes in Mexico in September. In addition, the severe flooding caused by Cyclone Debbie in Australia in March is expected to result in significant losses of approximately €100m.

At €636m, man-made major losses were also somewhat up on the previous year (€613m). This figure is equivalent to 3.8% (3.6%) of net earned premium. Development was marked by a variety of individual events, including the tragic fire at Grenfell Tower in London.

The combined ratio saw a significant deterioration to 114.1% (95.7%) because of high major-loss expenditure in 2017. Paid claims and the change in claims provisions totalled €13,474m (10,725m), along with net operating expenses of €5,600m (5,496m), compared to net earned premiums of €16,723m (16,946m).

The investment result was up €306m on the previous year, largely due to an improved net balance from equity derivatives and interest-rate derivatives.

Our individual core markets and selected special lines

Based on premium volume, around 45% of our global property-casualty reinsurance business including Risk Solutions is written in North America (including Canada). Around 35% of our premium comes from Europe, of which more than half is generated in the United Kingdom. Further substantial shares are contributed by Asia (about 10%), Australia/New Zealand (approximately 5%) and Latin America (approximately 5%).

In the US market, we were able to grow our existing reinsurance business with selected clients and, in addition, write profitable new business. As a result, Munich Reinsurance America Inc. significantly increased its premium volume to €3,409m (2,410m). Reinsurance prices continued to be under pressure in the first half of the year. In the second half, the results of all US entities were dominated by hurricanes Harvey, Irma and Maria. In addition, other natural hazard events such as the wildfires in California, local hail events and tornadoes also had an impact on the results.

Premium income at Hartford Steam Boiler Group (HSB Group) amounted to €968m (993m). Here, we are expanding our product range of cover solutions for the Internet of Things (IoT), also by enhancing our know-how through specific acquisitions. American Modern posted premium income of €1,131m (1,215m).

In Canada, we are represented in the area of non-life business by the Munich Reinsurance Company of Canada and Temple Insurance Company. At €284m (311m), premium volume decreased slightly owing to our withdrawal from unprofitable business.

European business is dominated by property business and UK motor business. In the United Kingdom, premium volume remained largely stable at €3,210m (3,266m). If exchange rates had remained unchanged, however, premium volume would have grown. This increase was mainly attributable to the expansion of our primary insurance activities and to rate increases in motor business. In Continental Europe, premium volume also remained stable despite the difficult market environment. Growth in primary insurance business and alternative capital solutions was able to more than compensate for the decline from our consistent cycle- and profitability-oriented portfolio management in traditional reinsurance.

At our Swiss subsidiary New Reinsurance Company Ltd. (New Re), business volume in the area of property-casualty fell by 22% to €574m in the 2017 financial year. Here, an increase in premiums from traditional reinsurance business was eroded by a decline in premium volume from structured business.

In Germany, we succeeded in slightly raising premium income to €646m (566m) in 2017 – despite the still challenging market environment.

In Australia and New Zealand, we have withdrawn from primary insurance business, whilst in reinsurance we were able to retain our strong market position. Overall, premiums decreased to €698m (935m).

In Japan, premium income was slightly down on the previous year; it totalled €281m (292m).

In China, we selectively withdrew from unprofitable proportional large-volume treaties in line with our consistently profitability-oriented portfolio management. This reduction was partially offset by organic growth and selective business expansion. Overall, premium income declined to €615m (1,190m).

In India, we continued to expand our business in 2017, and premium income increased to €120m (74m). Thanks to our local branch, we are well positioned to successfully participate in the expected future growth potential.

In the Caribbean and in Latin and Central America, we still provide high capacity for the coverage of natural hazards, in particular windstorm and earthquake. We were able to hold our strong market position. Despite rate reductions in natural catastrophe business, we grew our premium volume to €1,050m (992m), with adequate margins.

In the specialty lines of business, the market environment continues to be characterised by intense competition.

At €756m (989m), premium income in agricultural business was down by 24% year on year; we did not renew the business with one major client.

Marine business is heavily exposed to pricing pressure in selected segments, causing premium income to decline by 9% year on year to €766m (840m)[1]. The combined ratio improved despite the hurricanes.

In credit and bond reinsurance, premium income amounted to €634m – roughly the same level as in the previous year (€641m)[1]. The pressure on rates in traditional credit business was offset by profitable new business in specialty and niche segments.

Owing to the difficult market environment, premium income in direct industrial business, which we operate in our Corporate Insurance Partner unit, declined to €431m (529m). Our sales of innovative products and the selective expansion of our portfolio were unable to compensate for this effect. In the period under review, the result was impacted by losses from hurricanes.

In aviation and space business, premium income increased by 7% to €502m (468m)[1] due to targeted portfolio growth and the generation of new business.

The Capital Partners unit offers our clients a broad spectrum of structured, individual reinsurance and capital market solutions. We also use this unit's services for our own purposes in order to buy retrocession cover on the basis of our defined risk strategy. In 2017, we structured seven client transactions worth US$ 880m and €200m. In addition, Capital Partners placed a sidecar transaction amounting to US$ 360m (Eden Re II Ltd., Series 2017-1) in the capital markets for its own purposes.

1 Previous year's figure adjusted.

ERGO

The ERGO Group – which launched its comprehensive Strategy Programme in mid-2016 – is now more efficiently structured, is investing systematically in digitalisation, and is strengthening its international organisational structures. Following successful completion of its Strategy Programme in 2021, ERGO intends to make a sustainable contribution of more than €600m to the annual result of Munich Re. ERGO has made significant progress in reorganising its sales force. Since the beginning of 2017, there has been only one single tied agents' organisation. About 70% of the reduction of jobs targeted in the course of the Strategy Programme has already been realised.

ERGO Life and Health Germany

Key figures

		2017	Prev. year	Change
				%
Total premium income[1]	€m	9,902	10,009	–1.1
Gross premiums written	€m	9,210	9,177	0.4
Share of gross premiums written by ERGO	%	52.5	52.8	
Technical result	€m	435	270	60.8
Investment result	€m	4,196	4,415	–5.0
Operating result	€m	705	627	12.4
Consolidated result	€m	175	114	54.0

1 Total premium income includes not only gross premiums written but also savings premiums for unit-linked life insurance and capitalisation products in accordance with the applicable statutory accounting guidelines.

Premium

Gross premiums written were up, mainly owing to higher premium in the Health Germany segment, where they benefited in particular from the positive development in comprehensive health insurance. Direct Germany also posted premium growth, whilst Life Germany saw a decline in premium volume. Life insurance business is also responsible for the decline in overall premium income for the segment.

Result

The technical result generated by the ERGO Life and Health Germany segment was up on the previous year, thanks to increases in the Life Germany and Health Germany segments. The investment result fell year on year, mainly owing to a lower net balance of derivatives and a decline in regular income. Overall, the operating result and consolidated result improved, partly because of the absence of special effects that had influenced the previous year.

Development of premium income and results by segment

In the ERGO Life and Health Germany segment, we report on the ERGO divisions Life Germany, Health Germany and German direct business.

Life Germany

Key figures

	2017	Prev. year	Change
	€m	€m	%
Total premium income[1]	3,525	3,735	–5.6
Gross premiums written	2,865	2,988	–4.1
Technical result	112	–12	–
Operating result	314	215	46.1

1 Total premium income includes not only gross premiums written, but also savings premiums for unit-linked life insurance and capitalisation products in accordance with the applicable statutory accounting guidelines.

The decrease in premium volume was brought about by lower regular premium income owing to the ongoing portfolio reduction. The decline in single-premium income was caused chiefly by reduced new business production. Regular-premium new business was also under the level achieved in the previous year. In terms of annual premium equivalent (APE, i.e. regular premium income plus one-tenth of single-premium volume), which is the performance measure customary among investors, our new business volume dropped by 8.6%.

New business Life Germany

	2017	Prev. year	Change
	€m	€m	%
Regular premiums	178	191	–6.6
Single premiums	429	511	–16.0
Total	**608**	**702**	**–13.4**
Annual premium equivalent[1]	221	242	–8.6

1 The annual premium equivalent corresponds to the regular premium income plus 10% of single-premium volume.

The rise in the technical result is partly attributable to a less pronounced low-interest-rate environment and the absence of one-off effects that had impacted the previous year. In the past financial year, the investment result totalled €2,699m (3,064m), mainly on account of a lower net balance of derivatives. Market interest rates rose and interest-rate hedging instruments were adversely impacted. On balance, the operating result saw an increase.

Health Germany

Key figures

	2017	Prev. year	Change
	€m	€m	%
Total premium income	5,320	5,179	2.7
Gross premiums written	5,320	5,179	2.7
Technical result	239	191	24.8
Operating result	330	338	–2.4

In Health Germany, around 91% of premium is derived from health insurance and around 9% from travel insurance.

Premiums showed year-on-year growth of 4.4% in supplementary health insurance and 2.2% in comprehensive health insurance, due in part to premium adjustments. Supplementary insurance not similar to life insurance grew substantially by 16.6%, partly owing to the good development of new business. Travel insurance, which we write in Germany and abroad, grew by 2.7%, also contributing to the overall rise in premium volume.

The rise in the technical result is partly due to higher premium income, a reduction in costs and improved profitability. At €1,384m (1,230m), the investment result developed favourably, positive contributing factors including lower write-downs and a higher result from disposals. Altogether, the operating result remained at the same level as in the previous year.

German direct business

Key figures

	2017	Prev. year	Change
	€m	€m	%
Total premium income[1]	1,057	1,094	–3.4
Gross premiums written	1,025	1,009	1.6
Technical result	84	91	–8.2
Operating result	61	74	–17.9

1 Total premium income includes not only gross premiums written but also savings premiums for unit-linked life insurance and capitalisation products in accordance with the applicable statutory accounting guidelines.

Direct health insurance business accounts for around 46% of premium income for this field of business. Approximately 38% of the premium income derives from direct life insurance, and around 16% from direct property-casualty insurance.

Gross premiums written increased year on year, in particular on account of growth in health insurance (+6.3%) thanks to our dental plans. Premium income in property-casualty business was also up (+2.9%). By contrast, gross premiums written in life insurance business were down by 4.5% on the previous year. The decline in overall premium income was chiefly attributable to the MaxiZins capitalisation product, for which sales have been discontinued. In terms of annual premium equivalent, new business volume in life business declined by 24.1% compared with the previous year.

At 82.0%, the combined ratio for property-casualty business was significantly better than last year's (86.7%), and thus remained at a very good level.

New business direct life Germany

	2017	Prev. year	Change
	€m	€m	%
Regular premiums	25	29	–12.0
Single premiums	29	84	–65.8
Total	**54**	**113**	**–52.0**
Annual premium equivalent[1]	28	37	–24.1

1 The annual premium equivalent corresponds to the regular premium income plus 10% of single-premium volume.

The technical result in 2017 was slightly lower than in the previous year. The investment result declined to €114m ↗ (120m), one negative contributing factor being diminished regular income. All in all, the operating result decreased.

ERGO Property-casualty Germany

Key figures

		2017	Prev. year	Change
				%
Gross premiums written	€m	3,293	3,194	3.1
Share of gross premiums written by ERGO	%	18.8	18.4	
Loss ratio	%	64.1	61.9	
Expense ratio	%	33.5	35.1	
Combined ratio	%	97.5	97.0	
Technical result	€m	138	139	–0.3
Investment result	€m	185	80	132.3
Operating result	€m	244	128	90.3
Consolidated result	€m	57	–72	–

Premium

Our main classes of business are motor and personal accident insurance, which respectively account for around 20% and 19% of the segment's premium income.

Premium income developed favourably year on year, mainly on account of growth of 18.0% in the other classes of business, including in marine insurance. Fire and property insurance also saw an increase in premium volume (+5.6%), as did legal protection insurance (+2.1%) and liability business (+0.2%). By contrast, in motor insurance (–0.2%) and personal accident insurance (–1.2%) we posted lower premium income than in 2016.

Result

The technical result in the ERGO Property-casualty Germany segment was just under the level achieved last year. Overall, major-loss expenditure in the past financial year was somewhat above our expectations. The investment result increased especially on account of higher gains on disposals and lower write-downs of equities. The increased investment result and absence of restructuring expenses were responsible for the improved consolidated result.

The 2017 combined ratio was 0.5 percentage points higher than in the previous year. This was attributable to a higher loss ratio, driven – among other things – by losses from natural hazard events and reserve strengthening in the second half of the year. The expense ratio improved year on year. Paid claims and the change in claims provisions totalled €2,053m (1,955m) and net operating expenses came to €1,072m (1,108m), compared with net earned premiums of €3,204m (3,158m).

ERGO International

Key figures

		2017	Prev. year	Change
				%
Total premium income[1]	€m	5,352	5,387	–0.6
Gross premiums written	€m	5,043	5,018	0.5
Share of gross premiums written by ERGO	%	28.7	28.9	
Loss ratio	%	63.7	64.9	
Expense ratio	%	31.6	33.1	
Combined ratio	%	95.3	98.0	
Technical result	€m	20	–72	–
Investment result	€m	470	797	–41.0
Operating result	€m	219	351	–37.4
Consolidated result	€m	40	–1	–

1 Total premium income includes not only gross premiums written but also savings premiums for unit-linked life insurance and capitalisation products in accordance with the applicable statutory accounting guidelines.

The figures for 2017 and the previous year include international health primary insurance business, which was transferred from Munich Health and integrated into the ERGO International segment of the ERGO field of business as of 1 February 2017.

Premium

With regard to the segment's premium income, property-casualty insurance accounts for around 52%, health for about 26% and life insurance for approximately 22%. Our biggest markets include Poland, accounting for approximately 26% of the premium volume, Belgium (approx. 20%) and Spain (approx. 14%).

Gross premiums written were slightly up year on year, mainly owing to significant growth in international property-casualty insurance. We also saw growth in international health business. The slight decrease in overall premium was attributable to a lower volume of life insurance business.

At €1,164m (1,530m), overall premium income from international life insurance business was down compared with the previous year. This significant decrease is primarily due to the sale of our Italian business and to reductions in Poland and Austria. In terms of the annual premium equivalent, new business in international life insurance was down 45.2% year on year. Premiums in health business climbed by 3.7% to €1,405m (1,354m), thanks to growth in Spain and Belgium. In 2017, we posted premium volume of €2,783m (2,502m) in international property-casualty business, representing an increase of 11.2%. Growth was especially strong (+30.2%) in Poland, our largest market. We also increased our premium volume in Greece and the Baltic States.

New business Life International

	2017	Prev. year	Change
	€m	€m	%
Regular premiums	74	130	–43.2
Single premiums	262	526	–50.1
Total	**336**	**656**	**–48.8**
Annual premium equivalent[1]	100	183	–45.2

1 The annual premium equivalent corresponds to the regular premium income plus 10% of single-premium volume.

Result

The technical result in the ERGO International segment was up on the previous year. The favourable development was attributable to the absence of negative one-off effects in Italy, such as had been seen in the previous year, and price adjustments in Polish property-casualty business. Owing chiefly to reduced gains from disposals and lower regular income, the investment result was down year on year. The absence of one-off effects on the other non-operating result and the increased technical result were chiefly responsible for the improved consolidated result.

In international property-casualty business, the combined ratio improved year on year – above all in Poland, where business benefited from price adjustments, and in the Baltic States. The combined ratio also improved by 0.5 percentage points in international health business. Overall, paid claims and the change in claims provisions totalled €2,060m (1,942m) and net operating expenses came to €1,022m (990m), compared with net earned premiums of €3,236m (2,993m).

Financial position

Analysis of our capital structure

Our primary insurance and reinsurance operations have a significant influence on the structure of our balance sheet: as we have consistently geared our Group towards value creation in its core business, investments serve to cover technical provisions (79% of the balance sheet total). Equity (11% of the balance sheet total) and bonds classified as strategic debt (1% of the balance sheet total) are the most important sources of funds.

Development of Group equity

	31.12.2017	Prev. year	Change
	€m	€m	%
Issued capital and capital reserve	7,418	7,417	0.0
Retained earnings	15,036	14,890	1.0
Other reserves	5,183	6,628	–21.8
Consolidated result attributable to equity holders of Munich Reinsurance Company	375	2,580	–85.5
Non-controlling interests	186	269	–30.8
Total	**28,198**	**31,785**	**–11.3**

The decrease in equity was attributable not only to the dividend payment and share buy-back programme but also in particular to a decline in the reserve for currency translation adjustments.

Strategic debt

We define as strategic debt all financial instruments with the character of outside financing that do not have a direct link to our operative business. Strategic debt supplements our financial resources, is essentially designed to optimise the cost of capital, and ensures that we have sufficient liquidity at all times. With a view to making our capital structure transparent, we quantify our debt leverage, which is pleasingly low compared with that of our competitors: it is defined as the ratio – expressed as a percentage – of strategic debt to the sum of Group equity and strategic debt. Our technical provisions are not considered, even though they are mostly available to us on a long-term basis as a source of financing for investment.

Debt leverage

		31.12.2017	Prev. year	Change
		€m	€m	%
Strategic debt[1]		3,125	4,601	–32.1
Group equity		28,198	31,785	–11.3
Total		**31,323**	**36,385**	**–13.9**
Debt leverage	%	10.0	12.6	

1 The main components of our strategic debt are subordinated liabilities, and bonds and notes issued (see pages 144 and 153 of the notes to the consolidated financial statements).

Under the supervisory regulations of Solvency II, subordinated liabilities are recognised as own funds provided that they are available at all times to cover losses on a going-concern basis. Munich Re's subordinated liabilities amount to €2,790m. Of this sum, €2,411m was recognised as eligible own funds under Solvency II at the reporting date. As a consequence, strategic debt is reduced to €714m and the debt leverage amounts to only 2.3%.

Technical provisions

Reinsurance business accounts for approximately 33% of technical provisions; around 67% comes from primary insurance. In contrast to liabilities under loans and securities issued, we cannot foresee with certainty how high our liabilities from underwriting business will be and when they will arise. This is especially true of reinsurance. Whereas in property insurance a major portion of the provisions is generally paid out within two to three years, in life or liability insurance substantial amounts may still be due decades after the contracts were concluded. The currency distribution of our provisions reflects the global orientation of our Group. Besides the euro, our main currencies are the US dollar, the Canadian dollar and the Australian dollar.

Restraints on disposal

Since we are an international (re)insurance group, some of our financial resources are subject to restraints on disposal. Supervisory authorities in some countries, for example, require foreign reinsurers to establish premium and reserve deposits to the benefit of primary insurers, or set up trustee accounts or guarantees with certain financial institutions. At the reporting date, this involved investments with a volume of €8.8bn (9.7bn). In addition, there were contingent liabilities. Information on these can be found on page 167 of the notes to the consolidated financial statements.

Capital position

Through active capital management, we strive to ensure that Munich Re's capital satisfies all applicable standards. In addition to the capital requirements determined using our internal risk model, more far-reaching requirements by regulatory authorities, rating agencies and our key insurance markets must be met. The Solvency II ratio is a fundamental measure of Munich Re's capital strength. Further information on this ratio can be found on page 75 in the risk report. We aim to ensure that our financial strength is such that it enables us to take advantage of profitable opportunities for growth, is not significantly affected by normal fluctuations in capital market conditions, and remains at a reasonable level even in the wake of major loss events or substantial falls in the stock markets. At the same time, we also define an appropriate level of Group own funds as one which does not lastingly exceed that which is required. Excess capital is returned to our shareholders via attractive dividends and share buy-backs. In practice, capital repatriation comes up against limits because under German commercial law (HGB), our parent, Munich Reinsurance Company, is forced to maintain the claims equalisation provision in local GAAP accounting at a level that exceeds the economic requirements. This restricts the revenue reserves and profit distribution possibilities, but stabilises results in years with high claims expenditure. As at 31 December 2017, Munich Reinsurance Company's claims equalisation provision totalled €7.7bn. Additional information can be found under Munich Reinsurance Company (Information reported on the basis of German accountancy rules) on page 86.

Between 2006 and 2017, we returned a total of €24.3bn to our shareholders. In March 2017, the Board of Management launched another share buy-back programme. We intend to buy back shares up to a maximum purchase price of €1bn by the Annual General Meeting on 25 April 2018. During the reporting year, we had bought back shares with a total volume of €1,017m.

Information in accordance with Sections 315a(1) and 289a(1) of the German Commercial Code (HGB) and explanatory report of the Board of Management

Composition of the subscribed capital

As at 31 December 2017, Munich Reinsurance Company's share capital of €587,725,396.48 was divided into 155,027,908 registered, no-par-value, fully paid shares. The rights and obligations deriving from these shares follow from the applicable statutory requirements and the Company's Articles of Association. With respect to the Company, the only parties deemed shareholders in accordance with Section 67 of the German Stock Corporation Act (AktG) are those entered as such in the Company's register of shareholders.

Restrictions on voting rights and the transfer of shares

The listed registered shares are subject to transfer restrictions. The issuing of restrictedly transferable registered shares by Munich Reinsurance Company dates back to the Company's foundation in 1880. Restricted transferability means that these shares may be transferred to another holder only with the Company's consent, which, according to Article 3(2) of Munich Reinsurance Company's Articles of Association, is granted at the Company's discretion. Since the share-trading processes have been made very efficient, the consent requirement does not lead to any delays in entry in the register. In recent decades, it has been granted without exception. Contractual agreements are in place with the members of the Board of Management providing for two or four-year minimum holding periods for the shares of the Company they have to purchase as part of share-based remuneration programmes.

Each share carries one vote at the Annual General Meeting and determines the shareholders' participation in the Company's profit. This excludes own shares held by the Company, from which it enjoys no rights. In the cases specified in Section 136 of the German Stock Corporation Act (AktG), voting rights from the shares concerned are excluded by law. If shareholders are entered under their own name for shares which belong to a third party and exceed at this time the upper limit of 2% of the share capital as stated in the Articles of Association, pursuant to Article 3(5) of the Articles of Association the shares entered shall not carry any voting rights.

Shareholdings exceeding 10% of the voting rights

Munich Reinsurance Company has not been notified, nor has it otherwise learned, about any direct or indirect shareholdings in the Company that exceeded 10% of the voting rights as at 31 December 2017.

Shares with special control rights

There are no shares with special control rights.

System of control for employee share scheme where the control rights are not exercised directly by the employees

Like other shareholders, employees of Munich Reinsurance Company exercise their control rights in accordance with statutory provisions and the Articles of Association.

Statutory regulations and provisions of the Articles of Association regarding appointment and dismissal of members of the Board of Management, and concerning amendments to the Articles of Association

The legal parameters for the appointment and dismissal of members of the Board of Management are specified in the Company's Co-determination Agreement, Articles 13(3) and 16 of the Articles of Association, Sections 84 and 85 of the Stock Corporation Act (AktG), and Sections 24, 47 and 303 of the German Insurance Supervision Act (VAG). Munich Re's Co-determination Agreement and Articles of Association follow the legal tenets of the German Co-Determination Act (MitbestG). Pursuant to Article 16 of the Articles of Association, the Board of Management must comprise a minimum of two persons; beyond this, the number of members is determined by the Supervisory Board. There are currently eight members of the Board of Management (nine members until 31 December 2017). The Supervisory Board appoints the members of the Board of Management pursuant to Section 84 of the Stock Corporation Act and may dismiss them at any time for good cause. On initial appointment, members of the Board of Management are usually given contracts for a term of between three and five years, and extensions of up to five years are possible. For the appointment or dismissal of members of the Board of Management, Article 13(3) of the Articles of Association stipulates a two-thirds majority of the votes cast on the Supervisory Board. If the requisite majority is not obtained in the initial resolution, the appointment or dismissal of the Board of Management requires a simple majority of the votes cast. The second resolution is only possible following a suitable period of reflection and after the issue has been dealt with in the competent committee, but is thereafter also possible by written consent in lieu of a meeting. In exceptional cases, members of the Board of Management may also be appointed by a court of law, pursuant to Section 85 of the Stock Corporation Act.

The Stock Corporation Act contains general provisions governing amendments to the Articles of Association – Section 124(2) sentence 3, and Sections 179–181 of the Act. These state that only the Annual General Meeting can make resolutions on changes to the Articles of Association. In order to be carried, such a resolution must receive the votes cast by at least three-quarters of the share capital represented in the vote. The Articles of Association may stipulate a different capital majority (higher or lower) or other requirements, but the Company's Articles of Association do not provide for any such special features.

The Stock Corporation Act contains special regulations on amendments to the Articles of Association where increases and reductions in share capital are concerned (Sections 182–240 of the Act). Under these regulations, resolutions on capital measures are generally to be made by the Annual General Meeting. Within a self-determined scope, however, the Annual General Meeting can authorise the Board of Management to initiate certain (capital) measures. The authorisations relating to Munich Reinsurance Company are listed below. In all such cases, a resolution of the Annual General Meeting is required that has been adopted by at least a three-quarter majority of the share capital represented in the vote. Where these resolutions are concerned, the Company's Articles of Association again do not provide for other (i.e. higher) majorities or further requirements. Pursuant to Article 14 of the Articles of Association and Section 179(1) sentence 2 of the Stock Corporation Act, the Supervisory Board is empowered to make amendments to the Articles of Association which affect only the wording.

Powers of the Board of Management, with particular regard to the option of issuing or buying back shares

The powers of the members of the Board of Management are defined in Sections 71 and 76–94 of the Stock Corporation Act (AktG). The Board of Management has the following powers to issue and buy back shares:

- The Annual General Meeting of 26 April 2017 authorised the Company, pursuant to Section 71(1) no. 8 of the Stock Corporation Act, to buy back shares until 25 April 2022 up to a total amount of 10% of the share capital. The shares acquired, plus other own shares in the possession of the Company or attributable to the Company in accordance with Section 71a ff. of the Stock Corporation Act, may at no time amount to more than 10% of the share capital. In accordance with the provisions of the authorisation, the shares may be acquired in various ways. The Company may buy back shares amounting to a maximum of 5% of the share capital using derivatives. The Board of Management is authorised to use shares thus acquired for all legally permissible purposes, in particular those specified in the authorisation, whilst excluding subscription rights. Among other things, the Board of Management is empowered under Section 71(1) no. 8 of the Stock Corporation Act to retire the shares without requiring further approval from the Annual General Meeting. By resolution of 15 March 2017, the Board of Management decided to utilise this authorisation to acquire own shares. Around 3.8 million shares had been acquired by 31 December 2017 at a purchase price of approximately €684m.

- The Annual General Meeting of 23 April 2015 authorised the Board of Management to issue, with the consent of the Supervisory Board, in one or more issues up to 22 April 2020, convertible bonds, bonds with warrants, profit participation rights, profit participation certificates or combinations of such instruments (hereinafter collectively referred to as “bonds”) for a maximum nominal amount of €3bn with or without a limited term to maturity. Shareholders are generally entitled to a subscription right in respect of these bonds, but the Board of Management is authorised, with the consent of the Supervisory Board, to exclude this subscription right in the cases specified in the authorisation. The holders of such bonds may be granted conversion rights, warrants or conversion obligations in respect of shares issued by the Company up to a maximum amount of €117m of the share capital, in accordance with the respective bond or warrant conditions. As a precautionary measure, capital of €117m was conditionally authorised under Article 4(3) of the Articles of Association (Contingent Capital 2015).

- Under Article 4(1) of the Articles of Association, the Board of Management is authorised, with the consent of the Supervisory Board, to increase the Company’s share capital at any time up to 25 April 2022 by an amount of up to €280m by issuing new shares against cash or non-cash contribution (Authorised Capital 2017). In accordance with the above-mentioned provisions of the Articles of Association, it may exclude subscription rights. As regards the resolution of 26 April 2017, the Board of Management declared that it will utilise the Authorised Capital 2017 only up to a maximum amount of 33% of the share capital at the time of the Annual General Meeting. It further stated that it will only exercise the authority to exclude shareholders’ subscription rights where such shares do not exceed 10% of the existing share capital at the time the authorisation is exercised for the first time.

- Under Article 4(2) of the Articles of Association, the Board of Management is authorised, with the consent of the Supervisory Board, to increase the Company’s share capital at any time up to 22 April 2020 by an amount of up to €10m by issuing new shares against cash contribution (Authorised Capital 2015). The subscription right of shareholders is excluded insofar as this is necessary to allow the new shares to be issued to employees of Munich Reinsurance Company and its affiliated companies.

The complete text of the aforementioned authorisations and the declaration by the Board of Management is provided in the agenda of the respective Annual General Meetings at www.munichre.com/agm/archive. Munich Reinsurance Company’s Articles of Association are available at www.munichre.com/articles-of-association.

Significant agreements which take effect, alter or terminate upon a change of control following a takeover bid, and resultant implications

Based on our underwriting guidelines, our reinsurance agreements generally include a clause that grants both parties to the agreement a right of extraordinary cancellation in the event that “the other party merges with another company or its ownership and control undergoes a material change”. Such or similar clauses are typical of the industry. They are also common in joint venture or cooperation agreements between shareholders of a joint investment company.

Compensation agreements concluded with members of the Board of Management or employees for the event of a takeover bid

There are no compensation agreements with members of the Board of Management or employees for the event of a takeover bid.

Analysis of the consolidated cash flow statement

Our primary insurance and reinsurance operations have a significant influence on Munich Re’s cash flow. We generally first collect the premiums for the risks assumed and do not make payments until later, when claims need to be settled. Cash flow statements of insurance companies are therefore of limited relevance. The cash flow statement is adjusted to eliminate the effects of fluctuations in exchange rates and changes in the entities consolidated.

Consolidated cash flow statement

	2017	Prev. year	Change
	€m	€m	%
Cash flows from operating activities	1,833	2,975	–38.4
Cash flows from investing activities	2,326	–1,127	–
Cash flows from financing activities	–3,754	–2,531	–48.3
Cash flows for the financial year	**405**	**–683**	–

In the consolidated cash flow statement, the consolidated profit of €392m is used as the starting point for determining the cash inflows from operating activities. The consolidated result is also adjusted by €6,003m to take account of the higher technical provisions. The net gains on the disposal of investments – which in adjusting the consolidated profit have to be deducted from the cash flows – are essentially attributable to the disposal of securities available for sale.

Inflows from investing activities were determined by cash flows from the sale and/or maturity of investments totalling €2,067m.

The cash outflows for financing activities stem mainly from the dividend payment in 2017, the share buy-back programme and the redemption of subordinated liabilities.

In the year under review, cash – which encompasses cash at banks, cheques and cash in hand – increased by €405m (including currency effects) to €3,628m overall. There were items pledged as security and other restrictions on title amounting to €45m (10m).

Risk report

Risk governance and risk management system

Risk management organisation

Organisational structure
Munich Re has set up a governance system as required under Solvency II. The most important elements of this are the risk management, compliance, audit and actuarial functions. At Group level, risk management is part of the Integrated Risk Management Division (IRM) and reports to the Chief Risk Officer (Group CRO). In addition to the Group functions, there are risk management units in the fields of business, each headed up by its own CRO.

Risk Governance
Our risk governance ensures that an appropriate risk and control culture is in place by clearly assigning roles and responsibilities for all significant risks. Risk governance is supported by various committees at Group and field-of-business level. The Board of Management must consult the risk management function on major decisions to be taken.

Defining the risk strategy
The risk strategy, which is aligned with Munich Re's business strategy, defines where, how and to what extent we are prepared to incur risks. The further development of our risk strategy is embedded in the annual planning cycle, and hence in our business planning. It is approved by the Board of Management, and discussed regularly with the Audit Committee of the Supervisory Board as a material element of the own risk and solvency assessment (ORSA) process.

Our risk strategy is determined by defining risk appetites for prescribed risk criteria based on available capital and liquidity and our profit targets, with which units in the Group must comply.

Implementation of strategy and the risk management cycle
The risk appetite defined by the Board of Management is reflected in our business planning and integrated into the management of our operations. If capacity shortages or conflicts with the limit system or regulations arise, defined escalation and decision-making processes are followed. These have been designed to ensure that the interests of the business are reconciled with risk management considerations. Our implementation of risk management at operational level embraces the identification, analysis and assessment of all material risks. This provides a basis for risk reporting, the control of limits and monitoring.

Risk identification is performed by means of appropriate processes and indicators, which are complemented by expert opinions. Our process for early identification of risks also encompasses emerging risks. We define emerging risks as trends or unexpected events that are characterised by a high degree of uncertainty in terms of occurrence probability, expected loss amount and potential impact on Munich Re.

As part of the risk analysis, a quantitative and qualitative assessment of all risks at consolidated Group level is made in order to take into account possible interactions between risks across all fields of business. Internal risk reporting provides the Board of Management with regular information on the risks in the individual risk categories and the Group as a whole. This ensures that negative trends are identified in sufficient time for countermeasures to be taken. The purpose of external risk reporting is to provide our clients, shareholders and the supervisory authorities with a clear overview of the Group's risk situation. Actual risk limits are derived from the risk strategy. Taking the defined risk appetite as a basis, limits, rules and any risk-reducing measures required are approved and implemented. We also have a comprehensive early-warning system that draws our attention to any potential shortages of capacity.

Quantitative risk monitoring based on indicators is carried out both centrally and within units. We monitor risks that cannot be expressed directly as an amount either centrally or in our units, depending on their materiality and allocation. The risk management system is regularly audited by Group Audit, external auditors and the Federal Financial Supervisory Authority (BaFin).

Significant risks

Our definition of a risk is a possible future development or event that could result in a negative deviation from the Group's prognoses or targets. We classify risks as "significant" if they could have a long-term adverse effect on Munich Re's assets, financial situation or profitability. We have applied this definition consistently to each business unit and legal entity, taking account of its individual risk-bearing capacity. In doing so, we differentiate between risks depicted in our internal model and other risks.

Risks depicted in the internal model

Solvency capital requirement – Internal model

Munich Re has a comprehensive internal model that determines the capital needed to ensure that the Group is able to meet its commitments even after extreme loss events. We use the model to calculate the capital required under Solvency II (the solvency capital requirement, or SCR). The SCR is the amount of eligible own funds that Munich Re needs to have available, with a given risk appetite, to cover unexpected losses in the following year. It corresponds to the value at risk of the economic profit and loss distribution over a one-year time horizon with a confidence level of 99.5%, and thus equates to the economic loss for Munich Re that, given unchanged exposures, will be statistically exceeded in no more than one year in every 200. Our internal model is based on specially modelled distributions for the risk categories ↗ property-casualty, life and health, market, credit, and operational risks. We use primarily historical data for the calibration of these distributions, complemented in some areas by expert estimates. Our historical data covers a long period to take account of the one-year time horizon and to provide a stable and appropriate estimate of our risk parameters. We continue to take account of diversification effects we achieve through our broad spread across various risk categories and the combination of primary insurance and reinsurance business. We also take into account dependencies between the risks, which can result in higher capital requirements than would be the case if no dependency were assumed. We then determine the effect of the loss absorbency of deferred taxes.

The table shows the solvency capital requirement for Munich Re and its risk categories as at 31 December 2017.

Solvency capital requirements (SCR)[1]

	Reinsurance		ERGO		Diversification	
	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year
	€m	€m	€m	€m	€m	€m
Property-casualty	6,210	6,688	403	381	–321	–311
Life and health	4,331	4,389	808	1,284	–224	–474
Market	5,890	5,850	5,607	6,544	–2,276	–2,499
Credit	2,284	2,532	1,291	1,655	–127	–161
Operational risk	754	901	775	818	–291	–328
Other[2]	454	397	205	197	–	–
Subtotal	**19,923**	**20,756**	**9,089**	**10,880**	**–**	**–**
Diversification effect	–7,397	–7,709	–1,923	–2,509	–	–
Tax	–2,144	–2,180	–597	–1,003	–	–
Total	**10,382**	**10,868**	**6,569**	**7,367**	**–2,597**	**–2,979**

	Group			
	31.12.2017	Prev. year		Change
	€m	€m	€m	%
Property-casualty	6,292	6,759	–467	–6.9
Life and health	4,914	5,199	–285	–5.5
Market	9,221	9,895	–673	–6.8
Credit	3,449	4,026	–576	–14.3
Operational risk	1,238	1,391	–153	–11.0
Other[2]	659	594	65	10.9
Subtotal	**25,773**	**27,863**	**–2,090**	**–7.5**
Diversification effect	–9,133	–9,992	860	–8.6
Tax	–2,287	–2,615	327	–12.5
Total	**14,353**	**15,256**	**–903**	**–5.9**

1 Previous year's figures adjusted owing to a change in the composition of the reporting segments.
2 Capital requirements for other financial sectors, e.g. institutions for occupational retirement provisions.

The decrease in the solvency capital requirement, which we observed in all risk categories, was mainly due to changes in the capital markets, particularly the appreciation of the euro against all relevant currencies and the moderate rise in euro interest rates. Updates in the models for the risk categories market and credit and in the natural catastrophe models also contributed to the reduction.

The diversification effect between the risk categories property-casualty, life and health, market, credit and operational risks was, at 35%, virtually unchanged from the previous year's percentage. Further information on the changes within individual risk categories can be found in the sections below.

Property-casualty underwriting risk

The property-casualty risk category encompasses the underwriting risks in the property, motor, third-party liability, personal accident, marine, aviation and space, and credit classes of insurance, together with special lines also allocated to property-casualty. Additional information on risks in property-casualty insurance can be found in the notes to the consolidated financial statements on page 161 ff.

Underwriting risk here is defined as the risk of insured losses being higher than our expectations. The premium and reserve risks are significant components of the underwriting risk. The premium risk is the risk of future claims payments relating to insured losses that have not yet occurred being higher than expected. The reserve risk is the risk of technical provisions established being insufficient to cover losses that have already been incurred. In calculating technical provisions, we follow a cautious reserving approach and assess uncertainties conservatively. In every quarter, we also compare notified losses with our loss expectancy, in order to ensure that the level of reserves always remains high.

We differentiate between losses involving a cost exceeding €10m in one field of business (large losses), losses affecting more than one risk or more than one class of insurance (accumulation losses), and all other losses (basic losses). For basic losses, we calculate the risk of subsequent reserving being required for existing risks within a year (reserve risk) and the risk of under-rating (premium risk). To achieve this, we use actuarial methods that are based on standard reserving procedures, but take into account the one-year time horizon. The calibration for these methodologies is based on our own historical loss and run-off data. Appropriate homogeneous segments of our property-casualty portfolio are used for the calculation of the reserve and premium risks. To aggregate the risk to whole-portfolio level, we apply correlations that take account of our own historical loss experience.

We limit our risk exposure by, for example, setting limits and budgets not only for natural catastrophe risks but also for potential man-made losses. Our experts develop scenarios for possible natural events, taking into account the scientific factors, occurrence probabilities and potential loss amounts. On the basis of these models, the impact of various events on our portfolio is calculated and represented in mathematical terms in the form of a stochastic model.

Another measure for controlling underwriting risks is the cession of a portion of our risks to other carriers via external reinsurance or retrocession. Most of our companies have intra-Group and/or external reinsurance and retrocession cover. In addition to traditional retrocession, we use alternative risk transfer for natural catastrophe risks in particular. Under this process, underwriting risks are transferred to the capital markets by means of securitisation vehicles.

Solvency capital requirements (SCR) – Property-casualty

	Reinsurance		ERGO		Diversification	
	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year
	€m	€m	€m	€m	€m	€m
Basic losses	3,330	3,601	351	330	–237	–217
Large and accumulation losses	5,654	6,130	197	201	–154	–153
Subtotal	**8,983**	**9,731**	**547**	**531**	**–**	**–**
Diversification effect	–2,774	–3,043	–144	–149	–	–
Total	**6,210**	**6,688**	**403**	**381**	**–321**	**–311**

→

	Group			
	31.12.2017	Prev. year		Change
	€m	€m	€m	%
Basic losses	3,443	3,714	–272	–7.3
Large and accumulation losses	5,696	6,178	–482	–7.8
Subtotal	**9,139**	**9,893**	**–754**	**–7.6**
Diversification effect	–2,847	–3,134	287	–9.2
Total	**6,292**	**6,759**	**–467**	**–6.9**

Solvency capital requirement – Property-casualty

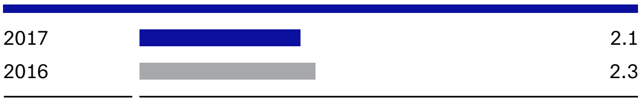
The decrease in the solvency capital requirement for the basic losses was caused primarily by the appreciation of the euro. For the large and accumulation losses, the expansion of our business increased risk, while the appreciation of the euro against the US dollar in particular and the updates of models of large natural hazard scenarios led to a reduction in the solvency capital requirement.

Our internal model treats the accumulation-risk scenarios as independent events. The diagrams show how we estimate our exposure for the coming year to the peak scenarios for a return period of 200 years.

Atlantic Hurricane
Aggregate VaR (return period: 200 years)
€bn (before tax), retained

Earthquake North America
Aggregate VaR (return period: 200 years)
€bn (before tax), retained

Storm Europe
Aggregate VaR (return period: 200 years)
€bn (before tax), retained



Life and health underwriting risk

The underwriting risk is defined as the risk of insured benefits payable in life or health insurance business being higher than expected. Of particular relevance are the biometric risks and the policyholder behaviour risks, for example lapses and lump-sum options. We differentiate between risks that have a short-term or long-term effect on our portfolio. In addition to the simple risk of random fluctuations resulting in higher claims expenditure in a particular year, the adverse developments with a short-term impact that we model notably include the risk of claims in excess of actuarial estimates that could arise on the occurrence of rare but costly events such as pandemics. More information on the risks in life and health insurance can be found in the notes to the consolidated financial statements on page 159 ff.

Life insurance products in particular, and a large part of our health primary insurance business, are long-term in nature, and the results they produce are spread over the entire duration of the policies. This can mean that negative developments in risk drivers with long-term effects reduce the value of the insurance portfolio (trend risks). The risk drivers mortality and disability are dominated by the reinsurance field of business, particularly by exposure in North America. The risk driver longevity risk is to be found in the products marketed by ERGO in Germany, together with typical risks from policyholder behaviour, such as the lapse risk, but we also underwrite longevity risk in the reinsurance field of business, especially in the United Kingdom. To a lesser extent, risks connected with the increase in treatment costs arise in the ERGO field of business.

In addition, underwriting risks in life insurance in the ERGO field of business are strongly affected by the capital market environment, as they are dependent on the ability to earn the guaranteed interest rate.

The risk modelling attributes probabilities to each modified assumption and produces a complete profit and loss distribution. We use primarily historical data extracted from the underlying portfolios to calibrate these probabilities and additionally apply general mortality rates for the population to model the mortality trend risk. To enable us to define appropriate parameters for the modelling of the range of areas in which we operate, portfolios with a homogeneous risk structure are grouped together. We then aggregate the individual profit and loss distributions taking account of the dependency structure to obtain an overall distribution.

Our largest short-term accumulation risk in the life and health risk category is a severe pandemic. We counter this risk by analysing our overall exposure in detail (scenario analysis) and defining appropriate measures to manage the risks.

In reinsurance, we control the assumption of biometric risks by means of a risk-commensurate underwriting policy. Interest-rate and other market risks are frequently ruled out by depositing the provisions with the cedant, with a guaranteed rate of interest from the deposit. In individual cases, these risks are also hedged by means of suitable capital market instruments.

In primary insurance, substantial risk minimisation is achieved through product design. In the event of adverse developments, parts of the provision for premium refunds – increases or reductions in which are recognised in profit or loss – make a significant contribution to balancing the risk. In health primary insurance, there is also a possibility of adjusting – or an obligation to adjust – premiums for most long-term contracts. In practice, however, there are limits to the resilience of policyholders.

Limits are laid down for the pandemic scenarios, which affect the portfolio in the shorter term, and the longevity scenarios with their longer-term effect in conformity with the risk strategy. We continue to analyse the sensitivity of the internal model to the input parameters on a regular basis. This relates to the interest rate and the biometric risk drivers.

Solvency capital requirement – Life and health

In the reinsurance field of business, the decline in the solvency capital requirement was primarily due to the appreciation of the euro against the US dollar and the Canadian dollar, while in the ERGO field of business the moderate rise in euro interest rates led to a decrease in the solvency capital requirement.

Market risk

We define market risk as the risk of economic losses resulting from price changes in the capital markets. It includes equity risk, general interest-rate risk, specific interest-rate risk, property-price risk and currency risk. The general interest-rate risk relates to changes in the basic yield curves, whereas the specific interest-rate risk arises out of changes in credit risk spreads, for example on euro government bonds from various issuers, or on corporate bonds. We also include in market risk the risk of changes in inflation rates and implicit volatilities (cost of options). Fluctuations in market prices affect not only our investments but also the underwriting liabilities, especially in life insurance. Due to the long-term interest-rate guarantees given in some cases and the variety of options granted to policyholders in traditional life insurance, the amount of the liabilities can be highly dependent on conditions in the capital markets. Market risks are modelled by means of Monte Carlo simulation of possible future market scenarios. We revalue our assets and liabilities for each simulated market scenario, thus showing the probability distribution for changes to basic own funds.

We use appropriate limit and early-warning systems in our asset-liability management to manage market risks. Derivatives such as equity futures, options and interest-rate swaps – which are used mainly for hedging purposes – also play a role in our management of the risks. The impact of options is taken into account in the calculation of solvency capital requirements. Information on derivative financial instruments can be found in the notes to the consolidated financial statements on page 135 f.

Solvency capital requirements (SCR) – Market[1]

	Reinsurance		ERGO		Diversification	
	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year
	€m	€m	€m	€m	€m	€m
Equity risk	3,333	3,023	1,059	808	-50	-22
General interest-rate risk	1,383	1,708	3,339	4,058	-1,306	-1,779
Specific interest-rate risk	1,394	1,447	3,329	4,376	-798	-825
Property risk	964	947	625	574	-47	-78
Currency risk	3,807	3,853	158	137	-26	-75
Subtotal	**10,881**	**10,978**	**8,510**	**9,953**	–	–
Diversification effect	-4,991	-5,128	-2,903	-3,409	–	–
Total	**5,890**	**5,850**	**5,607**	**6,544**	**-2,276**	**-2,499**

→	Group			
	31.12.2017	Prev. year		Change
	€m	€m	€m	%
Equity risk	4,342	3,809	533	14.0
General interest-rate risk	3,416	3,987	-571	-14.3
Specific interest-rate risk	3,925	4,998	-1,073	-21.5
Property risk	1,542	1,443	99	6.9
Currency risk	3,939	3,915	24	0.6
Subtotal	**17,164**	**18,152**	**-988**	**-5.4**
Diversification effect	-7,943	-8,257	314	-3.8
Total	**9,221**	**9,895**	**-673**	**-6.8**

1 Previous year's figures adjusted owing to a change in the composition of the reporting segments.

Solvency capital requirement – Market

Equity risk

The higher equities exposure after derivatives compared with the previous year was reflected in a rise in the solvency capital requirement.

Interest-rate risk

The fall in the general and specific interest-rate risk in the reinsurance field of business was substantially the result of a reduction in long-term liabilities and a moderate decrease in credit exposure. The interest-rate risk fell considerably in the ERGO field of business. A large part of the decrease was caused by the moderate rise in interest rates in the eurozone and the improved depiction of the life and health units in market risk.

In the reinsurance field of business, the market value of interest-sensitive investments as at 31 December was €66.6bn (74.6bn). Measured in terms of modified duration, the interest-rate sensitivity of those investments was 5.8 (5.8), while that of the liabilities was 4.2 (4.5). The change in the freely available financial resources in the event of a decrease in interest rates of one basis point would have been approximately €3.1m (2.5m). This means that the interest-rate sensitivity of the liabilities is largely hedged by investments.

In the ERGO field of business, the market value of interest-sensitive investments as at 31 December was €130.6bn (132.5bn). The modified duration was 8.8 (9.3) for interest-sensitive investments and 9.5 (10.5) for liabilities. This resulted in exposure to falling interest rates arising mainly out of the long-term options and guarantees in life insurance business. A decrease in interest rates of one basis point would have reduced the freely available financial resources by approximately €9.8m (22.1m).

Property risk

The property risk rose slightly as a result of additions to our property portfolio and higher market values.

Currency risk

The currency risk was virtually unchanged from the previous year.

Credit risk

We define credit risk as the financial loss that Munich Re could incur as a result of a change in the financial situation of a counterparty. In addition to credit risks arising out of investments in securities and payment transactions with clients, we actively assume credit risk through the writing of credit and financial reinsurance and in corresponding primary insurance business.

Munich Re determines credit risks using a portfolio model, which is calibrated over a longer period (at least one full credit cycle), and which takes account of both changes in fair value caused by rating migrations and debtor default. The credit risk arising out of investments (including deposits retained on assumed reinsurance, government bonds and credit default swaps – CDSs) and ceded reserves is calculated by individual debtor. We use historical capital-market data to determine the associated migration and default probabilities. Correlation effects between debtors are derived from the sectors and countries in which they operate, and sector and country correlations are based on the interdependencies between the relevant stock indices. The calculation of the credit risk in "other receivables" is based on internal expert assessments. For life and health primary insurance business, we also take account of the share of the mitigating effect on the credit risk resulting from policyholders' participation in profits. We also capitalise the credit risk for highly rated government bonds. Information on the ratings of the fixed-interest securities and loans can be found in the notes to the consolidated financial statements on page 133 f.

We use a cross-balance-sheet counterparty limit system valid throughout the Group to monitor and control our Group-wide credit risks. The limits for each counterparty (a group of companies or country) are based on its financial situation as determined by the results of our fundamental analyses, ratings and market data, and the risk appetite defined by the Board of Management. The utilisation of limits is calculated on the basis of credit-equivalent exposure (CEE). There are also volume limits for securities lending and repurchase transactions. Group-wide rules for collateral management, for example for OTC derivatives and catastrophe bonds issued, enable the associated credit risk to be reduced. Exposure to issuers of interest-bearing securities and CDSs in the financial sector is limited by a financial sector limit at Group level.

In monitoring the country risks, we do not simply rely on the usual ratings, but perform independent analyses of the political, economic and fiscal situation in the most important of the countries issuing paper in which we might potentially invest. On this basis, and taking account of the investment requirements of the fields of business in the respective currency areas and countries, limits or actions that are mandatory throughout the Group for investments and the insurance of political risks are approved by the Group Investment Committee.

With the help of defined stress scenarios, our experts forecast potential consequences for the financial markets, the fair values of our investments, and the present values of our underwriting liabilities. At Group level, we counter any negative effects with the high degree of diversification in both our investments and our liability structure, and with our active Group-wide asset-liability management.

We manage credit default risk in retrocession and external reinsurance with the assistance of limits determined by the Retro Security Committee. Our reserves ceded to reinsurers were assignable to the following rating categories as at 31 December:

Ceded share of technical provisions according to rating

%	31.12.2017	Prev. year
AAA	3.2	3.6
AA	29.1	39.6
A	37.9	43.3
BBB and lower	2.7	1.0
No rating available	27.1	12.6

Further information on the risks arising out of receivables relating to insurance business can be found in the notes to the consolidated financial statements on page 137.

Solvency capital requirement – Credit
The decline in the solvency capital requirement was due mainly to developments in the capital markets, particularly the appreciation of the euro against all important currencies. Model updates also contributed to the reduction, in particular the more refined depiction of migration and default probabilities.

Operational risk
We define operational risk as the risk of losses resulting from inadequate or failed internal processes, incidents caused by the actions of personnel or system malfunctions, or external events. This includes criminal acts committed by employees or third parties, insider trading, infringements of antitrust law, business interruptions, inaccurate processing of transactions, non-compliance with reporting obligations, and disagreements with business partners.

Operational risks are managed through our internal control system (ICS), which is an integrated system for managing operational risks that covers all risk dimensions and areas of the Group. It addresses Group management requirements, while complying with local regulations. Appropriate measures – up to and including larger projects – are used to correct identified weaknesses or mistakes.

A key purpose of the ICS is to guarantee the reliability of the annual financial statements at both consolidated and individual-company level and to identify, manage and control risks in the accounting process. It is essential for all items in our accounts to be correctly recorded and measured appropriately, and for the information provided in the notes and the management report to be complete and correct. To assist in achieving this, the Group has an Accounting Manual, and a system for regular communication of changes in uniform Group-wide rules is in place. Financial accounting and reporting are subject to materiality thresholds to ensure that the cost of the internal controls performed is proportionate to the benefits derived. The risks that are significant from a Group perspective for our financial reporting are covered by the ICS and are reviewed and adjusted by the risk carriers on a regular basis.

A central IT solution with general ledgers largely standardised throughout the Group is used to produce the consolidated financial statements. Ongoing checks are performed to protect it from unauthorised access. It is based on harmonised basic data, uniform processes and posting rules, and a standard interface for delivery of data to the Group or subgroup. Authorisation procedures regulate access to accounting systems. Group Audit regularly audits data management in the accounting systems to ensure that it is being performed in a proper and orderly manner.

We use scenario analyses to quantify operational risks. The results are fed into the modelling of the solvency capital requirement for operational risks and are validated using various sources of information, such as the internal control system (ICS) and internal and external loss data.

The sensitivity in the internal model is regularly checked against the most important input parameters. This mainly relates to the dependence of the result on frequency and loss amounts and the parameters for the correlations between scenarios. The analyses showed no anomalies in the financial year.

Solvency capital requirement – Operational risk
The reduction in the solvency capital requirement was due to updated assessments of some scenarios, in particular reflecting risk-mitigating measures taken in the area of cyber risks.

Other risk categories

We use appropriate procedures to specifically identify and analyse reputational risk, strategic risk, liquidity risk and security risk. These risks are also assessed and managed in our risk management process.

Reputational risk
We define reputational risk as the risk of damage to Munich Re's reputation as a consequence of a negative public image resulting in a deterioration in its credit rating, corporate value, etc. The reputational-risk aspect of relevant issues (e.g. business transactions or strategic decisions) is assessed in the fields of business by "Reputational Risk Committees". Where a reputational risk could potentially have an impact on Munich Re as a group, central divisions at Group level are involved in the assessment.

Strategic risk

We define strategic risk as the risk of making wrong business decisions, implementing decisions poorly, or being unable to adapt to changes in the operating environment. The existing and new potential for income generation in the Group and the fields of business in which it operates creates strategic risks, which we manage by carrying out risk analyses for significant strategic issues and regularly monitoring the implementation of measures deemed necessary. The Chief Risk Officer is involved in operational business planning and the processes for company mergers and acquisitions.

Liquidity risk

Our objective in managing liquidity risk is to ensure that we are in a position to meet our payment obligations at all times. To guarantee this, the liquidity position at our units is continuously monitored and subject to stringent requirements for the availability of liquidity. The short-term and medium-term liquidity planning is submitted to the Board of Management on a regular basis. The liquidity risk is managed within the framework of our holistic risk strategy, with the Board of Management defining limits on which minimum liquidity requirements for our operations are based. These risk limits are reviewed annually, and compliance with the minimum requirements is continuously monitored. Using quantitative risk criteria, we ensure that Munich Re has sufficient liquidity available to meet its payment obligations even under adverse scenarios, with the liquidity position being assessed both for insurance catastrophe scenarios and for adverse situations in the capital markets. Further information on liquidity risks in life and health insurance business and in property-casualty business can be found in the notes to the consolidated financial statements on page 159 ff. and page 161 ff.

Security risk

We define security risks as risks arising out of threats to the safety of our employees, data, information and property. We are intensifying our analysis of cyber risks in particular in recognition of the increasing spread of information technology in society and the economy. Security Risk Committees have been set up in the fields of business to manage and coordinate measures taken to counter security risks. The members of the Security Risk Committees are managers from operational areas (e.g. IT Security), the control functions (e.g. the Information Security Officer and the Data Protection Officer) and representatives from business units and central divisions.

Solvency ratio under Solvency II

The solvency ratio under Solvency II is the ratio of the eligible own funds to the solvency capital requirement.

Solvency II ratio[1]

		31.12.2017	Prev. year[2]	Change
Eligible own funds[3]	€m	35,060	40,667	–5,608
Solvency capital requirement	€m	14,353	15,256	–903
Solvency II ratio	%	244	267	

1 Eligible own funds excluding the application of transitional measures for technical provisions; including the application of transitional measures for technical provisions, the eligible own funds amounted to €42.6bn (48.2bn); Solvency II ratio: 297% (316%).
2 The eligible own funds for 2016 do not take into account deductions for the dividend agreed by the Board of Management for the 2016 financial year, the possible redemption of a subordinated bond with a call option in 2017 and share buy-backs from the 2017/2018 share buy-back programme.
3 The capital measures included in the eligible own funds comprise €3.7bn for the dividend payment for the 2016 financial year, the 2017/2018 share buy-back programme, and the redemption of a subordinated bond in 2017, and €2.6bn for the dividend approved by the Board of Management for the financial year 2017, a possible share buy-back programme for 2018/2019, and the possible redemption of a subordinated bond. There is also a further €0.2bn for other measures.

The dividend for the 2017 financial year approved by the Board of Management has been deducted from the eligible own funds as at the balance sheet date. In order to present the impact of possible further capital measures on the Solvency II solvency ratio more transparently for users of our financial statements, we decided to take into account a possible share buy-back programme in 2018/2019 in the amount of €1bn and a possible £300m repayment of a subordinated bond with a redemption option in 2018. No Board resolutions had been passed or approvals given for either measure at the time of preparation of the consolidated financial statements.

Other risks

Economic and financial-market developments and regulatory risks

Munich Re has substantial investments in the eurozone. We attach importance to maintaining a correspondingly broad diversification of investments to cover our technical provisions and liabilities in euros. However, low interest rates continue to pose major challenges for life insurance companies in the eurozone in particular. The fluctuations in the capital markets give rise to considerable volatility in investments and liabilities. We counter these risks with various risk management measures.

Political risks in the eurozone continue to exist owing to discord caused by the conflicting national interests of the individual member states. The reduction in the stimulus provided by the European Central Bank's monetary policy could cause borrowing costs to rise for some countries. Though progress has been made recently in the exit negotiations between the EU and the United Kingdom, the possibility of a disorderly outcome (hard Brexit) with corresponding consequences for individual EU countries cannot be excluded. A number of Munich Re insurance and reinsurance units conduct business in the United Kingdom, and the country's departure from the EU will have implications for that business. We have set up a Group-wide project to ensure that our local structure is adapted to the direct effects of Brexit. Besides these direct effects, there may also be indirect effects on our business – for instance, owing to negative economic development, falling exchange rates or rising inflation. However, also because there may be contrary effects, what this may mean for Munich Re is not currently foreseeable. Taking into account the various possible Brexit scenarios, as things stand at present we do not expect any significant negative direct or indirect effects overall on Munich Re's assets, liabilities, financial position or results. In Germany, the continuing discussions on a "citizens' insurance scheme" could lead to government action with implications for private health insurance, though it is not possible at the present time to predict what they might be.

Apart from the political imponderables in Europe and the situation in the emerging countries and the Middle East, the differences between the USA and North Korea are also creating uncertainty. Further escalation could have significant consequences for the region and the global capital markets.

We constantly analyse the potential impact that developments of this sort may have on our risk profile.

As a result of the US tax reform, taxation regulations have been introduced that are disadvantageous for intra-Group retrocessions with non-US entities. To avoid the additional tax expenditure associated with this, Munich Re has amended the intra-Group retrocession structure for its US subsidiaries and has adjusted its recognition accordingly.

Climate change

Climate change represents one of the greatest long-term risks of change for the insurance industry. We expect climate change to lead to an increase in extreme weather events in the long term. Our risk-management competence built up over many years and our highly developed risk models allow us to better assess these risks of change and to develop new solutions for our primary insurance and reinsurance clients.

Legal risks

As part of the normal course of business, Munich Re (Group) companies are involved in court, regulatory and arbitration proceedings in various countries. The outcome of pending or impending proceedings is neither certain nor predictable. However, we believe that none of these proceedings will have a significant negative effect on the financial position of Munich Re.

Summary

In accordance with the prescribed processes, our Board committees explicitly defined the risk appetite for significant risk categories in the year under review, and quantified it with key figures. We determined and documented the risk appetite across the Group hierarchy and communicated it throughout the Group. During the whole of 2017, risk exposures were regularly quantified and compared with the risk appetite. We assess Munich Re's risk situation to be manageable and under control.

Opportunities report

Our strong client focus, global risk management capabilities and industry knowledge put us in a strong position to benefit from continuously evolving markets and changes in client behaviour, whilst we create new business opportunities by developing customised solutions for our clients. Unless stated otherwise, the opportunities for Munich Re outlined below generally relate equally to all fields of business.

Business environment

The currently strong global economic growth should have a positive impact on the demand for insurance cover, and trigger higher premium volume in most classes of insurance. A less expansionary monetary policy could also lead to a normalisation of the bond markets. This would entail price losses and have a negative impact in the short term on our investment result, but would be favourable to our insurance business and bring higher returns in the long run. At the same time, the pressure on our cedants from the still prevailing low-interest-rate environment opens up diverse business opportunities for our reinsurance activities.

Innovation and digitalisation

Markets are being increasingly shaped by digitalisation, and changes in client behaviour call for flexibility in terms of coverage and solutions. Munich Re is investing heavily in our digital infrastructure and skills as well as in cooperation with strategic partners – including start-ups – in order to help bring about the requisite changes in terms of innovative products, services and processes. With Munich Re's presence in major start-up hubs, the collaboration with accelerators, and the new Digital Partners and Digital Ventures units, numerous new business and cooperation ideas are arising which will help us to expand our business model beyond the insurance value chain and tap the growth opportunities offered by the digital world.

We strive to obtain the highest possible degree of automation throughout the value chain and across all business units to not only meet our clients' and our own needs as regards quality, speed and security, but also to improve efficiency. Significant investments in data, infrastructure, and human resources make it possible for us to use big data analytics even more systematically for our own business and make the technology available to our clients. Our US subsidiary Hartford Steam Boiler (HSB), for example, uses sensor technology to develop innovative insurance solutions for the Internet of Things together with our industrial clients. The fact that our clients are increasingly using traditional and digital channels to gain information and make purchases encourages us in our efforts to promote the integration of products and distribution channels and the expansion of direct sales in all lines of primary insurance. Furthermore, we utilise the growing digital opportunities to further reduce and cover health risks, moving away from pure cost coverage for illness and towards health maintenance and prevention.

Social and economic trends

The positive economic dynamics and low levels of insurance penetration in many developing and emerging markets provide opportunities for profitably expanding and further diversifying our business portfolio. In life and health insurance, the ageing population will lead to increasing demand for private-provision products. Together with the primary insurance and reinsurance undertakings of our Group, MEAG plays an important role with its expertise in asset management; as a reinsurer, we also provide life insurance companies outside our Group with integrated financial and reinsurance solutions for the benefit of clients.

Climate change and natural catastrophes

We expect climate change to lead to an increase in weather-related natural catastrophes in the long term. This growing loss potential will lead to increased demand for primary insurance and reinsurance products. Our expertise in risk management, together with our highly developed risk models, allow us to professionally assess these risks, calculate adequate prices for traditional covers, and develop new solutions for our primary insurance and reinsurance clients.

Expanding the limits of insurability

Together with our clients, we strive to expand the boundaries of insurability in many ways, working on cyber risks and enhanced cover options, among other things. We now offer our clients diverse coverage concepts for risks and damage caused by faulty product software and cyber attacks. In addition to this, we are developing a broad range of covers for new risks, such as entrepreneurial risks in their multitude of different forms. Many of these risks in our changed world are now of much greater significance than the perils traditionally covered by the insurance industry.

Prospects

Our predictions for the forthcoming development of our Group are based on planning figures, forecasts and expectations. Consequently, the following outlook merely reflects our imperfect assumptions and subjective views. It follows that we do not accept any responsibility or liability in the event that they are not realised in part or in full. ↗

It is not only the obvious fluctuations in the incidence of major losses that make an accurate forecast of IFRS results impossible. The pronounced volatility of the capital markets and exchange rates, as well as the special features of IFRS accounting, also make this difficult. Thus, there may be significant fluctuations in the investment result, currency result and consolidated result, despite the fact that our assets are geared to the characteristics of our liabilities.

Comparison of the prospects for 2017 with the result achieved

Munich Re (Group)

Comparison of prospects for Munich Re (Group) for 2017 with results achieved

		Target 2017	Result 2017
Gross premiums written	€bn	48–50	49.1
Technical result life and health reinsurance[1]	€m	at least 450	428
Combined ratio property-casualty reinsurance	%	97	114.1
Combined ratio ERGO Property-casualty Germany	%	99	97.5
Combined ratio ERGO Property-casualty International	%	98	95.3
Return on investment[2]	%	around 3	3.2
RORAC	%	15	1.5
Consolidated result	€bn	2.0–2.4	0.4

1 Including the result from reinsurance treaties recognised in the non-technical result owing to insufficient risk transfer.
2 Excluding insurance-related investments.

Gross premiums were up on the previous year's level, despite negative currency translation effects and, at €49.1bn, were in the upper half of the expected range of €48–50bn.

At the beginning of the year, we had forecast a result of €2.0–2.4bn for the 2017 financial year. The exceptionally high claims expenditure from hurricanes Harvey, Irma and Maria in the third quarter prompted us to abandon our result target, instead forecasting only a "small profit". At €392m, we achieved the adjusted profit forecast for the year.

Our long-term objective of a 15% return on our risk-adjusted capital (RORAC) after tax across the cycle of the insurance and interest-rate markets was already difficult to achieve in the ongoing environment of very low interest rates on low-risk investments. For the above reasons, we were far from achieving it in 2017, managing only 1.5%. The return on total IFRS capital (return on equity, ROE) was 1.3%.

In the light of the persistently low interest rates on low-risk investments, a 15% return on risk-adjusted capital (RORAC) after tax throughout the cycle can no longer be realistically achieved. For this reason, the target is no longer being pursued.

At €7.6bn, the Group's investment result (excluding insurance-related investments) exceeded our expectations of over €7bn by a significant margin. In spite of persistent yield attrition, our regular income from investments fell only slightly. Gains on the disposal of fixed-interest securities and equities more than offset losses from hedging derivatives and impairment losses. Considering the situation in the capital markets, this investment result represents a relatively high annualised return of 3.2% in relation to the average fair value of the portfolio. We thus exceeded our originally anticipated return on investment of "around 3%".

We did not reach the 2017 economic earnings target that we had anticipated at the beginning of the financial year in the range of €2.0–2.4bn of the IFRS result forecast. The economic earnings for 2017 totalling €0.5bn were adversely impacted by high natural catastrophe losses and significant negative currency translation effects which, contrary to the expectations for the Group, were only partly offset by otherwise positive variances from our asset-liability management and business operations.

Reinsurance

At the beginning of the financial year, we had forecast gross premiums written of between €31bn and €33bn in the reinsurance field of business. At €31.6bn, we achieved this target. Thanks to a number of large-volume treaties written in Australia, Asia and Canada, gross premiums written in life and health reinsurance totalled €13.7bn – towards the upper end of the expected range of €13–14bn. In property-casualty reinsurance, we had forecast gross premiums written of between €17.5bn and €18.5bn. Despite the reduction in treaty shares and the targeted withdrawal from unprofitable business, we remained within this range, achieving €17.8bn.

At the start of the year, we forecast a technical result for life and health reinsurance – including the result from reinsurance treaties with insufficient risk transfer – of at least €450m. Following lower-than-expected performance in the second and third quarters, partly as a result of the recapture of loss-making portfolios in the USA, we reduced our target for the financial year to approximately €400m. With good performance in the fourth quarter, the result, at €428m, was fortunately between the original and reduced targets.

At 114.1%, the combined ratio in property-casualty reinsurance was significantly higher than the around 97% initially envisaged. Exceptionally high property damage caused by hurricanes Harvey, Irma and Maria prompted us to significantly increase the expected combined ratio for the full year to 112% in the third quarter. We missed the adjusted figure by 2.1 percentage points due primarily to considerable expenditure for major natural catastrophe losses in the fourth quarter. In 2017, a contrary effect derived from the release of provisions for basic losses in prior years. For the financial year, we released loss reserves (adjusted for commissions) of around €870m.

The consolidated result for 2017 in the reinsurance field of business amounted to €120m, falling far short of our initial expectations of €1.8–2.2bn.

ERGO

Overall premium income in the ERGO field of business amounted to €18.5bn, and was in the upper range of our €18–19bn target corridor for 2017. Gross premiums written came to €17.5bn, at the very upper end of our projected range of €17–17.5bn.

At ERGO Life and Health Germany, we had forecast total premium income of "just under €10bn" and at €9.9bn, we achieved this. At €9.2bn, gross premiums written were above our expectations of "around €9bn". In Life Germany, we achieved premium volume of €3.5bn, in line with our expectation of around €3.5bn. At €5.3bn, gross premium in Health Germany was within the target corridor of €5–5.5bn.

In the Property-casualty Germany segment, gross premiums of €3.3bn exceeded the target of "slightly over €3bn". Our forecast at the start of the year for the combined ratio in property-casualty business in Germany had been around 99% – provided major losses remained within normal bounds. In our Half-Year Financial Report, we reduced our forecast for the combined ratio to 98% on the strength of lower costs. Although the loss ratio was negatively influenced by a major loss in the third quarter, we were below the adjusted projection, with a combined ratio of 97.5%.

At ERGO International, gross premiums written amounted to €5.0bn compared with our forecast at the beginning of the year of "slightly under €5bn". At €5.4bn, total premium income fell slightly short of our expectations of around €5.5bn. At the beginning of the year, we had aimed for a combined ratio of around 98% in the ERGO Property-casualty International segment, provided major losses remained within normal bounds. Thanks to good performance in the first nine months, we were able to reduce our forecast to 97% in the third quarter. The positive performance continued into the fourth quarter, enabling us to achieve a combined ratio of 95.3% at year-end – considerably better than the adjusted forecast.

At the beginning of the year, we had forecast a result in the range of €150–200m for the ERGO field of business. Owing to the good results in the first half-year, we increased that target range in the Half-Year Financial Report to €200–250m. With a very pleasing consolidated result of €273m, ERGO significantly exceeded the revised forecast.

Outlook for 2018

Outlook for Munich Re (Group)

		2018
Gross premiums written	€bn	46–49
Technical result life and health reinsurance[1]	€m	at least 475
Combined ratio property-casualty reinsurance	%	99
Combined ratio ERGO Property-casualty Germany	%	96
Combined ratio ERGO Property-casualty International	%	97
Return on investment[2]	%	around 3
Consolidated result	€bn	2.1–2.5

1 Including the result from reinsurance treaties recognised in the non-technical result owing to insufficient risk transfer.
2 Excluding insurance-related investments.

Reinsurance

Gross premium in reinsurance as a whole should be in the range of €29–31bn in 2018, i.e. below last year's figure, although currency translation effects could potentially have a considerable impact on this estimate. We project that the consolidated result for 2018 in reinsurance will total between €1.8bn and €2.2bn. This projected result is therefore significantly higher than the 2017 result, which was marked by exceptional major-loss accumulation.

For 2018, we expect gross premiums written in life and health reinsurance to be in the region of €9.5–10.5bn. Owing to the termination of large-volume treaties and negative currency translation effects, the median is around €3.5bn below last year's figure. The technical result plus the result from reinsurance treaties without sufficient risk transfer is expected to amount to at least €475m, significantly above the previous year's figure. The result from reinsurance treaties without sufficient risk transfer is recognised under "other operating result" and thus forms part of the non-technical result.

For 2018, we anticipate gross premiums written of €19.5–20.5bn in property-casualty reinsurance, representing up to €2.7bn more than the previous year. This is due in part to the conclusion of new large-volume treaties in the USA and Australia. We anticipate a combined ratio of 99% of net earned premiums, with expected reserve releases for claims from prior years of at least four percentage points. The sharp reduction of around 15 percentage points in the combined ratio compared with last year's figure is largely due to randomly high losses from natural catastrophes in 2017. For 2018, we again anticipate major losses in the order of €2bn, corresponding to 12% of net earned premiums.

Negotiations concerning treaties taking effect at the beginning of 2018 were influenced by the exceptionally high major losses from natural catastrophes in 2017. Contrary to expectations at the beginning of the renewal negotiations, reinsurance capacity remained at a high level. Prices for reinsurance cover therefore did not increase across the board. While prices in markets affected by natural catastrophes rose considerably, they stabilised in loss-free areas around the world.

In this market environment, the price level of our portfolio up for renewal in January increased for the first time in four years (0.8%), even without consideration of the interest-rate increase, which also benefits us. The positive development (0.5%) in our dominant proportional book was topped by even greater improvement in non-proportional business (3.0%). The key drivers of this were significant price increases for loss-afflicted business, both as regards the original covers as well as in reinsurance.

Premium volume written at 1 January 2018 increased by 19% to around €9.9bn. Thanks to our excellent client relationships and our sought-after expertise, we were able to tap into attractive business opportunities across all regions and classes of business. These involved the expansion of existing client relationships as well as new business, and included some very large transactions.

The renewals at 1 April 2018 (mainly Japan) and 1 July 2018 (parts of the portfolio in the USA, Australia and Latin America) will involve the renegotiation of a premium volume of around €4bn in reinsurance treaty business. Munich Re expects market conditions to continue to improve in the remaining renewal rounds, although claims experience in the individual market segments will play a major role.

ERGO

Total premium volume in 2018 in the ERGO field of business should be at roughly the same level as the previous year, approximately €18–19bn, with gross premiums written of €17–18bn. For the ERGO field of business, we anticipate a consolidated result in the range of €250–300m in 2018, approximately the same level as the 2017 financial year, which was surprisingly successful.

In the ERGO Life and Health Germany segment, we expect total premium income of €9.5–10bn, and gross premiums written of around €9–9.5bn. We expect overall premium volume in the Life Germany segment to decrease to around €3–3.5bn in the 2018 financial year, partly owing to the shrinking portfolio, with gross premiums written in the range of €2.5–3bn. In our Health Germany segment, we anticipate that gross premiums written will be up on the previous year's level, at €5–5.5bn. Gross premiums written for direct business in Germany should increase slightly in 2018, at around €1–1.2bn.

In the Property-casualty Germany segment, we envisage gross premiums written of €3–3.5bn. The combined ratio should be around 96%, provided major losses remain within normal bounds.

We aim to achieve gross premiums written of €4.5–5bn for the ERGO International segment in 2018, and generate overall premium volume of about €5–5.5bn, with uncertainty concerning the demand for single-premium business in life insurance. In health business and in property-casualty business, we project a slight fall in premium. Contingent upon major losses being within normal bounds, we are aiming for a combined ratio of around 97%.

Munich Re (Group)

We expect that the Group's gross premiums written for 2018 will be in the range of €46–49bn; the median value is approximately €1.5bn below the previous year's level.

Owing to methodological differences, we expect the economic earnings for 2018 to be slightly higher than the envisaged IFRS result of €2.1–2.5bn. Our projection is based on the assumption of stable capital markets, normal major-loss incidence and unchanged modelling parameters. Deviations from these assumptions may have a different impact on economic earnings than on IFRS accounting. Further information on our economic earnings management tool can be found on page 50.

Provided that major-loss experience is in line with expectations, our assumption for 2018 is that Munich Re will post a significantly increased technical result of €2.5–2.7bn.

For our investments, we expect to generate slightly lower regular income from fixed-interest securities and loans in 2018, because of currency translation effects in particular. As in the previous year, we want to incrementally increase our widely diversified investments and investment commitments in the area of alternative investments. We also intend to only minimally change our moderate equity-backing ratio of 7.3%, so that write-down risks continue to be limited. Regular income from our investments should come to around 2.8%, slightly above last year's level. Overall, we expect the investment result to be lower than last year at some €7bn, equivalent to an annual return on investment of around 3%.

The consolidated profit should be significantly up on the previous year, which was marked by high losses from natural catastrophes. Furthermore, there is still exceptionally high political and macroeconomic uncertainty overall, in all markets relevant to us. Nevertheless, we still envisage a consolidated result for 2018 of €2.1–2.5bn. The effective tax rate should be around 20%. This profit guidance is subject to claims experience with regard to major losses being within normal bounds, to claims provisions remaining unchanged and to our income statement not being impacted by severe currency or capital market movements, significant changes in fiscal parameters, special restructuring expenses, or other special factors.

In the period from June 2017 to the end of February 2018, we bought back shares with a value of €919m; another €81m are to be used for share buy-backs before the Annual General Meeting in April 2018. We are using this measure to return unneeded capital to shareholders. Despite the buy-backs, our good capital position will allow us to continue paying attractive dividends and selectively utilising opportunities for profitable growth. Subject to approval by the Annual General Meeting, Munich Re will pay a dividend of €8.60 per share in 2018, as in the previous year. This is equivalent to a total payout of €1.3bn.

Munich Reinsurance Company (information reported on the basis of German accountancy rules)

For the 2017 financial year, Munich Re again utilised the option of publishing a combined management report in accordance with Section 315(5) in conjunction with Section 298(2) of the German Commercial Code (HGB). Supplementary to our Munich Re (Group) reporting, this section provides details on the performance of Munich Reinsurance Company.

The annual financial statements of Munich Reinsurance Company are prepared in accordance with German accounting rules. By contrast, the consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRSs). As a result, there are some deviations in the accounting policies – mainly ↗ with regard to intangible assets, investments, financial instruments, individual underwriting assets and liabilities, and deferred taxes.

Market environment and major factors of influence

The macroeconomic and industry environment of Munich Reinsurance Company essentially corresponds to that of the Group. Further information on this can be found on page 49.

Business performance

Munich Reinsurance Company's 2017 financial year was marked by exceptionally high expenditure for property damage from hurricanes Harvey, Irma and Maria, which caused massive destruction in the Caribbean and in the USA in August and September. Major-loss expenditure was therefore significantly higher than in the previous year, and was well above the expected range. In contrast, the release of loss reserves for prior accident years, which we were able to make following a review of our reserving position, once again made a positive contribution to the technical result before claims equalisation provision. The accounting result of Munich Reinsurance Company developed as follows:

Condensed income statement for Munich Reinsurance Company

	2017	Prev. year	Change
	€m	€m	%
Earned premiums for own account	20,525	20,976	-2.2
Interest on technical provisions for own account	469	418	12.2
Other underwriting income for own account	39	5	666.3
Claims incurred for own account	-16,711	-14,795	-13.0
Change in other technical provisions for own account	-552	-147	-275.6
Expenses for premium refunds for own account	-1	-3	53.2
Operating expenses for own account	-5,736	-5,851	2.0
Other underwriting expenses for own account	-23	-8	-202.9
Subtotal	**-1,990**	**596**	**–**
Change in claims equalisation provision and similar provisions	2,382	-391	–
Underwriting result for own account	**392**	**205**	**91.4**
Investment income	4,333	5,829	-25.7
Investment expenses	-1,257	-1,922	34.6
Interest income on technical provisions	-493	-452	9.1
Other income	204	996	-79.5
Other expenses	-546	-585	-6.7
Non-technical result	**2,241**	**3,866**	**-42.0**
Operating result before tax	**2,634**	**4,071**	**-35.3**
Taxes on income and profit, and other taxes	-434	-659	34.1
Profit for the year	**2,199**	**3,411**	**-35.5**
Profit brought forward from previous year	52	48	8.5
Transfers from other revenue reserves	0	0	–
Appropriations to revenue reserves	-918	-1,706	46.2
Net retained profits	**1,333**	**1,754**	**-24.0**

Technical result

In the 2017 financial year, Munich Reinsurance Company's gross premium income totalled €22,612m (23,527m), a year-on-year decrease of 3.9%, mainly owing to the reduction in treaty shares, the targeted withdrawal from unprofitable business, and changes in the value of the euro as against other currencies.

Gross premium volume in life and health reinsurance was lower than in the previous year. Gross premiums written were down moderately by 0.6% to €10,798m (10,869m). A large part of the fall in premium volume was attributable to negative currency translation effects. If exchange rates had remained unchanged, our premium income would have increased moderately by 0.6% in life and health reinsurance.

In property-casualty reinsurance, we posted a reduction in premium income of 6.7% to €11,813m (12,659m) in 2017. This was mainly due to the reduction in treaty shares across all lines of business and regions and the targeted withdrawal from unprofitable business (especially large proportional treaties in China). This erosion was only partially offset by selective underwriting of attractive new business and organic growth of our business with existing clients. Negative currency translation effects also played a role in the fall in premium volume. If currency exchange rates had remained unchanged, premium volume would have fallen by only 5.3%. The 2017 renewals again took place in a highly competitive market environment, not least because there continued to be sufficient reinsurance capacity in all classes of business. Prices declined, but to a much lesser degree than in previous years' renewals, confirming the signs of stabilisation previously seen in the marketplace. In a few markets, we were able to selectively exploit business opportunities that offered adequate margins. Overall, we are adhering to our profit-oriented underwriting policy.

Our technical result before claims equalisation provision amounted to –€1,990m in the 2017 financial year, compared with a profit of €596m in the previous year. This deterioration of the result was mainly attributable to exceptionally high major-loss expenditure. A customary review of provisions for the full year also resulted in a relatively lower reduction in the provisions for claims from prior years. Over the years, the safety margin in the provisions has remained unchanged at a high level, as Munich Reinsurance Company has adhered to its careful approach to determining and adjusting loss provisions. Major-loss expenditure totalling €3,428m (1,249m) after retrocession and before tax was significantly higher than in the previous year and exceeded our expectations. Just as in the previous year, 2017 was also marked by a large number of major losses, but hurricanes Harvey, Irma and Maria, which caused massive destruction in the Caribbean and the USA in August and September, were by far the most expensive loss events of the year.

At €2,862m, aggregate losses from natural catastrophes were significantly higher than in the previous year (€702m), accounting for 20.8 (5.0) percentage points of net earned premiums.

In property-casualty reinsurance, man-made losses totalled €554m (496m), equivalent to 4.0 (3.6) percentage points of net earned premiums.

The combined ratio, which reflects the relation of claims and costs to net earned premiums, came to 113.7% (96.9%), mainly owing to the above effects.

Performance of the classes of business

Life

		2017	Prev. year	Change
				%
Gross premiums written	€m	7,719	7,930	-2.7
Underwriting result before claims equalisation provision and similar provisions	€m	–111	164	–

In many of our most important markets, competition was unrelenting. In addition, in many markets the persistently low-interest-rate environment continued to subdue our clients' business, in turn curbing demand for traditional reinsurance. While we are very satisfied with the development of new business in Asia, business in other markets is stagnant or slightly down.

The technical result for 2017 did not follow on from the very good result from the previous year. It was adversely impacted by reserve strengthening in Israel and increased claims expenditure in Australian disability business, in particular as a result of longer benefit periods. Apart from this, claims expenditure across all other markets was within the expected bounds. This applies in particular to mortality business in the USA, which had been adversely impacted by major losses in the previous year. The technical result for the markets of Asia and the United Kingdom continued to develop favourably.

Health

		2017	Prev. year	Change
				%
Gross premiums written	€m	3,079	2,939	4.8
Combined ratio	%	99.5	100.4	
Underwriting result before claims equalisation provision and similar provisions	€m	14	–10	–

In health reinsurance, premium income in the year under review showed an increase, which was essentially attributable to business expansion in particular in Canada and the United Kingdom. The result was up slightly compared with the previous year.

Personal accident

		2017	Prev. year	Change
				%
Gross premiums written	€m	236	198	19.2
Combined ratio	%	55.8	31.5	
Underwriting result before claims equalisation provision and similar provisions	€m	105	120	–11.9

In personal accident reinsurance, the premium level was up in the year under review. The result before claims equalisation provision was down somewhat on the previous year owing to higher claims expenditure and higher commissions. Once again, we generated a gratifying profit.

Third-party liability

		2017	Prev. year	Change
				%
Gross premiums written	€m	1,668	1,887	–11.6
Combined ratio	%	138.3	114.6	
Underwriting result before claims equalisation provision and similar provisions	€m	–634	–256	–147.7

In liability business, treaty reductions led to a fall in premium volume in the 2017 financial year. A significant increase in major-loss expenditure caused the technical result before claims equalisation provision to deteriorate substantially year on year. In addition, fewer loss reserves for prior accident years could be released.

Motor

		2017	Prev. year	Change
				%
Gross premiums written	€m	2,970	3,082	–3.6
Combined ratio	%	105.9	100.0	
Underwriting result before claims equalisation provision and similar provisions	€m	–153	–2	<–1,000.0

Motor reinsurance showed a marginal reduction in premium volume owing to negative currency translation effects in the 2017 financial year. The technical result was much lower than in the previous year, primarily on account of reduced reserve releases for claims from prior accident years.

Marine

		2017	Prev. year	Change
				%
Gross premiums written	€m	277	392	–29.3
Combined ratio	%	73.1	111.5	
Underwriting result before claims equalisation provision and similar provisions	€m	73	–40	–

Owing to the high level of pricing pressure, the premium level in marine reinsurance was down significantly compared with the previous year. The technical result before claims equalisation provision improved significantly. After the negative result posted in the previous year, the technical result was positive in the year under review, mainly owing to lower major-loss expenditure compared with the previous year.

Aviation

		2017	Prev. year	Change
				%
Gross premiums written	€m	486	443	9.8
Combined ratio	%	73.3	75.3	
Underwriting result before claims equalisation provision and similar provisions	€m	132	111	18.6

Premium income in aviation reinsurance, which comprises the aviation and space classes, increased in the financial year. The result in aviation reinsurance was also up on the previous year.

Fire

		2017	Prev. year	Change
				%
Gross premiums written	€m	3,278	3,551	-7.7
Combined ratio	%	142.8	83.7	
Underwriting result before claims equalisation provision and similar provisions	€m	-1,248	497	-

The decline in premium income in fire reinsurance was largely attributable to treaty terminations. After having generated a pleasing profit in the previous year, the technical result before claims equalisation provision fell into very negative territory in the year under review. This was primarily due to the high claims expenditure from hurricanes Harvey, Irma and Maria.

Engineering

		2017	Prev. year	Change
				%
Gross premiums written	€m	567	752	-24.6
Combined ratio	%	122.0	95.9	
Underwriting result before claims equalisation provision and similar provisions	€m	-125	28	-

In engineering reinsurance (machinery, EAR, CAR, EEI, etc.), premium income was down significantly on the previous year owing to treaty cancellations. After having generated a small profit in the previous year, the technical result before claims equalisation provision fell into negative territory, owing primarily to a sharp increase in major-loss expenditure.

Other classes

		2017	Prev. year	Change
				%
Gross premiums written	€m	2,332	2,355	-1.0
Combined ratio	%	102.7	100.7	
Underwriting result before claims equalisation provision and similar provisions	€m	-42	-16	-162.2

Under other classes of business, we subsume the remaining classes of property reinsurance, such as burglary, plate glass, hail (including agricultural reinsurance), water damage, contingency, windstorm, livestock and householders' and homeowners' comprehensive reinsurance – as well as credit and fidelity guarantee reinsurance.

Year-on-year premium income remained almost constant. The combined technical result of these other classes of business deteriorated compared with the previous year, primarily due to higher major-loss expenditure.

Non-technical result

The global low-interest-rate environment continued to pose great challenges for investment by insurers. Yields on ten-year German government bonds reached a new record level of 0.6% in July, following speculation about an imminent end to the ECB's expansionary monetary policy, but fell back again to 0.4% by the end of the year. Yields on government bonds remained at a relatively low level in the USA as well – despite strong economic growth and key-interest-rate increases. This was partly attributable to persistently weak core inflation. The equity markets saw appreciable increases in prices, and volatility was very low. The EURO STOXX 50 climbed by around 6% in the period under review. The US Dow Jones Index rose by around 25% – driven by the expectation that many companies would benefit from the tax reform adopted at the end of the year. Throughout the year, the euro exchange rate increased significantly against most important currencies. At the end of December 2017, the euro was up year on year by around 14% against the US dollar, 6% against the Canadian dollar and 4% against the pound sterling.

In the 2017 financial year, Munich Reinsurance Company's return on investment (including deposits retained on assumed reinsurance) totalled 3.9% (5.0%) on the basis of carrying amounts.

Investment result

€m	2017	Prev. year
Regular income	3,152	3,134
Write-ups and write-downs	-70	94
Realised gains/losses on the disposal of investments	170	1,022
Other income/expenses	-175	-343
Total	**3,076**	**3,907**

The decline in the investment result is principally the consequence of reduced gains on disposals in the year under review. The positive contribution to profits achieved in the previous year was chiefly due to the sale of a block of shares to a subsidiary of Munich Reinsurance Company for the purpose of optimising Munich Re's structure taking into account tax and commercial law aspects.

Profit for the year

Despite high natural catastrophe losses, Munich Reinsurance Company generated a profit of €2,199m (3,411m). The technical result was stabilised by withdrawals from the claims equalisation provision. Compared with the previous year, the decline is primarily attributable to the non-technical result, which in turn was impacted by the loss of one-off effects in the investment and currency translation results.

The lower tax expenditure was mainly attributable to a sharp decrease in the branch results compared with the previous year.

Financial position

Balance sheet structure of Munich Reinsurance Company

	2017	Prev. year	Change
	€m	€m	%
Intangible assets	188	12	>1,000
Investments	76,679	79,295	-3.3
Receivables	7,051	5,937	18.8
Other assets	601	559	7.5
Deferred items	270	332	-18.7
Excess of plan assets over pension liabilities	456	534	-14.7
Total assets	**85,246**	**86,670**	**-1.6**
Equity	11,841	11,992	-1.3
Subordinated liabilities	2,745	4,128	-33.5
Technical provisions	60,036	59,265	1.3
Other provisions	2,299	1,908	20.5
Deposits retained on retroceded business	1,686	2,057	-18.1
Other liabilities	6,620	7,292	-9.2
Deferred items	19	28	-30.7
Total equity and liabilities	**85,246**	**86,670**	**-1.6**

In the 2017 financial year, Munich Reinsurance Company generated net retained profits of €1,333m (1,754m) according to German accountancy rules. Including these net retained profits, the Company's revenue reserves amounted to €4,422m (4,574m) as at the balance sheet date, of which €376m (407m) is subject to a restriction on distribution. The distributable funds thus amount to €4,046m (4,167m).

The shareholders' equity of Munich Reinsurance Company as determined under German accountancy rules is protected effectively against the risk of loss arising from a random accumulation of losses by a claims equalisation provision totalling €7,724m (10,126m). Given our robust capitalisation according to all calculation methods, we intend – subject to the approval of the Annual General Meeting – to pay our shareholders a year-on-year stable dividend of €8.60 per share, or a total of €1,290m, from Munich Reinsurance Company's net retained profits for the 2017 financial year.

The carrying amount of Munich Reinsurance Company's investments excluding deposits retained on assumed reinsurance fell by €3,063m to €64,010m (67,073m) in the 2017 financial year. Investments in fixed-interest securities fell by €2,369m as a result of foreign exchange losses and sales. We primarily reduced our portfolios of German, UK and US government bonds and European covered bonds. As at 31 December 2017, 95% of our fixed-interest securities were investment-grade and around 87% were rated "A" or better.

Equity[1]

€m	2017	Prev. year
Issued capital	573	573
Capital reserve	6,845	6,845
Revenue reserves	3,089	2,821
Net retained profits	1,333	1,754
Equity	**11,841**	**11,992**

1 Information on Section 160 (1) no. 2 of the German Stock Corporation Act can be found on page 21 of Munich Reinsurance Company's Annual Report 2017.

Pursuant to German commercial and corporate law, dividends and share buy-backs may only be paid out of profits and revenue reserves. Besides the expenses and income incurred in the current year, changes in the claims equalisation provision also have a significant influence on the level of profits.

The claims equalisation provision is established for individual classes of property-casualty business. It serves to smooth significant fluctuations in loss experience over a number of years. Its recognition and measurement are largely governed by legal provisions.

If, in a given financial year, loss ratios in individual classes of business are significantly in excess of the long-term average (which amounts to 15 years in most classes), the claims equalisation provision is reduced and the above-average loss expenditure is largely offset. According to current calculations, it is expected that – given normal claims expenditure – higher amounts will have to be allocated to the claims equalisation provision in the 2018 financial year.

The target or maximum amount allowed for the claims equalisation provision, which is essentially calculated on the basis of earned premiums and the standard deviation of the loss ratio in the respective class of insurance, determines the amount of the annual non-performance-related allocation to the claims equalisation provision. The performance-related change in the claims equalisation provision is added to this figure in years in which claims experience is favourable (i.e. when the random occurrence of claims is below average), whereas amounts are withdrawn in years in which claims experience is adverse (i.e. the random occurrence of claims is above average).

The balance sheet item "claims equalisation provision and similar provisions" was down by €2,382m to €8,263m (10,645m) in the 2017 financial year. Owing to the negative results, we had to withdraw significant amounts from the claims equalisation provision in some classes of business – especially in fire –€1,419m (–116m) and liability –€258m (+209m), as well as in engineering –€127m (–18m), credit –€100m (–48m) and marine –€92m (–35m). In addition, the prerequisites for establishing a claims equalisation provision no longer existed in the aviation class of business, so the entire amount of –€720m (–37m) was withdrawn.

In contrast, the claims equalisation provision was increased in some classes of business owing to positive business performance: by €166m (82m) in accident, €72m (259m) in all other classes, and €77m (66m) in motor.

The current level of the claims equalisation provision is 100% of the legally stipulated maximum amount in the motor and marine classes of business, and more than 50% in fire, liability, credit, and accident.

Liquidity

Our liquidity is ensured at all times by means of detailed liquidity planning. As a rule, the Company generates significant liquidity from its premium income, from regular investment income and from investments that mature. We also attach great importance to the credit rating and fungibility of our investments. Given the maturity structure of the outstanding bonds and the credit facilities employed (which are, in any case, relatively insignificant in scope), there are no refinancing requirements.

Statement of Corporate Governance for the 2017 financial year pursuant to Section 289f and Section 315d of the German Commercial Code (HGB)

Munich Reinsurance Company has submitted the Statement of Corporate Governance in accordance with Section 289f of the Commercial Code (HGB), and the Group Statement of Corporate Governance in accordance with Section 315d HGB. The Statements have been combined and can be found at www.munichre.com/cg-en.

Further information

Risks and opportunities

The business performance of Munich Reinsurance Company is largely subject to the same risks and opportunities as the performance of the reinsurance field of business presented in the consolidated financial statements. Munich Reinsurance Company generally participates in the risks of its shareholdings and subsidiaries in accordance with its respective percentage interest held. Munich Reinsurance Company is integrated in the Group-wide risk management system and internal control system of the Group. Further information is provided in the risk report on page 68 ff. and in the opportunities report on page 77 ff.

Remuneration report of Munich Reinsurance Company

The principles regarding the structure and design of the compensation system of Munich Reinsurance Company correspond to those of the Group. The remuneration report can be found on page 27 ff.

Other information

On 31 December 2017, Munich Reinsurance Company had 4,119 employees.

Munich Reinsurance Company has branches in Australia, China, France, the United Kingdom, Hong Kong, India, Italy, Japan, Canada, Malaysia, New Zealand, Singapore, Spain and South Korea.

Prospects

The projections by Munich Reinsurance Company about the future development of its business are essentially subject to the same influences as the reinsurance life and health and reinsurance property-casualty segments presented in the consolidated financial statements. You will find this information on page 79 f.

Against this background, and after making allowance for the effects of intra-Group retrocession, Munich Reinsurance Company should post gross premium of around €22bn in the 2018 financial year – assuming that exchange rates remain constant. We expect the combined ratio to be around 99% of net earned premiums. An accurate forecast is not possible, partly due to the obvious fluctuations in the incidence of major losses. Assuming average claims experience, we project that the technical result before claims equalisation provision for the 2018 financial year will be significantly better than in the year under review.

The investment result of Munich Reinsurance Company is expected to decrease in the 2018 financial year. This applies in particular to regular income, which is also attributable to income from affiliated companies and shares in investment funds. As things stand at present, we expect to achieve an adequate German GAAP result in 2018, although it is likely to be lower than in the year under review owing to the allocation to the claims equalisation provision.

Consolidated financial statements and notes

3

Consolidated balance sheet as at 31 December 2017[1]

Assets

	Notes			31.12.2017	Prev. year		Change
		€m	€m	€m	€m	€m	%
A. Intangible assets							
I. Goodwill	(1)		2,584		2,817	-233	-8.3
II. Other intangible assets	(2)		1,105		1,303	-198	-15.2
				3,689	**4,120**	**-431**	**-10.5**
B. Investments							
I. Land and buildings, including buildings on third-party land	(3)		5,121		4,444	677	15.2
II. Investments in affiliated companies, associates and joint ventures	(5)		2,216		1,711	505	29.5
Thereof: Associates and joint ventures accounted for using the equity method			2,010		1,565	445	28.5
III. Loans	(6)		54,702		54,684	17	0.0
IV. Other securities							
1. Available for sale	(7)	143,845			149,059	-5,215	-3.5
2. At fair value through profit or loss	(8)	1,979			2,695	-716	-26.6
			145,824		151,754	-5,930	-3.9
V. Deposits retained on assumed reinsurance	(9)		5,690		5,240	450	8.6
VI. Other investments	(10)		4,009		3,918	90	2.3
				217,562	**221,752**	**-4,190**	**-1.9**
C. Insurance-related investments	**(8)**			**9,664**	**9,558**	**106**	**1.1**
D. Ceded share of technical provisions	**(11)**			**4,169**	**3,669**	**500**	**13.6**
E. Receivables							
I. Current tax receivables			440		623	-183	-29.4
II. Other receivables	(12)		13,385		11,583	1,802	15.6
				13,825	**12,205**	**1,619**	**13.3**
F. Cash at banks, cheques and cash in hand				**3,625**	**3,353**	**272**	**8.1**
G. Deferred acquisition costs	**(13)**						
Gross			9,563		9,634	-71	-0.7
Ceded share			-135		-95	-40	-42.0
Net				9,428	9,539	-111	-1.2
H. Deferred tax assets	**(14)**			**534**	**328**	**206**	**62.9**
I. Other assets	**(15)**			**3,107**	**3,280**	**-172**	**-5.3**
J. Assets held for sale	**(16)**			**118**	**0**	**118**	**-**
Total assets				**265,722**	**267,805**	**-2,083**	**-0.8**

1 Previous year's figures adjusted owing to IAS 8; see "Changes in accounting policies and other adjustments".

Equity and liabilities

	Notes		31.12.2017	Prev. year		Change
		€m	€m	€m	€m	%
A. Equity	**(17)**					
I. Issued capital and capital reserve		7,418		7,417	1	0.0
II. Retained earnings		15,036		14,890	146	1.0
III. Other reserves		5,183		6,628	-1,445	-21.8
IV. Consolidated result attributable to Munich Reinsurance Company equity holders		375		2,580	-2,205	-85.5
V. Non-controlling interests		186		269	-83	-30.8
			28,198	**31,785**	**-3,586**	**-11.3**
B. Subordinated liabilities	**(19)**		**2,790**	**4,218**	**-1,428**	**-33.8**
C. Gross technical provisions						
I. Unearned premiums	(20)	8,857		8,984	-127	-1.4
II. Provision for future policy benefits	(21)	108,956		108,108	847	0.8
III. Provision for outstanding claims	(22)	63,965		61,362	2,603	4.2
IV. Other technical provisions	(23)	19,174		19,026	149	0.8
			200,952	**197,480**	**3,472**	**1.8**
D. Gross technical provisions for unit-linked life insurance	**(24)**		**8,971**	**8,429**	**542**	**6.4**
E. Other provisions	**(25)**		**4,508**	**4,895**	**-387**	**-7.9**
F. Liabilities						
I. Bonds and notes issued	(26)	277		324	-46	-14.2
II. Deposits retained on ceded business	(27)	593		828	-236	-28.4
III. Current tax liabilities		2,439		2,429	10	0.4
IV. Other liabilities	(28)	15,472		15,187	285	1.9
			18,781	**18,768**	**13**	**0.1**
G. Deferred tax liabilities	**(14)**		**1,456**	**2,230**	**-774**	**-34.7**
H. Liabilities related to assets held for sale	**(16)**		**65**	**0**	**65**	**-**
Total equity and liabilities			**265,722**	**267,805**	**-2,083**	**-0.8**

Consolidated income statement for the financial year 2017[1]

Items » Consolidated income statement (XLS, 44 KB)

	Notes			2017	Prev. year		Change
		€m	€m	€m	€m	€m	%
Gross premiums written		**49,115**			**48,851**	**264**	**0.5**
1. Earned premiums	**(30)**						
Gross		48,691			48,664	27	0.1
Ceded share		-1,528			-1,546	18	1.2
Net			47,164		47,118	46	0.1
2. Income from technical interest	**(31)**		**6,376**		**6,390**	**-14**	**-0.2**
3. Expenses for claims and benefits	**(32)**						
Gross		-43,194			-39,167	-4,027	-10.3
Ceded share		1,549			669	879	131.4
Net			-41,645		-38,498	-3,148	-8.2
4. Operating expenses	**(33)**						
Gross		-12,498			-12,655	157	1.2
Ceded share		313			360	-47	-13.2
Net			-12,186		-12,295	109	0.9
5. Technical result (1–4)				**-292**	**2,715**	**-3,007**	**–**
6. Investment result	**(34)**		**7,611**		**7,567**	**44**	**0.6**
Thereof: Income from associates and joint ventures accounted for using the equity method			145		121	24	19.8
7. Insurance-related investment result	**(35)**		**443**		**326**	**117**	**35.8**
8. Other operating income	**(36)**		**778**		**744**	**34**	**4.5**
9. Other operating expenses	**(36)**		**-924**		**-938**	**14**	**1.5**
10. Deduction of income from technical interest			**-6,376**		**-6,390**	**14**	**0.2**
11. Non-technical result (6–10)				**1,533**	**1,310**	**223**	**17.0**
12. Operating result				**1,241**	**4,025**	**-2,784**	**-69.2**
13. Other non-operating result	**(37)**			**-926**	**-437**	**-489**	**-112.0**
14. Impairment losses on goodwill	**(37)**			**-9**	**-28**	**19**	**66.9**
15. Net finance costs	**(37)**			**-211**	**-219**	**8**	**3.4**
16. Taxes on income	**(38)**			**298**	**-760**	**1,058**	**–**
17. Consolidated result				**392**	**2,581**	**-2,189**	**-84.8**
Thereof: Attributable to Munich Reinsurance Company equity holders				375	2,580	-2,205	-85.5
Attributable to non-controlling interests	(17)			17	1	16	>1,000.0
	Notes			€	€	€	%
Earnings per share	**(52)**			**2.44**	**16.13**	**-13.69**	**-84.9**

1 Previous year's figures adjusted owing to IAS 8; see "Changes in accounting policies and other adjustments".

Statement of recognised income and expense for the financial year 2017

€m	2017	Prev. year
Consolidated result	**392**	**2,581**
Currency translation		
Gains (losses) recognised in equity	–1,837	345
Recognised in the consolidated income statement	0	0
Unrealised gains and losses on investments		
Gains (losses) recognised in equity	970	1,394
Recognised in the consolidated income statement	–610	–1,129
Change resulting from equity method measurement		
Gains (losses) recognised in equity	–20	12
Recognised in the consolidated income statement	0	0
Change resulting from cash flow hedges		
Gains (losses) recognised in equity	–1	–1
Recognised in the consolidated income statement	0	0
Other changes	4	0
I. Items where income and expenses recognised directly in equity are reallocated into the consolidated income statement	–1,494	620
Remeasurements of defined benefit plans	–36	–76
Other changes	0	0
II. Items where income and expenses recognised directly in equity are not reallocated to the consolidated income statement	–36	–76
Income and expense recognised directly in equity (I + II)	**–1,530**	**544**
Total recognised income and expense	**–1,138**	**3,125**
Thereof: Attributable to Munich Reinsurance Company equity holders	–1,146	3,133
Attributable to non-controlling interests	9	–8

Group statement of changes in equity for the financial year 2017

€m	Issued capital	Capital reserve
Balance at 31.12.2015	**573**	**6,845**
Allocation to retained earnings	0	0
Consolidated result	0	0
Income and expense recognised directly in equity	0	0
Currency translation	0	0
Unrealised gains and losses on investments	0	0
Change resulting from valuation at equity method measurement	0	0
Change resulting from cash flow hedges	0	0
Remeasurements of defined benefit plans	0	0
Other changes	0	0
Total recognised income and expense	0	0
Change in shareholdings in subsidiaries	0	0
Change in consolidated group	0	0
Dividend	0	0
Purchase/sale of own shares	–21	0
Retirement of own shares	20	0
Balance at 31.12.2016	**573**	**6,845**
Allocation to retained earnings	0	0
Consolidated result	0	0
Income and expense recognised directly in equity	0	0
Currency translation	0	0
Unrealised gains and losses on investments	0	0
Change resulting from valuation at equity method measurement	0	0
Change resulting from cash flow hedges	0	0
Remeasurements of defined benefit plans	0	0
Other changes	0	0
Total recognised income and expense	0	0
Change in shareholdings in subsidiaries	0	0
Change in consolidated group	0	0
Dividend	0	0
Purchase/sale of own shares	–21	0
Retirement of own shares	22	0
Balance at 31.12.2017	**573**	**6,845**

Equity attributable to Munich Reinsurance Company equity holders						Non-controlling interests	Total equity
Retained earnings		Other reserves			Consolidated result		
Retained earnings before deduction of own shares	Treasury shares	Unrealised gains and losses	Currency translation reserve	Remeasurement gains/losses from cash flow hedges			
14,793	**–683**	**4,185**	**1,848**	**–1**	**3,107**	**298**	**30,966**
1,778	0	0	0	0	–1,778	0	0
0	0	0	0	0	2,580	1	2,581
–44	0	256	347	–7	0	–9	544
0	0	0	347	0	0	–3	345
0	0	268	0	0	0	–2	265
29	0	–12	0	–6	0	0	12
0	0	0	0	–1	0	0	–1
–72	0	0	0	0	0	–4	–76
0	0	0	0	0	0	0	0
–44	0	256	347	–7	2,580	–8	3,125
15	0	0	0	0	0	–19	–4
0	0	0	0	0	0	0	0
0	0	0	0	0	–1,329	–2	–1,330
0	–949	0	0	0	0	0	–971
–999	979	0	0	0	0	0	0
15,544	**–654**	**4,441**	**2,195**	**–8**	**2,580**	**269**	**31,785**
1,247	0	0	0	0	–1,247	0	0
0	0	0	0	0	375	17	392
–76	0	370	–1,831	16	0	–8	–1,530
0	0	0	–1,831	0	0	–7	–1,837
0	0	366	0	0	0	–6	360
–41	0	4	0	16	0	0	–20
0	0	0	0	–1	0	0	–1
–37	0	0	0	0	0	1	–36
1	0	0	0	0	0	3	4
–76	0	370	–1,831	16	375	9	–1,138
–9	0	0	0	0	0	–87	–97
0	0	0	0	0	0	0	0
0	0	0	0	0	–1,333	–4	–1,338
0	–994	0	0	0	0	0	–1,015
–1,002	980	0	0	0	0	0	0
15,703	**–668**	**4,811**	**365**	**7**	**375**	**186**	**28,198**

Consolidated cash flow statement for the financial year 2017

€m	2017	Prev. year
Consolidated result	**392**	**2,581**
Net change in technical provisions	6,003	2,783
Change in deferred acquisition costs	107	–203
Change in deposits retained and accounts receivable and payable	–1,580	90
Change in other receivables and liabilities	–1,544	–571
Gains and losses on the disposal of investments and insurance-related investments	–2,134	–2,029
Change in securities at fair value through profit or loss	300	–920
Change in other balance sheet items	–286	737
Other non-cash income and expenses	575	508
I. Cash flows from operating activities	1,833	2,975
Change from losing control of consolidated subsidiaries	9	235
Change from obtaining control of consolidated subsidiaries	–48	–397
Change from the acquisition, sale and maturity of investments and insurance-related investments	2,142	–1,043
Change from the acquisition and sale of investments for unit-linked life insurance contracts	99	–8
Other	124	86
II. Cash flows from investing activities	2,326	–1,127
Inflows from increases in capital and from non-controlling interests	0	0
Outflows to ownership interests and non-controlling interests	–1,034	–974
Dividend payments	–1,338	–1,330
Change from other financing activities	–1,382	–227
III. Cash flows from financing activities	–3,754	–2,531
Cash flows for the financial year (I + II + III)[1]	**405**	**–683**
Effect of exchange-rate changes on cash and cash equivalents	–130	–5
Cash at the beginning of the financial year	3,353	4,041
Cash at the end of the financial year	3,628	3,353
Thereof:		
Cash not attributable to disposal group[2]	3,625	3,353
Cash attributable to disposal group	3	0
Restricted cash	45	10
Additional information		
Income tax paid (net) – included in the cash inflows from operating activities	–225	–231
Dividends received	638	594
Interest received	5,236	5,533
Interest paid	–362	–359

1 Cash mainly comprises cash at banks.
2 For a definition of the disposal group, see Assets – J Assets held for sale.

Notes to the consolidated financial statements

Application of International Financial Reporting Standards (IFRSs)

Munich Re's consolidated financial statements have been prepared on the basis of the International Financial Reporting Standards (IFRSs), as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315a 1) of the German Commercial Code (HGB).

In accordance with the provisions of IFRS 4, Insurance contracts, underwriting items are recognised and measured on the basis of US GAAP (United States Generally Accepted Accounting Principles) at first-time adoption of IFRS 4 on 1 January 2005.

Declaration of Conformity with the German Corporate Governance Code in accordance with Section 161 of the German Stock Corporation Act (AktG)

In November 2017, the Board of Management and Supervisory Board of Munich Reinsurance Company published an updated Declaration of Conformity with the German Corporate Governance Code in accordance with Section 161 of the German Stock Corporation Act (AktG), and made this Declaration permanently available to shareholders on the internet at www.munichre.com/cg-en.

Recognition and measurement

Use of judgements and estimates in recognition and measurement

In preparing the consolidated financial statements, we have to use our judgement in applying accounting policies and to make estimates and assumptions that affect the year-end items shown in the consolidated balance sheet, the consolidated income statement and the disclosures on contingent liabilities.

Particularly in primary insurance and reinsurance, the use of estimates for measuring technical provisions is of substantial significance, given that measurement is invariably based on models, and the development of future cash flows from insurance contracts cannot be conclusively predicted. But judgements and estimates play a significant role in the case of other items as well.

Our internal processes are geared to determining amounts as accurately as possible, taking into account all the relevant information. The basis for determining amounts is management's best knowledge regarding the items concerned at the reporting date. Nevertheless, it is in the nature of these items that estimates may have to be adjusted in the course of time to take account of new knowledge.

Discretionary judgements and estimates are of significance for the following items in particular and are described in more detail in the respective explanatory notes:

- Consolidated group
- Goodwill and other intangible assets
- Fair values and impairments of financial instruments
- Deferred acquisition costs
- Technical provisions
- Provisions for post-employment benefits
- Deferred tax
- Contingent liabilities

Presentation currency and rounding of figures

Our presentation currency is the euro (€). Amounts are rounded to million euros. Due to rounding, there may be minor deviations in summations and in the calculation of percentages, with figures in brackets referring to the previous year. Expenses, outflows and losses are shown using the minus sign; income and inflows are shown without a plus or minus sign.

Figures for previous years

Retrospective adjustments have been made to the figures from the consolidated balance sheet for the financial years 2015 and 2016, the consolidated income statement, and the relevant items of the notes to the consolidated financial statements for the year 2016 (see section "Changes in accounting policies and other adjustments"). The other previous-year figures have been calculated on the same basis as the figures for the financial year 2017.

Changes in accounting policies and other adjustments

Application of the recognition, measurement and disclosure methods follows the principle of consistency.

In the 2017 financial year, the following amended IFRSs had to be applied for the first time, after having been adopted into European law.

- Amendments to IAS 7 (rev. 1/2016), Disclosure Initiative
- Amendments to IAS 12 (rev. 1/2016), Recognition of Deferred Tax Assets for Unrealised Losses
- Amendments published as part of the "Annual Improvements to IFRSs 2014–2016 Cycle", (12/2016) Amendments to IFRS 12, Disclosure of Interests in Other Entities.

The aim of the amendment to IAS 7 is to enable users of financial statements to better assess changes in liabilities from financing activities. This includes cash and non-cash transactions. To implement this requirement, a reconciliation of the development of these figures in the financial year is provided in the notes to the consolidated balance sheet – Equity and liabilities (29) Liabilities from financing activities.

The other amendments have little or no material effects on Munich Re.

In addition, in September 2017 the IASB published a second Practice Statement "Making Materiality Judgements". The document provides entities with guidance on whether information is of decision-making relevance for users of financial statements and therefore requires disclosure. It is not an IFRS and is therefore non-mandatory. However, entities have been permitted to take the Practice Standard into consideration since the date it was published. Munich Re will make use of this option if the guidance in the Practice Statement is useful for our decision-making.

As part of the regular review of the calculation methods for income from technical interest, changes have been made with regard to German health primary insurance, with the aim of improving its informational value. The calculation of the income from technical interest now no longer defines technical result components in the allocation to the provision for premium refunds. This change has been made retroactively in accordance with IAS 8.14.

Interest receivables not due have been shown in the past under "other receivables". They are now allocated to the various items of the underlying, interest-bearing financial instruments. The respective items have been adjusted accordingly. This change has been made retroactively in accordance with IAS 1.41 to be consistent with disclosure practices used in the banking sector, in particular.

The adjustments had the following effects on the consolidated balance sheets for the 2015 and 2016 financial years, and on the consolidated income statement for 2016:

Consolidated balance sheet

€m	31.12.2015 as originally recognised	Changes due to adjustments in 2015	31.12.2015
Assets			
B. Investments			
III. Loans	53,516	1,038	54,555
IV. Other securities	144,094	1,348	145,442
1. Available for sale	141,543	1,324	142,867
2. At fair value through profit or loss	2,551	24	2,574
VI. Other investments	4,635	108	4,742
E. Receivables			
II. Other receivables	11,823	–2,494	9,328

Consolidated balance sheet

€m	31.12.2016 as originally recognised	Changes due to adjustments in 2016	31.12.2016
Assets			
B. Investments			
III. Loans	53,691	993	54,684
IV. Other securities	150,515	1,239	151,754
1. Available for sale	147,843	1,216	149,059
2. At fair value through profit or loss	2,672	23	2,695
VI. Other investments	3,814	104	3,918
E. Receivables			
II. Other receivables	13,919	–2,337	11,583

Consolidated income statement

€m	2016 as originally recognised	Changes due to adjustments in 2016	2016
2. Income from technical interest	6,490	−100	6,390
5. Technical result	2,815	−100	2,715
10. Deduction of income from technical interest	−6,490	100	−6,390
11. Non-technical result	1,210	100	1,310

Standards or changes in standards not yet entered into force

Unless otherwise stated, all standards or amendments to standards that have entered into force will be applied by Munich Re for the first time as from the mandatory effective date for entities with their registered office in the European Union. The relevant dates for the mandatory first-time application are shown in the following list of new standards.

IFRS 9 (7/2014), Financial Instruments, replaces IAS 39 as regards the requirements relating to recognition and measurement of financial instruments. Under this revision, in future financial assets will be categorised on the basis of contractual cash flow characteristics and the business model to which the asset is allocated. Accordingly, subsequent measurement is made at amortised cost, at fair value without impact on profit or loss, or at fair value through profit or loss.

For financial liabilities, there are no changes in the measurement rules except that if the fair value option is applied, value changes attributable to a change in the entity's credit risk must in future be recognised without impact on profit or loss.

IFRS 9 envisages an expected loss model for recognising impairments, by which – unlike under the current incurred loss model of IAS 39 – expected losses are anticipated before they arise and must be accounted for in the balance sheet as an expense. There is to be only one model for recognising impairments that is to be used for all financial assets falling under the impairment rules of IFRS 9.

Hedge accounting under IFRS 9 focuses more strongly on the entity's risk management activities than was the case under the current rules of IAS 39.

The provisions of IFRS 9 are associated with extensive additional disclosures required in the appendices that were adopted in IFRS 7, Financial Instruments: Disclosures. The provisions are mandatory for financial years beginning on or after 1 January 2018.

Due to the great importance of this standard for Munich Re, we have established a Group-wide project to analyse the provisions in detail, and we are currently driving forward the required implementation processes.

In October 2017, the IASB issued an amendment to IFRS 9 (rev. 10/2017), Prepayment Features with Negative Compensation. This amendment clarifies how certain financial instruments with prepayment features are to be classified and therefore measured under IFRS 9. This amendment is to be applied from 2019 onwards and will be taken into consideration by Munich Re as part of its overall IFRS 9 project. The amendment has not yet been adopted into European law.

IFRS 17, Insurance Contracts, which reorganises the recognition and measurement of insurance contracts, was published in May 2017; please refer to the separate remarks on this topic below. These new rules will not be mandatory until 2021. Due to the close interlinking of underwriting liabilities and investments of insurance companies, it is essential to have an aligned measurement of these line items in the balance sheet in order to prevent balance sheet distortions. For this reason, the insurance industry has been pressing for a postponement of the mandatory first application of IFRS 9 for the industry until application can be aligned with the insurance standard. The IASB took account of these concerns, and published an amendment standard to IFRS 4, Insurance Contracts, in September 2016. This gives the possibility of postponing the first-time application of IFRS 9 until 2021, but requires evidence on the basis of the financial statements as at 31 December 2015 that most of the Group's activity is in insurance. Insurance business is considered "predominant" if at the time of measurement more than 90% of total liabilities were related to insurance business. Besides liabilities that fall within the scope of IFRS 4, these also include liabilities from investment contracts measured at fair value and other liabilities resulting from insurance business. At Munich Re, liabilities related to insurance business accounted for a share of around 96.5% of total liabilities as at 31 December 2015. In the meantime, there have been no changes to our business activities that would necessitate a reassessment. In the interim period, additional qualitative and quantitative investment disclosures will have to be made from 2018 onwards in order to ensure a degree of comparability with companies that ware already applying IFRS 9. This involves in particular the disclosure of fair values and their changes during the financial year with respect to financial assets, which must be separated into assets measured at fair value through profit or loss and assets where this is not the case. The entity also needs to provide transparency as to how it proved that it is qualified to postpone the first-time application of IFRS 9. Munich Re will make use of this option, and will thus publish information about the effects of IFRS 9 from 2018 onwards.

IFRS 15 (05/2014), Revenue from Contracts with Customers, governs the time and amount of revenue to be recognised by an entity. As the recognition of revenue from insurance contracts and financial instruments does not fall within the scope of the new standard, it is not material for the accounting of our core business. The amount of revenue to be recognised in accordance with IFRS 15 in relation to gross premiums written is likely to amount to around 1%. For this reason, and due to the fact that there are no significant deviations from our existing accounting rules in the few cases in which IFRS 15 applies to Munich Re, the implementation of this standard is not expected have any material effects. Such cases of application at Munich Re mainly involve technical engineering and inspection services, assistance services, investment management services and services in connection with the provision of insurance-related software.

An amendment to IFRS 15, Clarifications to IFRS 15, was already issued in April 2016, but it has no material effects on Munich Re. Overall, the standard is mandatory for financial years beginning on or after 1 January 2018. Owing to new rules about unbundling certain components from insurance contracts under IFRS 17, the effects of IFRS 15 will have to be re-evaluated when the new standard on recognition and measurement of insurance contracts is introduced. These analyses are an integral part of the comprehensive project to implement IFRS 17.

IFRS 16 (01/2016), Leases, mainly involves a revision of the accounting rules for lessees. IFRS 16 introduces universal accounting rules, according to which leases must be reported on the lessee's balance sheet. In future, lessees will be obliged to recognise the right of use of the underlying asset as a right-of-use asset in their balance sheets. The lessee must recognise a lease liability reflecting the obligation to pay leasing instalments. Accounting rules for the lessor remain largely unchanged.

Based on an initial analysis, we expect that assets and liabilities from operating leases will have to be recognised for property, office premises and equipment, and the vehicle fleet. Previous leasing expenditure will continue to be recognised by means of an amortisation expense for rights of use and interest expenses for the liabilities.

Munich Re will take advantage of the exceptions permitted for current assets and leases for low-value assets, according to which recognition in the balance sheet is not required. On transitioning to IFRS 16, we intend to continue to apply the exception regarding maintenance of the definition of leasing. IFRS 16 will therefore be applied to all contracts concluded prior to 1 January 2019 and identified as leases in accordance with IAS 17, Leases, and IFRIC 4, Determining whether an Arrangement Contains a Lease.

IFRS 16 is mandatory for financial years beginning on or after 1 January 2019.

As at 31 December 2017, future minimum lease payments under non-cancellable operating leases (on a non-discounted basis) totalled €409m (see Other information (50) Leasing. In general, we do not expect the new rules to have any material effects on the consolidated financial statements of Munich Re.

In **IFRS 17 (5/2017), Insurance Contracts**, the IASB has for the first time published a standard that governs the recognition, measurement and disclosure of insurance contracts in a comprehensive manner; the rules require extensive disclosures in the notes to the consolidated financial statements. The new standard will replace IFRS 4, Insurance Contracts.

IFRS 17 is applicable to all primary insurance contracts, to reinsurance assumed and ceded, and to investment contracts with a discretionary participation in surplus. The valuation rules are mainly based on a "building block approach", which is made up of a fulfilment value (discounted expected future cash flows and an explicit risk margin) and a contractual service margin. Under certain conditions, a simplified measurement approach is permitted for short-term contracts. The general measurement model in adjusted form is to be applied to primary insurance contracts with a discretionary participation in surplus and to ceded reinsurance, in order to take account of the special features of this business.

Measurement is not made at the individual contract level, but on the basis of portfolios that are subdivided into specified groups. This should largely take account of all cash flows resulting from the conclusion of insurance contracts, which by implication means that certain items currently shown separately in our financial statements will not be included in future.

Another new feature is the clearly stipulated differentiation in the income statement between the technical result – which is precisely defined in IFRS 17 and comprises insurance revenue and insurance service expenses – and insurance finance income or expenses. Insurance revenue is defined in order to allow for comparability with the revenues of other industries. In particular, savings premiums ("deposit components") may no longer be recognised as result components. The new definition will thus require a fundamental rethink of the way we disclose revenue, which currently includes all premium components. IFRS 17 contains an option regarding the recognition of changes in value because of amendments to financial parameters. The option allows for recognition either in the income statement or directly in equity. It can be exercised at individual portfolio level.

The new rules require detailed reconciliations to be disclosed for changes to individual measurement components, as under IFRS 17 the measurement of insurance business is made on the basis of models that include unobservable inputs. Notes about the risks from insurance contracts will remain largely unchanged.

IFRS 17 will involve fundamental changes to the accounting for insurance contracts and related processes. As the required changes will involve a considerable amount of work, we have started to analyse them in great detail. In a parallel implementation project that has also already been set up, all important areas of our reinsurance and primary insurance Group are involved from the outset in order to ensure at an early stage that all special aspects of the individual insurance lines of business are taken into account.

IFRS 9, IFRS 15 and IFRS 16 were adopted into European law in September 2016 and October 2017 respectively. The endorsement of IFRS 17 is still outstanding.

The IASB has also published amendments to the following standards, which – with the exception of IFRS 2 and the "Annual Improvement to IFRSs 2014–2016" – have not yet been adopted into European law.

- Amendments to IFRS 10 and IAS 28 (rev. 9/2014), Sale or Contribution of Assets between an Investor and its Associate or Joint Venture
- Amendments to IFRS 2 (rev. 6/2016), Classification and Measurement of Share-based Payment Transactions
- Amendments to IAS 40 (rev. 12/2016), Transfers of Investment Property
- Amendments published as part of the "Annual Improvements to IFRSs 2014–2016 Cycle", (rev. 12/2016) Amendments to IFRS1, First-time Adoption of IFRS, and IAS 28, Sale or Contribution of Assets between an Investor and its Associate or Joint Venture
- Amendments to IAS 28 (rev. 10/2017), Long-term Interests in Associates and Joint Ventures
- Amendments published as part of the "Annual Improvements to IFRSs 2015–2017 Cycle", (12/2017):
- Amendments to IAS 12, Income Taxes; IAS 23, Borrowing Costs; IFRS 3, Business Combinations; and IFRS 11, Joint Arrangements
- IFRIC 22 (12/2016), Foreign Currency Transactions and Advance Consideration
- IFRIC 23 (6/2017), Uncertainty over Income Tax Treatments

The amendments will become mandatory in 2018 or 2019, but have little or no material effects on Munich Re.

Consolidation

Consolidated group

The consolidated financial statements include Munich Reinsurance Company and all the entities over which Munich Reinsurance Company directly or indirectly exercises control (subsidiaries).

Munich Reinsurance Company directly or indirectly holds all, or a clear majority of, the voting rights in most of the entities included in the consolidated group.

We include a small number of entities in the consolidated group on the basis that contractual rights are taken into consideration that result in determination of control over the relevant business activities. In assessing the need to consolidate shares in investment funds, we take particular account of the degree of variability in the remuneration of the fund manager, of dismissal rights, and of the role of the investors in committees and bodies of the investment fund. As a result, an assessment that we do exercise control sometimes occurs even though the shareholding is below 50%.

In assessing whether control exists for structured entities, we focus our analysis on the decisions still to be made within the corresponding unit and on the agency relationships between the parties. For structured entities used by us to issue catastrophe bonds, we focus above all on our relationship to the trustees and our possibilities to influence their decision-making. Generally, we do not control such structured entities, even if we hold their bonds.

A list of all our shareholdings can be found in the section "List of shareholdings as at 31 December 2017 in accordance with Section 313(2) of the German Commercial Code (HGB)".

Cash flows and net assets from obtaining and losing control of consolidated subsidiaries or other operations are shown in the tables:

Cash flows arising from obtaining control

€m	2017	Prev. year
Total consideration for obtaining control	–100	–428
Non-cash consideration for obtaining control	0	0
Cash consideration for obtaining control	**–100**	**–428**
Cash over which control was obtained	52	32
Total	**–48**	**–397**

Net assets acquired

€m	31.12.2017	Prev. year
Goodwill/gain from bargain purchase	–2	9
Other intangible assets	4	289
Investments	871	795
Cash	52	32
Other assets	48	189
Technical provisions (net)	–1	–723
Other liabilities	–375	–167
Total	**598**	**423**

Cash flows arising from losing control

€m	2017	Prev. year
Total consideration for losing control	9	294
Non-cash consideration for losing control	0	0
Cash consideration for losing control	**9**	**294**
Cash over which control was lost	0	–59
Total	**9**	**235**

Net assets disposed of

€m	31.12.2017	Prev. year
Goodwill	0	0
Other intangible assets	0	–2
Investments	0	–5,045
Cash	0	–59
Other assets	–2	–371
Technical provisions (net)	0	3,157
Other liabilities	0	1,801
Total	**–2**	**–520**

Business combinations occurring during the reporting period

On 1 January 2017, via its subsidiary MR RENT-Investment GmbH, Munich, Munich Re acquired 100% of the voting shares in the wind park company Eolus Vindpark Tolv AB, Hässleholm, Sweden, from Eolus Vindpark Elva AB, Hässleholm, Sweden. Eolus Vindpark Tolv AB was renamed Wind Farm Iglasjön AB immediately after the acquisition, and owns wind power plants with a total installed capacity of 26.4 megawatts. The acquisition is part of our infrastructure investment strategy.

On 20 June 2017, Munich Re acquired an additional 10.6% of the shares in the special fund MEAG European Prime Opportunities (MEAG Euro Pro) for a total payment in cash of €58.6m. This raised Munich Re's holding to a total of 54.8%, thus giving it control of the fund. The acquisition was made via the subsidiaries ERGO Lebensversicherung Aktiengesellschaft, Hamburg, DKV Deutsche Krankenversicherung Aktiengesellschaft, Cologne, ERGO Versicherung Aktiengesellschaft, Düsseldorf, ERGO Pensionskasse AG, Düsseldorf, ERGO DIREKT Lebensversicherung AG, Fürth, and Vorsorge Lebensversicherung Aktiengesellschaft, Düsseldorf. The investment focus of MEAG Euro Pro is high-value, long-term let office buildings, mainly in cities in western Europe. The investment in MEAG Euro Pro was made via direct investment and participations. The acquisition boosts the Group's investment property portfolio. The fair value of Munich Re's equity in MEAG Euro Pro immediately prior to the acquisition was €244.5m. The remeasurement of this share resulted in a realised profit of €1.4m, which was recognised in investment income as a gain from the disposal of available-for-sale securities. For the period between 20 June and the balance sheet date, the consolidated income statement includes income and expenses of MEAG Euro Pro. Investment income of €24.6m was recognised. The contribution to the consolidated result was €8.4m. If the business combination had already been complete on 1 January 2017, MEAG Euro Pro would have contributed investment income of €43.9m and a result of €14.0m to the consolidated result.

The fair values of the assets and liabilities at the time of acquisition are as follows:

Fair values of the assets and liabilities at the acquisition date

€m	
Purchase price	**59**
Assets acquired	**930**
Property	661
Other investments	169
Cash at bank, cheques and cash in hand	52
Other assets[1]	48
Liabilities assumed	**376**
Other liabilities	325
Other liability items	51
Contingent liabilities recognised pursuant to IFRS 3.23	0

1 The fair value of the receivables acquired as part of the transaction largely corresponds to the carrying amount. No material defaults were expected at the acquisition date.

On 30 June 2017, Munich Re acquired 100% of the voting shares in Allianz Life and Annuity Company, Minneapolis, Minnesota, USA, via its subsidiary Munich American Holding Corporation, Wilmington, Delaware, USA. After the acquisition, Allianz Life and Annuity Company was renamed Munich Re US Life Corporation. The company offers life and pension insurance, and is licensed in 46 US states and in the District of Columbia. The acquisition expands Munich Re's capabilities in the structuring of life reinsurance in the USA.

Associates and joint ventures

Entities and special funds are considered associates if we are able to significantly influence their financial and operating policies. We regularly operate on this assumption if we hold between 20% and 50% of the voting power or similar rights, unless the financial and operating policies of the entity or special fund are largely pre-determined.

Entities and special funds are considered joint ventures if we are able to determine their relevant operations solely by unanimous agreement of all parties entitled to joint control, and we only have rights to their net assets.

Joint operations

A joint operation exists if its relevant operations can only be determined by unanimous agreement of all parties entitled to joint control, and these parties – due to the legal form of the joint operation, contractual provisions or other circumstances – have rights to assets and obligations for the liabilities of the joint operation, instead of rights to net assets.

We recognise our share of assets, liabilities, income and expenses of joint operations in which we have joint control in the balance sheet in accordance with the relevant IFRSs.

Structured entities

Structured entities are entities that have been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when any voting rights relate to administrative tasks only and the relevant business activities are directed by means of contractual arrangements.

Munich Re has interests in both consolidated and unconsolidated structured entities.

Munich Re classifies **unconsolidated structured entities** as either investment funds or securitisation vehicles on the basis of the type of structured entity.

Investment funds As part of its investment activities Munich Re invests in investment funds on its own behalf, and on behalf of policyholders under unit-linked life insurance. Investment funds are mainly financed by issuing redeemable shares or units. Some of the investment funds are managed by MEAG MUNICH ERGO AssetManagement GmbH, others by fund managers outside the Group. We also report under investment funds all investments in infrastructure, forestry, private equity and other investments.

Securitisation vehicles Munich Re invests in debt securities that are issued by securitisation vehicles which are not set up by Munich Re. Munich Re also uses securitisation vehicles to issue catastrophe bonds, and it also invests in third-party catastrophe bonds. Securitisation vehicles are self-financed by issuing securities.

In order to protect its own portfolio, Munich Re uses alternative risk transfer in addition to traditional retrocession. Under this process, underwriting risks are transferred to the capital markets with the assistance of securitisation vehicles.

Munich Re also invests in the area of catastrophe risks. Munich Re invests in various securities whose repayment and interest is generally linked to the occurrence of natural catastrophes. The securities are issued by securitisation vehicles which as a matter of general policy are not set up by Munich Re.

Size of structured entities For investment funds, including investments in infrastructure, forestry, private equity and other investments, and investment funds for policyholders under unit-linked life insurance, the carrying amount gives an indication of the size of the structured entity. For debt securities and the securitisation of underwriting risks, the emission volume (nominal value) is used as an indicator for measuring the size of the structured entity. The size of the funds refers to both the issued volume of the securitisation vehicles set up by Munich Re and that of those securitisation vehicles in which Munich Re has invested.

Maximum exposure to loss With the exception of investment funds for investments for unit-linked life insurance, the maximum exposure to loss is the carrying amount of the respective items on the assets side, and zero for the items on the liabilities side. Therefore, for the items on the assets side, there is usually no difference between the carrying amount of interests in unconsolidated structured entities and the maximum exposure to loss.

Normally, the maximum exposure to loss for investments for unit-linked life insurance is also the carrying amount of the interests. However, the investment is held for the benefit of policyholders who bear the investment risk.

Managed fund assets MEAG MUNICH ERGO Kapitalanlagegesellschaft mbH also manages investment funds for private clients and institutional investors, for which it receives a management fee. The management fees are recognised as an expense in the consolidated income statement.

The maximum exposure to loss relates to the loss of future management fees. Fund management activities generated income of €41m (34m) in the financial year. The value of fund assets under management provides information about the size of the unconsolidated structured entities. As at 31 December 2017, the managed fund assets amounted to €4,239m (3,836m), and Munich Re itself also holds a small interest in these funds.

Sponsored unconsolidated structured entities Munich Re provides structuring and consultancy services for clients within the context of the foundation and structuring of third-party securitisation vehicles. As at 31 December 2017, Munich Re did not have any interests in these structured entities.

Unconsolidated structured entities

€m	Investment funds – Munich Re investments 31.12.2017	Investment funds – Investments for unit-linked life insurance 31.12.2017	Securitisation vehicles – Debt securities 31.12.2017	Securitisation vehicles – Underwriting risks 31.12.2017	Total 31.12.2017
Loans	82	0	0	0	82
Other securities					
Available for sale	3,899	0	2,888	579	7,366
At fair value through profit or loss	0	0	0	4	4
Deposits retained on assumed reinsurance	0	0	0	436	436
Investments for unit-linked life insurance contracts	0	7,346	0	0	7,346
Ceded share of technical provisions	0	0	0	85	85
Assets held for sale	1	0	0	0	1
Total assets	**3,982**	**7,346**	**2,888**	**1,103**	**15,320**
Technical provisions	0	0	0	6	6
Other liabilities	0	0	0	0	0
Total equity and liabilities	**0**	**0**	**0**	**6**	**6**
Size of structured entity	3,982	7,347	122,737	7,647	141,712

Unconsolidated structured entities

€m	Investment funds – Munich Re investments Prev. year	Investment funds – Investments for unit-linked life insurance Prev. year	Securitisation vehicles – Debt securities Prev. year	Securitisation vehicles – Underwriting risks Prev. year	Total Prev. year
Loans	100	0	0	0	100
Other securities					
Available for sale	3,155	0	3,975	555	7,686
At fair value through profit or loss	0	0	0	4	4
Deposits retained on assumed reinsurance	0	0	0	356	356
Investments for unit-linked life insurance contracts	0	6,866	0	0	6,866
Ceded share of technical provisions	0	0	0	0	0
Assets held for sale	0	0	0	0	0
Total assets	**3,255**	**6,866**	**3,975**	**915**	**15,012**
Technical provisions	0	0	0	8	8
Other liabilities	0	0	0	0	0
Total equity and liabilities	**0**	**0**	**0**	**8**	**8**
Size of structured entity	3,255	6,866	168,661	10,132	188,914

Assets

A Intangible assets

Goodwill resulting from the first-time consolidation of subsidiaries is tested for impairment at least annually. We additionally carry out ad-hoc impairment tests if there are indications of impairment. For impairment testing, the goodwill is allocated to the cash-generating units or groups of cash-generating units expected to derive benefit from the synergies of the business combination. To ascertain whether there is any impairment, the carrying amount (including allocated goodwill) of a cash-generating unit or group of cash-generating units is compared with that unit's or group's recoverable amount. The recoverable amount is the greater of the fair value less costs of disposal and the value in use. If this recoverable amount is lower than the carrying amount, a write-down for impairment is made on the goodwill. To determine the recoverable amount, numerous assumptions are required which may lead to significant differences in value. Information on the key assumptions is provided in the Notes to the consolidated balance sheet – Assets (1) Goodwill. Sensitivity analyses of changes to the key assumptions – which we consider realistic – are performed as part of the impairment tests. If as a result of these analyses the recoverable amount has fallen below the carrying amount, this is reported in the above-mentioned note.

The **other intangible assets** mainly comprise acquired insurance portfolios and software inventories.

Acquired insurance portfolios are recognised at their present value on acquisition (PVFP – present value of future profits). This is determined as the present value of expected profits from the portfolio acquired, without consideration of new business and tax effects. The acquired insurance portfolios are amortised in accordance with the realisation of the profits from the insurance portfolios underlying the PVFP calculation. They are regularly tested for impairment using a liability adequacy test as per IFRS 4; see Equity and liabilities C – Gross technical provisions. Write-downs are recognised under operating expenses.

Software assets are carried at cost and are amortised on a straight-line basis over a useful life of three to five years. The depreciations and amortisations are distributed in the consolidated income statement between investment expenses, expenses for claims and benefits, and operating expenses. If it is not possible to allocate impairments to the functional areas, they are shown under "other non-operating result". Impairments or impairment losses reversed are recognised if required.

B Investments

Land and buildings shown under investments comprise property used by third parties and are carried at cost. Maintenance expenses are recognised as an expense. Structural measures equivalent to 5% or more of the historical cost of a building are generally assessed with regard to whether they have to be capitalised. Buildings are depreciated on a straight-line basis in accordance with the component approach, depending on the weighted useful life for their specific building class. The underlying useful lives mainly range between 40 and 55 years. If the recoverable amount of land and buildings falls below their carrying amount, the carrying amount is written down to the recoverable amount.

Investments in affiliated companies, associated companies, associates and joint ventures that are not material for assessing the Group's financial position are generally accounted for at fair value. Changes in the fair value are recognised in "other reserves" under unrealised gains and losses. For the consolidated financial statements, investments in associates and joint ventures are measured using the equity method, i.e. with our share of their equity, and our earnings are included in the investment result. As a rule, the equity and annual result from the most recent individual or consolidated financial statements of the associate or joint venture are used. In the case of financial statements of important associates or joint ventures, appropriate adjustments are made to ensure they conform with Munich Re's accounting policies and exceptional transactions are recognised in the same reporting period.

Loans are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are measured at amortised cost in accordance with the effective interest method. Write-downs for impairments are made in cases where the repayment of a loan can no longer be expected.

Fixed-interest or non-fixed-interest securities available for sale that are not designated as at fair value through profit or loss or recognised under loans are accounted for at fair value, with resulting changes in value recognised in equity with no effect on profit or loss. Unrealised gains or losses are calculated taking into account interest accrued and, after deduction of deferred taxes and the amounts apportionable to policyholders by the life and health insurers on realisation (provision for deferred premium refunds), are recognised directly in equity under "other reserves".

Securities at fair value through profit or loss comprise securities held for trading and securities classified as at fair value through profit or loss. Securities held for trading mainly include all derivative financial instruments with positive fair values which we have acquired to manage and hedge risks but which do not meet the requirements of IAS 39 for hedge accounting. Securities designated as at fair value through profit or loss comprise structured securities and securities designated as at fair value to avoid accounting mismatches.

Deposits retained on assumed reinsurance are receivables from our cedants for cash deposits that have been retained under the terms of reinsurance agreements; they are accounted for at face value.

Other investments mainly include deposits with banks and investments in renewable energy and physical gold, and are accounted for at amortised costs. We apply the effective interest method for deposits with banks. Investments in renewable energies are amortised on a straight-line basis at a rate of at least 4%, but mostly at 5%, over a useful life of 20–25 years. If required, impairment losses or impairment losses reversed follow the annual impairment test. If the recoverable amount of physical gold is lower than the carrying amount, a write-down for impairment is carried out. If higher, the impairment is reversed, with impact on the income statement. The resultant carrying amount may not exceed the acquisition cost.

Repurchase agreements and securities lending

Under repurchase agreements we, as the lender, acquire securities against payment of an amount with the obligation to sell them back to the borrower at a later date. As the risks and rewards from the securities remain with the borrower, the amounts paid are not posted as such in our accounts but are shown as a receivable from the borrower under "other investments, deposits with banks". Interest income from these transactions is recognised in the investment result.

Securities that we lend by way of securities lending continue to be recognised in our balance sheet, as the main risks and rewards remain with Munich Re; securities that we have borrowed are not recognised in the balance sheet. Fees from securities lending are recognised in the investment result.

Recognition of financial instruments

Financial assets are accounted for at the trade date.

Determining fair values

IFRS 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. All investments and other assets and liabilities that are recognised at fair value, and such investments and other items for which a fair value is disclosed solely in the notes, are allocated to one of the fair value hierarchy levels of IFRS 13, which provides for three levels.

The allocation reflects which of the fair values derive from transactions in the market and where valuation is based on models because market transactions are lacking. If market prices are available, these are an objective yardstick for recognition at fair value. If valuation is based on models, there is a certain amount of scope for applying such methods. The greater the number of inputs used that are not observable on the market but are based on internal estimates, the greater the amount of discretionary scope available to Munich Re.

Information on the valuation models and processes can be found in the Notes to the consolidated balance sheet – Assets (4) Hierarchy for the fair value measurement of assets. An internal process ensures that the measurement basis at every reporting date results in the correct allocation to the individual levels of the fair value hierarchy according to IFRS 13.

In the case of Level 1, valuation is based on unadjusted quoted prices in active markets for identical financial assets which Munich Re can refer to at the balance sheet date. If a quoted price in an active market is available, this should always be used. The financial instruments we have allocated to this level mainly comprise equities, equity funds, exchange-traded derivatives, and exchange-traded subordinated liabilities.

Assets allocated to Level 2 are valued using models based on observable market data. If the financial instrument concerned has a fixed contract period, the inputs used for valuation must be observable for the whole of this period. Moreover, we have allocated to this level such assets for which prices are provided by price quoters but for which there is no proof that these were based on actual market transactions. The financial instruments we have allocated to this level mainly comprise bearer bonds and bond funds, borrowers' note loans, covered bonds, subordinated securities, derivatives not traded on the stock market, and physical gas.

For assets allocated to Level 3, we use valuation techniques that are also based on unobservable inputs. This is only permissible insofar as no observable market data is available. The inputs used reflect Munich Re's assumptions regarding the factors which market players would consider in their pricing. We use the best available information for this, including internal company data. The financial instruments allocated to this level of the fair value hierarchy largely comprise land and buildings, real estate funds, funds that mainly invest in theoretically valued instruments, investments in infrastructure and private equity, certain credit structures, and investments in subsidiaries, associates and joint ventures measured at fair value. Insurance-linked derivatives are also allocated to Level 3.

In the case of loans, bank borrowing, liabilities from financial transactions, and bond and note liabilities not traded on an active market, we have decided on a case-by-case basis to which level of the fair value hierarchy to allocate the respective fair values.

Owing to their leverage effect, changes in individual inputs may significantly affect the fair value shown for instruments measured under Level 3. If we make such adjustments in measuring fair value in the individual case, we explain the resultant effects.

Net investment result
The net investment result comprises regular income, income from write-ups, gains and losses on the disposal of investments, other income, write-downs of investments, management expenses, interest charges and other expenses. Regular income and expenses from investments not measured at fair value through profit or loss are calculated in accordance with the effective interest method, i.e. any premiums or discounts are spread over the period of maturity, with impact on profit or loss.

Impairment
At each balance sheet date, we assess whether there is any substantial objective evidence of impairment in a financial asset or group of financial assets. As the recognition of impairments – both on the merits and in terms of amount – is based on discretionary judgement and estimates, we have established a process that guarantees that at every reporting date all investments that might be subject to impairment are identified and tested for impairment. On the basis of these test results, a list of investments will be prepared for which an impairment must be recognised; this list will then be verified once again with the involvement of management.

IAS 39.59 contains a list providing evidence of impairment of financial assets. In addition, IAS 39.61 states that, for equity investments, a significant or prolonged decline in the fair value of the investment below its acquisition cost is objective evidence of impairment. These rules are given more concrete form by means of internal guidelines. For equities quoted on the stock exchange, we assume a significant decline in fair value if the market price at the review date is at least 20% below the average purchase price or has been lower than this amount for at least six months. In the case of fixed-interest securities and loans, the main basis for establishing impairment is an indication of substantial financial difficulty on the part of the issuer, the current market situation or media reports on the issuer.

We determine acquisition cost on the basis of the average purchase price. In the case of an impairment, a write-down is made to the fair value at the balance sheet date and recognised in profit or loss.

C Insurance-related investments

Investments for unit-linked life insurance contracts
Investments for policyholders under unit-linked life insurance are measured at fair value. Unrealised gains or losses from changes in fair value are included in the insurance-related investment result. They are matched by corresponding changes in the technical provisions (see Equity and liabilities D – Gross technical provisions for unit-linked life insurance), which are included in the technical result.

Other insurance-related investments
Other insurance-related investments are not utilised for asset-liability management. They include insurance-linked derivatives, derivatives to hedge variable annuities, weather and commodity derivatives, and physical gas. Insurance-linked derivatives include derivatives embedded in variable annuities, the derivative components of natural catastrophe bonds and from securitisations of mortality and morbidity risks, individually structured insurance-linked derivatives, and derivative components which are separated from their host insurance contract in accounting. Insurance-linked derivatives also include retrocessions in the form of derivatives to hedge insurance risks assumed. Insurance risks are defined as risks which – in a modified form – can also be covered by an insurance contract within the meaning of IFRS 4. Other insurance-related investments are accounted for at fair value, although we recognise changes in value in profit or loss. For physical gas, the fair value is reduced by estimated costs to sell.

Net insurance-related investment result
The composition of the net result from insurance-related investments corresponds to that of the net investment result.

D Ceded share of technical provisions

The share of technical provisions for business ceded by us is determined from the respective technical provisions in accordance with the terms of the reinsurance agreements; see Equity and liabilities – C Gross technical provisions. Appropriate allowance is made for the credit risk.

E Receivables

Current tax receivables are accounted for in accordance with local tax regulations and other receivables at amortised cost. The impairment test of our receivables is performed in a two-stage process, firstly at the level of individual items, and then on the basis of groups of similar receivables. The impairment is recognised as an expense. If, in a subsequent period, the reasons for the impairment cease to apply, the impairment is reversed, with impact on the income statement. The resultant carrying amount may not exceed the original amortised cost.

Current tax receivables comprise current taxes on income of the individual companies, including any interest on taxes, based on their respective national taxation. Other tax receivables are shown under “other receivables”.

F Cash at banks, cheques and cash in hand

Cash and cheques are accounted for at face value.

G Deferred acquisition costs

Deferred acquisition costs comprise commissions and other variable costs directly connected with acquisition or renewal of insurance contracts. In accordance with IFRS 4, we do not use shadow accounting for deferred acquisition costs in life primary insurance. In life business and long-term health primary insurance, acquisition costs are recognised and amortised over the duration of the contracts. In determining the amount of amortisation, we take into account an actuarial interest rate and changes resulting from the disposal or withdrawal of contracts from the portfolio. In property-casualty business, short-term health primary insurance and health reinsurance, the deferred acquisition costs are amortised on a straight-line basis over the average term of the policies, from one to five years.

H Deferred tax assets

Deferred tax assets must be recognised in cases where asset items have to be valued lower, or liability items higher, in the consolidated balance sheet than in the tax accounts of the Group company concerned and these differences will be eliminated at a later date with a corresponding effect on taxable income (temporary differences). Also included are tax assets deriving from tax loss carry-forwards. Deferred tax assets are recognised to the extent that, on the basis of tax result planning, it is sufficiently probable that they will be utilised. As a rule, a five-year forecast period is considered. We take into account the tax rates of the countries concerned and the consolidated company’s respective tax situation; in some cases, for purposes of simplification, we use uniform tax rates for individual circumstances or subsidiaries. Changes in tax rates and tax legislation that have already been adopted by the government at the balance sheet date are taken into account.

Deferred tax assets and liabilities are disclosed on a net basis, provided that they refer to the same taxable entity and tax office. The offsetting is made to the extent possible with respect to the underlying tax receivables and liabilities.

I Other assets

Other assets are generally recognised at amortised cost. Amortisations mainly occur on a straight-line basis, the underlying useful lives amounting to up to 55 years. Where required, impairment losses are recognised or reversed for the Group’s owner-occupied property. These impairment losses and impairment losses reversed are distributed between the functional areas.

J Assets held for sale

Assets held for sale are assets that can be sold in their current condition and whose sale is highly probable. The item may comprise individual assets or groups of assets. We account for assets held for sale at fair value less sales cost, provided the fair value is lower than the carrying amount. They are no longer depreciated. Measurement of financial instruments remains unchanged; the only difference is how they are disclosed.

Equity and liabilities

A Equity

The line item **issued capital and capital reserve** contains the amounts that the equity holders of Munich Reinsurance Company have paid in on shares. The issued capital comprises the subscribed capital less the accounting value of own shares held by Munich Reinsurance Company at the balance sheet date. Retired shares are taken into account in the subscribed capital and retained earnings at their accounting value. The capital reserve contains gains from the sale of own shares by Munich Reinsurance Company.

Under **retained earnings**, we show the profits which consolidated companies have earned and retained since becoming part of Munich Re, and income and expenses resulting from changes in the consolidated group. In addition, the adjustment amount resulting from changes in accounting policies for earlier periods not included in the consolidated financial statements is recognised in the opening balance of the retained earnings for the earliest prior period reported. Retained earnings also include the effects from remeasurement of defined benefit plans. Own shares held by Group companies at the reporting date have been deducted directly from retained earnings.

Other reserves primarily contain unrealised gains and losses resulting from the recognition of other securities available for sale at fair value and from investments in unconsolidated affiliated companies, and in associates and joint ventures that we do not value at equity. These reserves also include unrealised gains and losses from the measurement of associates and joint ventures using the equity method, differences resulting from the currency translation of foreign subsidiaries' figures, and remeasurement gains/losses from the hedging of cash flows.

B Subordinated liabilities

Subordinated liabilities are liabilities which, in the event of liquidation or insolvency, are only satisfied after the claims of other creditors. They are measured at amortised cost in accordance with the effective interest method.

C Gross technical provisions

Technical provisions are shown as gross figures in the balance sheet, i.e. before deduction of the ceded share; see the explanatory remarks on Assets – D Ceded share of technical provisions. The ceded share is calculated and accounted for on the basis of the individual reinsurance agreements. Acquisition costs for insurance contracts are recognised and amortised over the terms of the contracts; see note Assets – G Deferred acquisition costs. The measurement of technical provisions is based on US GAAP FAS 60 (life primary insurance without performance-related participation in surplus, health primary insurance and the bulk of reinsurance treaties), FAS 97 (life primary insurance based on the universal life model, unit-linked life insurance and life reinsurance for assumed business based on FAS 97) and FAS 120 (life primary insurance with performance-related participation in surplus). Credit insurance contracts are accounted for in accordance with the rules of IFRS 4.

Unearned premiums are accrued premiums already written for future risk periods. For primary insurance, these premiums are calculated separately for each insurance policy pro rata temporis; for reinsurance, nominal percentages are used in some cases where the data for a calculation pro rata temporis is not available. The posting of unearned premiums is restricted to short-term underwriting business; i.e. property-casualty business and parts of accident and health business. In the case of long-term business, a provision for future policy benefits is established.

The **provision for future policy benefits** in long-term underwriting business is posted for the actuarially calculated value of obligations arising from policyholders' guaranteed entitlements. As well as life insurance, this concerns portions of health and personal accident insurance, insofar as the business is conducted like life insurance. Measurement is usually based on the prospective method, by determining the difference between the present values of future benefits and future premiums. The actuarial assumptions used for their calculation include, in particular, assumptions relating to mortality, disability and morbidity, as well as assumptions regarding interest-rate development, lapses and costs. These are estimated on a realistic basis at the time the insurance contracts are concluded, and they include adequate provision for adverse deviation to make allowance for the risks of change, error and random fluctuations.

In reinsurance, measurement is carried out partly individually for each risk and partly collectively for reinsured portfolios, using biometric actuarial assumptions based on the tables of the national actuarial associations. These are adjusted for the respective reinsured portfolio, in line with the probabilities observed for the occurrence of an insured event. Discount rates are chosen that reflect the best estimate of expected investment income, less a safety margin. For the major part of the portfolio, these assumptions are fixed at the beginning of the contract and not changed over its duration.

In primary insurance, measurement is generally carried out individually for each risk. For German life primary insurance, biometric actuarial assumptions based on the tables of the German Association of Actuaries (Deutschen Aktuarvereinigung e.V.) are used. We also largely use the tables of the national actuarial associations for the rest of primary insurance business. The actuarial interest rate employed for discounting in life primary insurance is limited by the respective maximum actuarial interest rate prescribed by the supervisory authorities. In health primary insurance, discount rates are chosen that reflect the best estimate of expected investment income, less a safety margin.

The **provision for outstanding claims** is for payment obligations arising from insurance contracts in primary insurance and reinsurance where the size of the claim or the timing of the payment is still uncertain. Part of the provision is for known claims for which individually calculated provisions are posted. Another part is for expenses for claims whose occurrence is not yet known. There are also provisions for claims that are known, but whose extent has turned out to be greater than originally foreseen. All these provisions include expenses for internal and external loss adjustments. The provision for outstanding claims is based on estimates: the actual payments may be higher or lower. The amounts posted are the realistically estimated future amounts to be paid; they are calculated on the basis of past experience and assumptions about future developments (e.g. social, economic or technological factors). Future payment obligations are generally not discounted; exceptions are some provisions for occupational disability pensions and annuities in workers' compensation and other lines of property-casualty business. For determining the provision for outstanding claims, Munich Re uses a range of actuarial projection methods. Where ranges have been calculated, a realistic estimated value for the ultimate loss is determined within these. In applying the statistical methods, we regard large exposures separately.

Other technical provisions mainly include the provision for premium refunds in primary insurance and the provision for profit commission in reinsurance. The former is posted in life and health primary insurance for obligations involving policyholder bonuses and rebates that have not yet been irrevocably allocated to individual contracts at the balance sheet date. These provisions are posted on the basis of national regulations only for German primary insurance business; a retrospective approach is usually taken based on supervisory or individual contract regulations.

Besides this, there are provisions for deferred premium refunds, which are posted for the amounts apportionable to policyholders from the measurement differences between IFRS and local GAAP on the basis of the expected future participation quotas. For unrealised gains and losses on investments available for sale, which are recognised directly in equity (see Assets – B Investments – Fixed-interest or non-fixed-interest securities available for sale), the resultant provision for deferred premium refunds is also posted without impact on profit or loss; otherwise, changes in this provision are recognised in the income statement.

Liability adequacy test

All technical provisions are regularly subjected to a **liability adequacy test in accordance with IFRS 4**. If current experience shows that the provisions posted on the basis of the original assumptions – less the related deferred acquisition costs and the present value of the related premiums – are inadequate to cover the expected future benefits, we adjust the relevant technical provisions with recognition in profit or loss and disclose this under impairment losses in the notes to the consolidated balance sheet; see Notes to the consolidated balance sheet – Assets (2) Other intangible assets, Assets (13) Deferred acquisition costs, and Equity and liabilities (21) Provision for future policy benefits. The appropriateness of unearned premiums and of the provision for outstanding claims is assessed in relation to the realistically estimated future amount to be paid. The appropriateness of the provision for future policy benefits is assessed on the basis of realistic estimates of the actuarial assumptions, the proportional investment result and, for contracts with participation in surplus, future profit sharing.

D Gross technical provisions for unit-linked life insurance

This item encompasses the provision for future policy benefits in life primary insurance where policyholders bear the investment risk themselves (unit-linked life insurance). The value of the provision for future policy benefits essentially corresponds to the fair value of the relevant investments shown under Assets – C Insurance-related investments – Investments for policyholders under unit-linked life insurance contracts. Changes in this provision are fully recognised in the technical result. Insofar as these changes derive from unrealised gains and losses from alterations in the fair values of the related investments, they are matched by opposite changes of the same amount in the insurance-related investment result.

E Other provisions

This item includes **provisions for post-employment benefits and similar obligations**. Under defined contribution plans, the companies pay fixed contributions to an insurer or a pension fund. This fully covers the companies' obligations. Under defined benefit plans, the staff member is promised a particular level of retirement benefit either by the companies or by a pension fund. The companies' contributions needed to finance this are not fixed in advance. If pension obligations are covered by assets held by a legally separate entity (e.g. a fund or a contractual trust agreement in the form of a two-way trust) – assets that may only be used to cover the pension commitments given and are not accessible to creditors – the pension obligations are shown less the amount of these plan assets. If the fair value of the assets exceeds the related outsourced pension commitments, this reimbursement right is recognised under "other receivables".

Pension obligations are recognised in accordance with IAS 19, using the projected unit credit method. The calculation includes not only the pension entitlements and current pensions known on the balance sheet date but also their expected future development. The assumptions for the future development are determined on the basis of the circumstances in the individual countries.

The discount rate applied to the pension obligations is based on the yields for long-term high-quality bonds (e.g. corporate or government bonds).

The **miscellaneous provisions** included in this item are established in the amount of the probable requirement. Such amounts are not discounted if the interest-rate effect is insignificant.

F Liabilities

This item comprises bonds and notes issued, deposits retained on ceded business, current tax liabilities, and other liabilities. Financial liabilities are generally recognised at amortised cost. Derivative financial instruments are recognised at fair value. Details of how the fair value is determined are provided under Assets – B Investments – Determining fair values.

Current tax liabilities comprise current taxes on income and interest on back tax of the individual companies, based on their respective national taxation. Other tax liabilities are shown under "other liabilities".

Tax liabilities for current taxes are posted – without discounting – in accordance with the probable tax payments for the financial year or previous years.

G Deferred tax liabilities

Deferred tax liabilities must be recognised if asset items have to be valued higher, or liabilities items lower, in the consolidated balance sheet than in the tax accounts of the reporting company, and these differences will be eliminated at a later date with a corresponding impact on taxable income (temporary differences); see notes on Assets – H Deferred tax assets.

H Liabilities related to assets held for sale

Liabilities to be transferred together with disposal groups are recognised in this item; see Assets – J Assets held for sale.

Foreign currency translation

Munich Re's presentation currency is the euro (€). The assets of foreign subsidiaries whose national currency is not the euro are translated using the year-end exchange rates, and results using quarterly average exchange rates. Any exchange differences arising in the process are recognised in equity (reserve for currency translation adjustments).

In contrast to this, currency translation differences are largely recognised in profit or loss in our subsidiaries' financial statements, and shown under "other non-operating result".

The following table shows the exchange rates of the most important currencies for our business:

Currency translation rates

	Balance sheet		Income statement				Income statement			
Rate for €1	31.12.2017	Prev. year	Q4 2017	Q3 2017	Q2 2017	Q1 2017	Q4 2016	Q3 2016	Q2 2016	Q1 2016
Australian dollar	1.53525	1.45660	1.53173	1.48829	1.46583	1.40705	1.43939	1.47166	1.51527	1.52774
Canadian dollar	1.50450	1.41445	1.49672	1.47252	1.47958	1.41077	1.43878	1.45589	1.45566	1.51388
Pound sterling	0.88765	0.85360	0.88732	0.89774	0.86022	0.85995	0.86846	0.85033	0.78726	0.77068
Rand	14.86590	14.42370	16.03980	15.48550	14.51670	14.09310	15.00490	15.68870	16.94500	17.43190
Swiss franc	1.17015	1.07200	1.16200	1.13071	1.08353	1.06956	1.07947	1.08880	1.09579	1.09551
US dollar	1.20080	1.05475	1.17758	1.17449	1.10081	1.06557	1.07841	1.11618	1.12926	1.10273
Yen	135.2700	123.0210	132.9370	130.32700	122.3210	121.0950	117.9520	114.2350	121.8700	127.0080
Yuan Renminbi	7.81965	7.32995	7.78802	7.83515	7.55287	7.34193	7.36356	7.44063	7.37878	7.21238

Segment reporting

In accordance with the management approach, the segmentation of our business operations is based on the way in which Munich Re is managed internally.

We have identified five segments to be reported:

- Life and health reinsurance (worldwide life and health reinsurance business)
- Property-casualty reinsurance (global property-casualty reinsurance business)
- ERGO Life and Health Germany (German life and health primary insurance business, German property-casualty direct insurance business, and global travel insurance business)
- ERGO Property-casualty Germany (German property-casualty insurance business, excluding direct business)
- ERGO International: ERGO's primary insurance business outside Germany

The Munich Health field of business was disbanded on 1 February 2017. The reinsurance part of Munich Health was merged with the life reinsurance segment, and the primary insurance part was transferred to ERGO International. The reinsurance life segment was renamed life and health reinsurance. Internal management was adapted accordingly, and the corresponding items in the segment reporting and the notes to the financial statements were adjusted for the previous year.

Certain primary insurers whose business requires special solution-finding competence are coupled to reinsurance as the risk carrier. We therefore transact their business from within reinsurance and consequently allocate them to the reinsurance segments.

The IFRS result contributions are the basis of planning and strategy in all segments, hence the IFRS segment result is the uniform assessment basis for internal control.

Income and expenses from intra-Group loans are shown unconsolidated under "Other non-operating result, net finance costs and impairment losses on goodwill" for the segments concerned. These are otherwise shown after elimination of intra-Group transactions and shareholdings.

Segment assets[1] » Segment assets (XLS, 39 KB)

	Reinsurance			
	Life and health		Property-casualty	
€m	31.12.2017	Prev. year	31.12.2017	Prev. year
A. Intangible assets	**127**	**145**	**2,219**	**2,550**
B. Investments				
I. Land and buildings, including buildings on third-party land	309	291	1,532	1,683
II. Investments in affiliated companies, associates and joint ventures	44	42	1,225	735
Thereof: Associates and joint ventures accounted for using the equity method	28	29	1,164	701
III. Loans	176	127	745	629
IV. Other securities				
1. Available for sale	20,675	21,272	51,883	58,268
2. At fair value through profit or loss	75	63	378	358
	20,751	21,335	52,261	58,626
V. Deposits retained on assumed reinsurance	3,759	3,749	1,870	1,436
VI. Other investments	559	426	1,715	1,745
	25,597	**25,969**	**59,349**	**64,854**
C. Insurance-related investments	**754**	**957**	**104**	**148**
D. Ceded share of technical provisions	**735**	**923**	**2,727**	**2,004**
E. Assets held for sale	**0**	**0**	**0**	**0**
F. Other segment assets	**9,208**	**8,824**	**9,520**	**8,332**
Total segment assets	**36,421**	**36,819**	**73,918**	**77,888**

1 Previous year's figures adjusted owing to changes in segment allocation and IAS 8; see "Changes in accounting policies and other adjustments".

Segment equity and liabilities » Segment equity and liabilities (XLS, 40 KB)

	Reinsurance			
	Life and health		Property-casualty	
€m	31.12.2017	Prev. year	31.12.2017	Prev. year
A. Subordinated liabilities	**785**	**995**	**1,993**	**3,198**
B. Gross technical provisions				
I. Unearned premiums	295	372	6,034	6,265
II. Provision for future policy benefits	10,825	11,221	26	26
III. Provision for outstanding claims	8,694	9,197	45,004	42,355
IV. Other technical provisions	320	317	373	243
	20,134	**21,106**	**51,437**	**48,888**
C. Gross technical provisions for unit-linked life insurance contracts	**0**	**0**	**0**	**0**
D. Other provisions	**231**	**235**	**607**	**674**
E. Liabilities related to assets held for sale	**0**	**0**	**0**	**0**
F. Other segment liabilities	**6,842**	**7,498**	**7,480**	**7,949**
Total segment liabilities	**27,991**	**29,835**	**61,517**	**60,709**

	ERGO						Total	
	Life and Health Germany		Property-casualty Germany		International			
	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year
	168	**206**	**961**	**963**	**215**	**256**	**3,689**	**4,120**
	2,961	2,200	200	154	119	117	5,121	4,444
	331	299	72	54	544	582	2,216	1,711
	282	262	24	23	513	550	2,010	1,565
	51,952	52,359	1,593	1,393	236	176	54,702	54,684
	51,727	50,187	4,409	4,549	15,151	14,783	143,845	149,059
	1,024	1,710	14	21	488	543	1,979	2,695
	52,751	51,897	4,423	4,570	15,638	15,326	145,824	151,754
	40	34	21	21	1	0	5,690	5,240
	1,093	1,187	435	314	207	247	4,009	3,918
	109,129	**107,975**	**6,743**	**6,506**	**16,745**	**16,448**	**217,562**	**221,752**
	5,317	**4,951**	**0**	**0**	**3,488**	**3,503**	**9,664**	**9,558**
	15	**17**	**78**	**128**	**615**	**597**	**4,169**	**3,669**
	26	**0**	**0**	**0**	**92**	**0**	**118**	**0**
	7,124	**6,561**	**1,429**	**1,362**	**3,239**	**3,625**	**30,520**	**28,705**
	121,779	**119,709**	**9,210**	**8,960**	**24,394**	**24,428**	**265,722**	**267,805**

	ERGO						Total	
	Life and Health Germany		Property-casualty Germany		International			
	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year
	0	**0**	**0**	**0**	**13**	**25**	**2,790**	**4,218**
	214	204	468	465	1,846	1,677	8,857	8,984
	87,774	86,676	433	440	9,897	9,745	108,956	108,108
	2,935	2,841	4,483	4,254	2,849	2,715	63,965	61,362
	17,846	17,749	91	96	544	621	19,174	19,026
	108,770	**107,471**	**5,475**	**5,255**	**15,137**	**14,759**	**200,952**	**197,480**
	5,809	**5,341**	**0**	**0**	**3,162**	**3,088**	**8,971**	**8,429**
	1,711	**1,920**	**935**	**983**	**1,023**	**1,083**	**4,508**	**4,895**
	3	**0**	**0**	**0**	**63**	**0**	**65**	**0**
	3,873	**3,542**	**664**	**449**	**1,378**	**1,561**	**20,237**	**20,998**
	120,166	**118,273**	**7,074**	**6,687**	**20,776**	**20,515**	**237,524**	**236,020**
					Equity		**28,198**	**31,785**
					Total equity and liabilities		**265,722**	**267,805**

Segment income statement

» Segment income statement (XLS, 39 KB)

	Reinsurance			
	Life and health		Property-casualty	
€m	2017	Prev. year	2017	Prev. year
Gross premiums written	**13,726**	**13,637**	**17,843**	**17,826**
1. Net earned premiums	13,431	13,221	16,723	16,946
2. Income from technical interest	602	576	1,083	1,138
3. Net expenses for claims and benefits	–10,842	–10,581	–13,467	–10,730
4. Net operating expenses	–2,815	–2,697	–5,600	–5,496
5. Technical result (1–4)	**376**	**520**	**–1,261**	**1,859**
6. Investment result	865	686	1,895	1,589
7. Insurance-related investment result	43	–8	–80	103
8. Other operating result	25	14	–105	–129
9. Deduction of income from technical interest	–602	–576	–1,083	–1,138
10. Non-technical result (6–9)	**331**	**116**	**627**	**425**
11. Operating result	**708**	**635**	**–635**	**2,284**
12. Other non-operating result, net finance costs and impairment losses on goodwill	–82	85	–284	293
13. Taxes on income	–30	–205	443	–551
14. Consolidated result	**596**	**515**	**–476**	**2,025**

Other segment disclosures

	Reinsurance			
	Life and health		Property-casualty	
€m	2017	Prev. year	2017	Prev. year
Interest income	715	684	1,125	1,173
Interest expense	–17	–17	–46	–14
Depreciation and amortisation	–42	–49	–140	–112
Other operating income	136	122	289	246
Other operating expenses	–112	–108	–394	–374
Income from associates and joint ventures accounted for using the equity method	0	0	82	73

	ERGO						Total	
	Life and Health Germany		Property-casualty Germany		International			
	2017	Prev. year	2017	Prev. year	2017	Prev. year	2017	Prev. year
	9,210	**9,177**	**3,293**	**3,194**	**5,043**	**5,018**	**49,115**	**48,851**
	9,184	9,146	3,204	3,158	4,622	4,647	47,164	47,118
	4,180	4,142	75	73	435	461	6,376	6,390
	-11,734	-11,633	-2,069	-1,985	-3,533	-3,569	-41,645	-38,498
	-1,195	-1,384	-1,072	-1,108	-1,504	-1,610	-12,186	-12,295
	435	**270**	**138**	**139**	**20**	**-72**	**-292**	**2,715**
	4,196	4,415	185	80	470	797	7,611	7,567
	300	126	0	0	180	105	443	326
	-46	-43	-4	-17	-15	-19	-146	-194
	-4,180	-4,142	-75	-73	-435	-461	-6,376	-6,390
	270	**357**	**105**	**-11**	**199**	**423**	**1,533**	**1,310**
	705	**627**	**244**	**128**	**219**	**351**	**1,241**	**4,025**
	-437	-475	-185	-242	-158	-345	-1,146	-684
	-92	-39	-2	42	-21	-7	298	-760
	175	**114**	**57**	**-72**	**40**	**-1**	**392**	**2,581**

	ERGO						Total	
	Life and Health Germany		Property-casualty Germany		International			
	2017	Prev. year	2017	Prev. year	2017	Prev. year	2017	Prev. year
	2,961	3,154	87	100	353	427	5,241	5,538
	-42	-46	-9	-10	-17	-13	-132	-100
	-79	-62	-50	-58	-80	-91	-392	-370
	103	129	87	83	163	165	778	744
	-149	-172	-91	-100	-178	-184	-924	-938
	31	25	4	2	28	21	145	121

Notes on determining the combined ratio[1]

		Reinsurance		ERGO		
		Property-casualty		Property-casualty Germany		International[2]
€m	2017	Prev. year	2017	Prev. year	2017	Prev. year
Net earned premiums	16,723	16,946	3,204	3,158	3,236	2,993
Net expenses for claims and benefits	–13,467	–10,730	–2,069	–1,985	–2,068	–1,954
Net operating expenses	–5,600	–5,496	–1,072	–1,108	–1,022	-990
Loss-ratio calculation adjustments	–7	5	15	30	8	12
Fire brigade tax and other expenses	17	12	13	13	28	23
Expenses for premium refunds[3]	0	0	18	21	1	3
Other underwriting income	–24	–7	–5	–5	–24	–20
Change in remaining technical provisions and other underwriting expenses[3]	0	0	–10	0	2	5
Adjusted net expenses for claims and benefits	**–13,474**	**–10,725**	**–2,053**	**–1,955**	**–2,060**	**–1,942**
Loss ratio in %	80.6	63.3	64.1	61.9	63.7	64.9
Combined ratio in %	114.1	95.7	97.5	97.0	95.3	98.0

1 Information on the combined ratio is provided in the management report under "Important tools of corporate management".
2 Property-casualty business and short-term health business (excluding health insurance conducted like life insurance).
3 No adjustment for reinsurance property-casualty.

Non-current assets by country[1]

€m	31.12.2017	Prev. year
Germany	6,838	6,900
USA	2,424	2,811
UK	594	438
France	402	198
Sweden	268	256
Malta	235	278
Italy	196	176
Austria	195	223
Poland	190	190
Netherlands	177	132
Spain	150	97
Belgium	129	28
Switzerland	89	100
Portugal	70	58
Others	294	255
Total	**12,251**	**12,140**

1 The non-current assets mainly comprise intangible assets (especially goodwill) and our owner-occupied and investment property, as well as investments in renewable energy.

Investments in non-current assets per segment[1]

€m	2017	Prev. year
Life and health reinsurance	51	338
Property-casualty reinsurance	150	570
ERGO Life and Health Germany	772	251
ERGO Property-casualty Germany	108	46
ERGO International	65	170
Total	**1,146**	**1,375**

1 The non-current assets mainly comprise intangible assets (especially goodwill) and our owner-occupied and investment property, as well as investments in renewable energy.

Gross premiums written[1]

€m	Total 2017	Total Prev. year
Europe		
Germany	13,050	12,904
UK	4,790	5,037
Poland	1,385	1,197
Spain	1,346	1,339
Belgium	876	881
Others	4,510	4,423
	25,957	25,780
North America		
USA	10,314	9,913
Canada	5,526	5,421
	15,840	15,334
Asia and Australasia		
Australia	1,491	1,584
China	1,185	1,675
Japan	642	622
South Korea	311	313
Others	829	786
	4,458	4,979
Africa, Middle East		
South Africa	521	380
United Arab Emirates	489	490
Others	620	508
	1,630	1,379
Latin America	1,230	1,378
Total	**49,115**	**48,851**

1 The premiums are generally allocated according to the location of the risks insured.

Notes to the consolidated balance sheet – Assets

1 Goodwill

Changes in goodwill

€m	2017	Prev. year
Gross carrying amount at 31 Dec. previous year	4,358	4,303
Accumulated amortisation and impairment losses at 31 Dec. financial year	-1,541	-1,513
Carrying amount at 31 Dec. previous year	2,817	2,790
Currency translation differences	-217	45
Additions	1	9
Disposals	-8	0
Reclassifications	0	0
Amortisation and impairment losses	-9	-28
Carrying amount at 31 Dec. financial year	**2,584**	**2,817**
Accumulated amortisation and impairment losses at 31 Dec. financial year	-1,550	-1,541
Gross carrying amount at 31 Dec. financial year	4,134	4,358

Allocation of goodwill to cash-generating units

For impairment testing, the goodwill is allocated to the cash-generating units or groups of cash-generating units that derive benefit from the synergies of the business combinations. At the same time, the unit or group of units to which the goodwill is allocated represents the lowest level at which goodwill is monitored for internal management purposes. Goodwill is allocated in reinsurance to divisions or groups of divisions, and in primary insurance to the ERGO segment Property-casualty Germany, and to legal entities.

Allocation of goodwill to cash-generating units

€m	Property-casualty reinsurance segment and divisions	ERGO Property-casualty Germany segment	Various cash-generating units
Goodwill at 31 December 2017	**1,575**	**910**	**98**

Goodwill shown under various cash-generating units is not significant in comparison with the total goodwill, either individually or in total. We regard amounts of 10% or more of total Group goodwill as significant.

Significant assumptions for determining the recoverable amount in impairment testing

Impairment tests for cash-generating units to which a significant portion of the goodwill is allocated are based on the assumptions shown below.

Cash-generating unit or group of cash-generating units	Property-casualty reinsurance segment and divisions	ERGO Property-casualty Germany segment
Basis for calculating the recoverable amount	Value in use	Value in use
Key assumptions regarding the planning calculation (at the time of planning)	In the detailed planning phase (three years), we expected increasing premium income and a slight improvement in the combined ratio if major losses remain stable. Our general assumption was that there will be moderate upward movement on the equity markets and a stable interest-rate level.	For the detailed planning phase (four years), we expected a slight rise in premium income with an improved combined ratio. Our general assumption was that there will be moderate upward movement on the equity markets and a stable interest-rate level.
Growth rates after the detailed planning phase	1.5%	0.5%
Discount rates	8.3%	9.7%

The calculation of these values in use is based on distributable target results derived from the current market environment and the latest corporate planning approved by management. Prepared in an interactive process involving the operational units, the responsible controlling units and the Board of Management, the corporate plans are reviewed and updated at least every quarter. The aforementioned key assumptions regarding premium income development and combined ratios derive from the aggregation of the company plans of the individual companies of a cash-generating unit, or of a group of cash-generating units. The key assumptions regarding developments in the equity market and interest-rate level are defined on the basis of the current market environment. After the detailed planning phase, we estimate the target results achievable long term on the basis of the last adjusted planning year and taking into account growth rates and RoI derived from macroeconomic forecasts.

Cost-of-equity rates derived using the Capital Asset Pricing Model (CAPM) were used as discount rates. Calculations were made after consideration of normalised taxes. In the table, for disclosure purposes, a corresponding discount rate before tax is given in each case. Sensitivity analyses were performed for the discount rates, growth rates and distributable target results. No impairments have been identified.

2 Other intangible assets

Development of other intangible assets

	Acquired insurance portfolios				Software	
			Internally developed		Other	
€m	2017	Prev. year	2017	Prev. year	2017	Prev. year
Gross carrying amount at 31 Dec. previous year	1,334	1,329	405	388	1,186	1,106
Accumulated amortisation and impairment losses at 31 Dec. previous year	-798	-1,035	-363	-326	-898	-811
Carrying amount at 31 Dec. previous year	536	294	42	62	288	295
Currency translation differences	-24	8	-1	0	-7	0
Additions						
Business combinations	0	274	0	1	0	3
Other	0	0	17	18	96	96
Disposals						
Loss of control	0	0	0	0	0	-1
Other	0	0	0	-3	-12	-14
Reclassifications	0	0	1	0	-1	0
Impairment losses reversed	0	0	0	0	0	0
Amortisation and impairment losses						
Amortisation	-78	-39	-29	-34	-82	-83
Impairment losses	0	0	0	-2	-10	-9
Carrying amount at 31 Dec. financial year	**433**	**536**	**30**	**42**	**272**	**288**
Accumulated amortisation and impairment losses at 31 Dec. financial year	-870	-798	-383	-363	-972	-898
Gross carrying amount at 31 Dec. financial year	1,304	1,334	413	405	1,244	1,186

Continued on next page

	Acquired brand names		Acquired distribution networks/client bases		Acquired licences/ patents	
€m	2017	Prev. year	2017	Prev. year	2017	Prev. year
Gross carrying amount at 31 Dec. previous year	235	234	733	726	298	318
Accumulated amortisation and impairment losses at 31 Dec. previous year	-199	-196	-576	-534	-76	-60
Carrying amount at 31 Dec. previous year	36	38	158	192	222	258
Currency translation differences	-4	1	-15	3	-8	-17
Additions						
Business combinations	0	1	0	9	4	1
Other	0	0	0	2	1	0
Disposals						
Loss of control	0	0	0	0	0	0
Other	0	0	0	0	0	0
Reclassifications	0	0	0	0	0	0
Impairment losses reversed	0	0	0	0	5	0
Amortisation and impairment losses						
Amortisation	-2	-2	-24	-25	-13	-13
Impairment losses	0	-2	-7	-24	0	-7
Carrying amount at 31 Dec. financial year	**29**	**36**	**111**	**158**	**211**	**222**
Accumulated amortisation and impairment losses at 31 Dec. financial year	-193	-199	-568	-576	-84	-76
Gross carrying amount at 31 Dec. financial year	222	235	679	733	295	298

	Miscellaneous		Total	
€m	2017	Prev. year	2017	Prev. year
Gross carrying amount at 31 Dec. previous year	85	88	4,277	4,189
Accumulated amortisation and impairment losses at 31 Dec. previous year	-64	-55	-2,974	-3,018
Carrying amount at 31 Dec. previous year	21	33	1,303	1,171
Currency translation differences	0	-1	-59	-6
Additions				
Business combinations	0	0	4	289
Other	0	1	113	117
Disposals				
Loss of control	0	0	0	-1
Other	0	0	-12	-17
Reclassifications	0	0	0	0
Impairment losses reversed	0	0	5	0
Amortisation and impairment losses				
Amortisation	-3	-6	-231	-202
Impairment losses	0	-6	-18	-49
Carrying amount at 31 Dec. financial year	**18**	**21**	**1,105**	**1,303**
Accumulated amortisation and impairment losses at 31 Dec. financial year	-66	-64	-3,137	-2,974
Gross carrying amount at 31 Dec. financial year	85	85	4,243	4,277

Intangible assets pledged as security and other restrictions on title amount to €115m (127m).

3 Land and buildings, including buildings on third-party land

Development of investments in land and buildings, including buildings on third-party land

€m	2017	Prev. year
Gross carrying amount at 31 Dec. previous year	5,668	5,538
Accumulated amortisation and impairment losses at 31 Dec. previous year	-1,224	-1,220
Carrying amount at 31 Dec. previous year	4,444	4,317
Currency translation differences	-67	5
Additions		
Subsequent acquisition costs	44	38
Business combinations	661	0
Other	159	234
Disposals		
Loss of control	0	0
Other	-9	-113
Impairment losses reversed	33	49
Amortisation and impairment losses		
Amortisation	-95	-90
Impairment losses	-46	-9
Reclassifications	-3	12
Carrying amount at 31 Dec. financial year	**5,121**	**4,444**
Accumulated amortisation and impairment losses at 31 Dec. financial year	-1,302	-1,224
Gross carrying amount at 31 Dec. financial year	6,423	5,668

The fair value of investment property at the balance sheet date amounted to €7,865m (6,857m). The portfolio managed by the Group is measured by valuers within the Group, and the portfolio managed by third parties is valued by external valuers. Property is allocated to Level 3 of the fair value hierarchy; see Assets – B Investments – Determining fair values. Determining the sustainability of cash inflows and outflows, taking into account the market conditions at the property location, is material for measurement. The fair value is determined individually per item by discounting the future cash flow as at the measurement date. Depending on the type of property and its individual opportunity/risk profile, discount rates of 1.25% to 4.25% are used for residential buildings, 2.75% to 6.5% for office buildings, and 3% to 6.5% for retail.

Increases resulting from business combinations are mainly attributable to the expansion of our investment in a special real estate fund. As a result of this additional investment, we attained a controlling interest in the special funds, and therefore included it as a subsidiary in our consolidated financial statements in the year under review.

Under reclassifications, we recognise land and buildings of the disposal group totalling €22m.

Property pledged as security and other restrictions on title amount to €916m (853m). Contractual commitments to acquire property amount to €239m (46m).

4 Hierarchy for the fair value measurement of assets

All assets recognised at fair value are allocated to one of the fair value hierarchy levels of IFRS 13, as are those assets which are not recognised at fair value in the balance sheet but for which a fair value has to be disclosed in the notes. Information on the criteria for allocation to the individual levels of the fair value hierarchy can be found under Assets – B Investments – Determining fair values. Regularly, at each reporting date, we assess whether the allocation of our assets to the levels of the valuation hierarchy is still appropriate. If changes in the basis of valuation have occurred – for instance, if a market is no longer active or the valuation was performed using inputs requiring another allocation – we make the necessary adjustments.

The following table provides an overview of the models used to measure the fair values of our assets when market prices are not available.

Valuation techniques for assets

Bonds	Pricing method	Parameters	Pricing model
Interest-rate risks			
Loans against borrower's note/ registered bonds	Theoretical price	Sector-, rating- or issuer-specific yield curve	Present-value method
Cat bond (host)	Theoretical price	Interest-rate curve	Present-value method
Mortgage loans	Theoretical price	Sector-specific yield curve	Present-value method

Derivatives	Pricing method	Parameters	Pricing model
Equity and index risks			
OTC stock options	Theoretical price	Listing of underlying shares Effective volatilities Money-market interest rate Dividend yield	Black-Scholes (European) Cox, Ross and Rubinstein (American) Monte Carlo simulation
Equity forwards	Theoretical price	Listing of underlying shares Money-market interest rate Dividend yield	Present-value method
Interest-rate risks			
Interest-rate swaps	Theoretical price	OIS/swap curve	Present-value method
Swaptions/interest-rate guarantee	Theoretical price	At-the-money volatility matrix and skew OIS/skew swap curve	Bachelier/ Normal Black
Interest-rate currency swaps	Theoretical price	Swap curve Currency spot rates Money-market interest-rate curve	Present-value method
Inflation swaps	Theoretical price	Zero-coupon inflation swap rates OIS curve	Present-value method
Bond forwards (forward transactions)	Theoretical price	Listing of underlying Swap curve	Present-value method
Currency risks			
Currency options	Theoretical price	Volatility skew Currency spot rates Money-market interest-rate curve	Garman-Kohlhagen (European)
Currency forwards	Theoretical price	Currency spot rates Money-market interest-rate curve, CCY spreads	Present-value method
Other transactions			
Insurance derivatives (excluding variable annuities)	Theoretical price	Fair values of cat bonds Historical event data Interest-rate curve	Present-value method
Insurance derivatives (variable annuities)	Theoretical price	Biometric and lapse rates Volatilities Interest-rate curve Currency spot rates	Present-value method
Catastrophe swaps	Theoretical price	Fair values of catastrophe bonds Interest-rate curve	Present-value method
Credit default swaps	Theoretical price	Credit spreads Recovery rates Interest-rate curve	Present-value method ISDA CDS Standard Model
Total return swaps on commodities	Theoretical price	Listing of underlying index	Index ratio calculation
Commodity options	Theoretical price	Listing of underlying Effective volatilities Money-market interest rate	Black-Scholes (European) Cox, Ross and Rubinstein (American)

Bonds with embedded derivatives	Pricing method	Parameters	Pricing model
Callable bonds	Theoretical price	Money-market/swap interest-rate curve Issuer-specific spreads Volatility matrix	Hull-White model
CMS floaters	Theoretical price	Money-market/swap interest-rate curve Issuer-specific spreads Volatility matrix	Hull-White model
Zero-to-coupon switchable bonds	Theoretical price	Money-market/swap interest-rate curve Issuer-specific spreads Volatility matrix	Hull-White model
CMS floaters with variable cap	Theoretical price	OIS/swap interest-rate curve Issuer-specific spreads Volatility skew	Replication model (Hagan)
Inverse CMS floaters	Theoretical price	OIS/swap interest-rate curve Issuer-specific spreads Volatility skew	Replication model (Hagan)
CMS steepeners	Theoretical price	OIS/swap interest-rate curve Issuer-specific spreads Volatility skew Correlation matrix	Replication model (Hagan) Stochastic volatility model
Convergence bonds	Theoretical price	Money-market/swap interest-rate curves Issuer-specific spreads Volatility matrix Correlation matrix	Replication model (Hagan) Stochastic volatility model
Multi-tranches	Theoretical price	At-the-money volatility matrix and skew Swap curve Money-market interest-rate curve Sector-, rating- or issuer-specific yield curve	Bachelier/ Normal Black, Present-value method
FIS loans against borrower’s note	Theoretical price	At-the-money volatility matrix and skew Swap curve Money-market interest-rate curve Sector-, rating- or issuer-specific yield curve	Bachelier/ Normal Black, Present-value method
Swaption notes	Theoretical price	At-the-money volatility matrix and skew Swap curve Money-market interest-rate curve Sector-, rating- or issuer-specific yield rate curve	Bachelier/ Normal Black, Present-value method

Funds	Pricing method	Parameters	Pricing model
Real estate funds	–	–	Net asset value
Alternative investment funds (e.g. private equity, infrastructure, forestry)	–	–	Net asset value

Other	Pricing method	Parameters	Pricing model
Real estate	Theoretical market price	Interest-rate curve Market rents	Present-value method or valuation
Alternative direct investments (e.g. infrastructure, forestry)	Theoretical market price	Interest-rate curve (among others) Electricity price forecast and inflation forecast	Present-value method or valuation
Bank borrowing	Theoretical market price	Interest-rate curve	Present-value method

Insurance-linked derivatives (excluding variable annuities) are allocated to Level 3 of the fair value hierarchy. The derivative components of catastrophe bonds are measured based on the values supplied by brokers for the underlying bonds, which is why it is not possible to quantify the inputs used that were not based on observable market data. If no observable inputs are available for customised insurance-linked derivatives, the present-value method on the basis of current interest-rate curves and historical event data is used. Due to the low volume involved, the effects of alternative inputs and assumptions are immaterial.

The inputs requiring consideration in measuring variable annuities are derived either directly from market data (in particular volatilities, interest-rate curves and currency spot rates) or from actuarial data (especially biometric and lapse rates). The lapse rates used are modelled dynamically and range between 0.5% and 50%, depending on the specific insurance product and current situation of the capital markets. A 10% increase or decrease in the lapse rates would lead to a change of –/+1% in the fair value of the portfolio. The assumptions with regard to mortality are based on published mortality tables, which are adjusted with a view to the target markets and the actuaries' expectations. The impact of these and other non-observable assumptions is not material. The dependency between different capital market inputs is modelled by correlation matrices. We allocate these products to Level 3 of the fair value hierarchy.

The other investments allocated to Level 3 are mainly external fund units (in particular, private equity, real estate and funds that invest in a variety of assets that are subject to theoretical valuation) as well as relatively illiquid credit structures (especially commercial mortgage-backed securities and collateralised loan obligations). In the case of external fund units, market quotes are not available on a regular basis; rather, net asset values (NAVs) are provided by the asset managers. With regard to the latter, the quality of the market quotes available from market data providers is insufficient, so we use broker valuations. With these investments, we thus do not perform our own valuations using inputs not based on observable market data. We regularly subject the valuations supplied to plausibility tests on the basis of comparable investments.

At 31 December 2017, around 13% (12%) of the investments measured at fair value were allocated to Level 1 of the fair value hierarchy, 83% (84%) to Level 2 and 4% (4%) to Level 3, as shown in the table below.

Among the associates and joint ventures accounted for using the equity method, there is only one company for which a quoted market price is available. This price amounts to €104m (96m) and is allocated to Level 1 of the fair value hierarchy.

In the financial year, we maintained the allocation to the individual levels of the fair value hierarchy unchanged. The minor transfer amounts relating to Level 3 of the fair value hierarchy are adjustments to our Group requirements.

The following table presents the reconciliation from the opening balances to the closing balances for investments allocated to Level 3.

Gains (losses) recognised in the consolidated income statement are shown in the investment result or insurance-related investment result, while gains (losses) recognised in equity are shown in the statement of recognised income and expense for the 2017 financial year under "Unrealised gains and losses on investments, Gains (losses) recognised in equity". Gains (losses) recognised in the consolidated income statement that are attributable to investments shown at the end of the financial year are shown in the statement of recognised income and expense for the 2017 financial year under "Unrealised gains and losses on investments, Recognised in the consolidated income statement".

Allocation of investments (including insurance-related investments) to levels of the fair value hierarchy

				31.12.2017
€m	Level 1	Level 2	Level 3	Total
Investments measured at fair value				
Investments in affiliated companies measured at fair value	0	0	171	171
Investments in associates and joint ventures measured at fair value	0	0	34	34
Other securities available for sale				
Fixed-interest	290	123,521	2,675	126,486
Non-fixed-interest	13,540	959	2,860	17,359
Other securities at fair value through profit or loss				
Held for trading, and hedging derivatives[1]	224	1,424	2	1,649
Designated as at fair value through profit or loss	187	169	0	357
Other investments	0	10	36	46
Insurance-related investments	5,622	3,738	304	9,664
Total	**19,862**	**129,822**	**6,082**	**155,766**
Investments not measured at fair value				
Loans	0	64,082	1,393	65,475
Total	**0**	**64,082**	**1,393**	**65,475**

→				Prev. year
€m	Level 1	Level 2	Level 3	Total
Investments measured at fair value				
Investments in affiliated companies measured at fair value	0	0	138	138
Investments in associates and joint ventures measured at fair value	0	0	8	8
Other securities available for sale				
Fixed-interest	1,287	129,264	2,683	133,234
Non-fixed-interest	11,806	1,206	2,814	15,826
Other securities at fair value through profit or loss				
Held for trading, and hedging derivatives[1]	157	2,203	0	2,360
Designated as at fair value through profit or loss	222	178	2	402
Other investments	0	10	37	47
Insurance-related investments	5,834	3,447	277	9,558
Total	**19,306**	**136,308**	**5,959**	**161,573**
Investments not measured at fair value				
Loans	0	67,250	1,000	68,251
Total	**0**	**67,250**	**1,000**	**68,251**

1 Including hedging derivatives of €27m (68m) accounted for under "other assets".

Reconciliation for investments allocated to Level 3

	Investments in affiliated companies measured at fair value		Investments in associates and joint ventures measured at fair value	
€m	2017	Prev. year	2017	Prev. year
Carrying amount at 31 Dec. previous year	138	145	8	8
Gains and losses	4	–1	0	0
Gains (losses) recognised in the income statement	–9	–5	0	2
Gains (losses) recognised in equity	13	3	0	–2
Acquisitions	50	13	26	3
Disposals	–14	–23	0	–3
Transfer to Level 3	5	4	0	0
Transfer out of Level 3	–11	0	0	0
Changes in the fair value of derivatives	0	0	0	0
Carrying amount at 31 Dec. financial year	**171**	**138**	**34**	**8**
Gains (losses) recognised in the income statement that are attributable to investments shown at the end of the financial year	–10	–7	0	0

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	Other securities available for sale			
	Fixed-interest		Non-fixed-interest	
€m	2017	Prev. year	2017	Prev. year
Carrying amount at 31 Dec. previous year	2,683	2,160	2,814	2,803
Gains and losses	-14	77	3	-1
Gains (losses) recognised in the income statement	74	38	1	-28
Gains (losses) recognised in equity	-89	39	3	27
Acquisitions	1,796	1,002	809	425
Disposals	-1,770	-577	-793	-400
Transfer to Level 3	0	68	27	14
Transfer out of Level 3	-19	-47	0	-27
Changes in the fair value of derivatives	0	0	0	0
Carrying amount at 31 Dec. financial year	**2,675**	**2,683**	**2,860**	**2,814**
Gains (losses) recognised in the income statement that are attributable to investments shown at the end of the financial year	74	39	-39	-35

→

	Designated as at fair value through profit or loss		Held for trading, and hedging derivatives		Other investments	
€m	2017	Prev. year	2017	Prev. year	2017	Prev. year
Carrying amount at 31 Dec. previous year	2	0	0	0	37	30
Gains and losses	0	0	0	0	-1	7
Gains (losses) recognised in the income statement	0	0	0	0	-1	7
Gains (losses) recognised in equity	0	0	0	0	0	0
Acquisitions	0	2	2	0	0	0
Disposals	-2	0	0	0	0	0
Transfer to Level 3	0	1	0	0	0	0
Transfer out of Level 3	0	-1	0	0	0	0
Changes in the fair value of derivatives	0	0	0	0	0	0
Carrying amount at 31 Dec. financial year	**0**	**2**	**2**	**0**	**36**	**37**
Gains (losses) recognised in the income statement that are attributable to investments shown at the end of the financial year	0	0	0	0	-1	7

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	Insurance-related investments		Total	
€m	2017	Prev. year	2017	Prev. year
Carrying amount at 31 Dec. previous year	277	1,052	5,959	6,198
Gains and losses	106	122	97	204
Gains (losses) recognised in the income statement	128	119	192	134
Gains (losses) recognised in equity	-22	3	-95	70
Acquisitions	110	59	2,793	1,505
Disposals	-192	-71	-2,772	-1,073
Transfer to Level 3	0	0	32	87
Transfer out of Level 3	0	-886	-30	-961
Changes in the fair value of derivatives	3	0	3	0
Carrying amount at 31 Dec. financial year	**304**	**277**	**6,082**	**5,959**
Gains (losses) recognised in the income statement that are attributable to investments shown at the end of the financial year	45	116	70	121

5 Investments in affiliated companies, associates and joint ventures

Reversed impairment losses with respect to associates and joint ventures amounted to €15m (39m). They are distributed between the following different Group segments: €14m (37m) is apportionable to property-casualty reinsurance and €1m (2m) to ERGO Life and Health Germany.

Impairment losses with respect to these companies amounted to €11m (14m). They are distributed between the following different Group segments: €0m (14m) is apportionable to property-casualty reinsurance, and €11m (0m) is apportionable to ERGO International.

In the financial year, shares of losses of associates and joint ventures amounting to €3m (0m) were not recognised in the balance sheet. This was also the total amount of losses not recognised in the balance sheet.

Further information about affiliated companies, associates and joint ventures can be found in Other information (48) Contingent liabilities, other financial commitments, (49) Significant restrictions, and in the List of shareholdings as at 31 December 2017 pursuant to Section 313(2) of the German Commercial Code (HGB).

Aggregated financial information on investments in associates and joint ventures accounted for using the equity method

€m	31.12.2017	Prev. year
Overall result for the year after tax from continued operations	106	153
Result after tax from discontinued operations	0	-1
Income and expenses recognised directly in equity	9	-5
Total recognised income and expenses	**115**	**147**

6 Loans

Breakdown of loans

	Carrying amounts	
€m	31.12.2017	Prev. year
Mortgage loans	5,842	5,606
Loans and advance payments on insurance policies	266	297
Other loans	48,595	48,781
Total	**54,702**	**54,684**

The other loans mainly comprise covered bonds and government bonds.

The fair value of the loans is based on recognised valuation techniques in line with the present value principle and taking observable market inputs into account; see (4) Hierarchy for the fair value measurement of assets. The fair value totalled €65,490m (68,276m) at the reporting date.

Rating of "other loans" on the basis of amortised cost

€m	31.12.2017	Prev. year
AAA	27,560	26,461
AA	13,924	15,568
A	3,539	3,021
BBB or lower	2,285	2,251
No rating	1,287	1,480
Total	**48,595**	**48,781**

The rating categories are based on those of the leading international rating agencies. Virtually no credit risk exists in respect of the mortgage loans or the loans and advance payments on insurance policies.

7 Other securities available for sale

Over 40% of the corporate debt securities are covered bonds or issues by development banks and comparable institutions. The remaining portfolio is composed of securities issued by companies outside the banking sector, with each individual risk making up less than 1%, bonds issued by banks and state central savings banks, and asset-backed securities/mortgage-backed securities. The asset-backed securities/mortgage-backed securities are largely rated A or better. Assets pledged as security and other restrictions on title amount to €7,677m (8,661m). None of the securities shown had been loaned to third parties at year-end (previous year €1,715m). Loaned securities are not derecognised, as the main resultant risks and rewards remain with Munich Re. Of the €10,883m (11,573m) in unrealised gains and losses, €4,672m (4,309m) has been recognised in equity (other reserves), after deduction of provisions for deferred premium refunds, deferred taxes, non-controlling interests, and consolidation and currency translation effects.

Disposal proceeds in the financial year

€m	2017	Prev. year
Fixed-interest securities	48,780	58,408
Non-fixed-interest securities		
Quoted	20,953	23,661
Unquoted	1,012	926
Total	**70,745**	**82,995**

Realised gains and losses

€m	2017	Prev. year
Gains on disposal	2,067	2,993
Fixed-interest securities	1,034	2,070
Non-fixed-interest securities	1,033	923
Losses on disposal	–481	–897
Fixed-interest securities	–334	–414
Non-fixed-interest securities	–148	–483
Total	**1,586**	**2,096**

Rating of fixed-interest securities according to fair values

€m	31.12.2017	Prev. year
AAA	38,365	43,211
AA	40,298	46,169
A	19,552	16,980
BBB	21,796	21,413
Lower	5,791	4,968
No rating	682	494
Total	**126,486**	**133,234**

The rating categories are based on those of the leading international rating agencies.

Breakdown of other securities available for sale

	Carrying amounts		Unrealised gains/losses		Amortised cost	
€m	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year
Fixed-interest securities						
Government bonds						
Germany	6,837	7,815	873	1,209	5,964	6,606
Rest of EU	26,384	26,495	1,904	2,411	24,480	24,084
USA	16,296	18,901	624	402	15,672	18,499
Other	17,503	17,378	801	703	16,703	16,675
Corporate debt securities	44,799	48,467	2,197	2,541	42,602	45,927
Other	14,666	14,178	1,223	1,384	13,443	12,794
	126,486	**133,234**	**7,622**	**8,649**	**118,864**	**124,585**
Non-fixed-interest securities						
Shares	13,013	11,174	2,709	2,327	10,304	8,847
Investment funds						
Equity funds	734	552	56	50	678	502
Bond funds	1,139	1,604	58	55	1,081	1,548
Real estate funds	305	566	46	47	259	518
Other	2,168	1,930	393	445	1,775	1,485
	17,359	**15,826**	**3,261**	**2,924**	**14,098**	**12,901**
Total	**143,845**	**149,059**	**10,883**	**11,573**	**132,961**	**137,487**

8 Other securities at fair value through profit or loss and insurance-related investments

Securities at fair value through profit or loss comprise securities of €1,623m (2,293m) held for trading and securities of €357m (402m) designated as at fair value through profit or loss.

The securities held for trading are made up of fixed-interest securities totalling €18m (18m), non-fixed-interest securities totalling €67m (68m) and derivatives held for trading amounting to €1,538m (2,207m). The securities designated as at fair value through profit or loss comprise €146m (179m) assignable to fixed-interest securities and €211m (223m) to non-fixed interest securities. Some €15m (10m) of the securities at fair value through profit or loss is due within one year.

For securities at fair value through profit or loss, items pledged as security and other restrictions on title amount to €36m (0m).

Rating of fixed-interest securities according to fair values

€m	31.12.2017	Prev. year
AAA	25	15
AA	43	45
A	55	52
BBB	40	85
Lower	0	0
No rating	1	1
Total	**164**	**197**

The rating categories are based on those of the leading international rating agencies.

The insurance-related investments include investments for unit-linked life insurance contracts of €8,772m (8,428m) and other insurance-related investments of €891m (1,130m).

Derivative financial instruments are used by Munich Re to manage and hedge against interest-rate, currency, and other market risks. This is done at the Group companies within the framework of individual supervisory regulations and additional internal company guidelines. Given the daily margining process, the risk of default is practically non-existent in the case of products traded on the stock exchange. Over-the-counter products, on the other hand, harbour a theoretical risk in the amount of the replacement costs. Therefore, Munich Re selects only top-quality counterparties for such transactions, and exchanges collateral daily on the basis of current fair values.

As at 31 December 2017, Munich Re held collateral for derivatives in the form of securities with a rating of at least AA. The fair value of this collateral amounts to €26m (785m). The collateral received is subject to a title transfer collateral arrangement, but is not re-sold or pledged.

Disclosure of derivatives by balance sheet item

€m			31.12.2017	Prev. year
Fair value	Qualifying for hedge accounting	Balance sheet item		
Positive	No	Investments, other securities, designated as at fair value through profit or loss	1,538	2,207
	No	Insurance-related investments	853	1,046
	Yes	Other assets	27	68
Negative	No Yes	Liabilities, other liabilities	–1,385	–1,811
Total			**1,033**	**1,510**

Although the derivatives used by Munich Re essentially serve to hedge against risks, only an amount of €21m (59m) meets the requirements of IAS 39 for hedge accounting.

IAS 39 distinguishes between fair value hedges and cash flow hedges.

Fair value hedges In the case of fair value hedges, the change in the fair value of the hedging instrument and the change in the fair value of the hedged instrument are generally recognised in profit or loss under the item "investment result". Munich Re uses hedging relationships in the form of fair value hedges to selectively and efficiently mitigate interest-rate and other market risks. The main types of transaction employed for hedging are swaps and forwards. No fair value hedges existed at year-end, as Munich Reinsurance Company's hedged subordinated bond had been redeemed in June 2017. The fair value of the derivatives used for this purpose amounted to €31m at the 2016 balance sheet date. At the 2017 balance sheet date, these derivatives were no longer part of the portfolio. In the 2017 financial year, the following changes in value were recognised in the consolidated income statement: –€31m for the hedging instruments and €32m for the relevant underlyings.

Cash flow hedges play a role in countering fluctuations that may be caused, for example, by variable interest payments. Munich Re uses cash flow hedges chiefly to hedge against interest-rate risks, with interest-rate swaps ↗ being the main instruments employed. Changes in the fair value of the hedging instrument are recognised directly in equity for this purpose. Only when the actual cash inflow or outflow takes place – as a result of the hedged circumstance – is the relevant equity item reversed with recognition in profit or loss. The change in fair value assignable to the ineffective portion of the hedging was negligible at the reporting date. At the balance sheet date, there is an equity item of €7m (–8m) from cash flow hedges. The net fair value of the derivatives falling into this category amounted to €21m (28m) at the balance sheet date.

Periods to maturity and amount of the hedged cash flows at the balance sheet date

€m	< 1 year	1–2 years	2–3 years	3–4 years	4–5 years	> 5 years	31.12.2017	Prev. year
Notional amounts of hedged transactions	39	150	100	0	0	0	289	314

9 Deposits to cedants

Deposits retained on assumed reinsurance serve directly as collateral for technical provisions covering business assumed and may not be used by cedants independently. The credit risk is therefore limited. The amount of and changes in deposits retained on assumed reinsurance derive from the values for the changes in the related technical provisions for the reinsured business. Deposits retained on assumed reinsurance business thus do not have a fixed maturity date, and their release is generally dependent on the run-off of the corresponding provisions.

10 Other investments

Other investments comprise deposits with banks totalling €3,138m (3,029m), investments in renewable energies amounting to €468m (482m), physical gold of €357m (361m), and forestry investments of €46m (47m). Deposits with banks include receivables of €134m (117m) from borrowers under repurchase agreements that have been booked by us as the lender.

Of the amounts held on deposit with banks, €3,122m (3,027m) is due within one year. With these deposits, the fair values largely correspond to the carrying amounts. Assets pledged as security and other restrictions on title amount to €12m (14m) for deposits with banks.

Development of investments in renewable energies

€m	2017	Prev. year
Gross carrying amount at 31 Dec. previous year	676	645
Accumulated amortisation and impairment losses at 31 Dec. previous year	–195	–148
Carrying amount at 31 Dec. previous year	482	496
Changes due to currency translation	–6	–22
Additions		
Business combinations	32	51
Other	0	8
Disposals		
Loss of control	0	0
Other	0	0
Impairment losses reversed	4	0
Depreciation and impairment losses		
Depreciation	–36	–36
Impairment losses	–7	–16
Reclassification	0	0
Carrying amount at 31 Dec. financial year	**468**	**482**
Accumulated amortisation and impairment losses at 31 Dec. financial year	–231	–195
Gross carrying amount at 31 Dec. financial year	699	676

The investments in renewable energies include items pledged as security and other restrictions on title amounting to €182m (206m).

11 Ceded share of technical provisions

Ceded share of technical provisions

€m	31.12.2017	Prev. year
Unearned premiums	328	317
Provision for future policy benefits	760	862
Provision for outstanding claims	2,957	2,491
Other technical provisions	125	–1
Total	**4,169**	**3,669**

Details of the ceded share of technical provisions are shown in the Notes to the consolidated balance sheet – Equity and liabilities (20) Unearned premiums, (21) Provisions for future policy benefits, (22) Provisions for outstanding claims, (23) Other technical provisions, and in the risk report in the section "Credit risks".

12 Other receivables

Breakdown of other receivables

€m	31.12.2017	Prev. year
Amounts receivable on primary insurance business	2,615	1,306
Accounts receivable on reinsurance business	6,202	5,901
Miscellaneous receivables	4,568	4,376
Total	**13,385**	**11,583**

Of the amounts receivable on primary insurance business, €653m (485m) is apportionable to receivables from insurance agents. The miscellaneous receivables include receivables of €2,306m (1,968m) resulting from contracts without significant risk transfer, which do not fall within the scope of IFRS 4.

Assets pledged as security and other restrictions on title amount to €62m (54m).

The miscellaneous receivables contain cash collateral of €356m (534m), mainly for derivative transactions.

Given that the vast majority of other receivables, i.e. a total of €10,497m (9,300m), have a period to maturity of less than one year, the fair values largely correspond to the carrying amounts.

As at 31 December 2017, our accounts receivable on ceded reinsurance business were split between the following ratings (based on those of Standard & Poor's):

Rating of accounts receivable

€m	31.12.2017	Prev. year
AAA	1	2
AA	54	42
A	95	51
BBB and lower	3	0
No external rating	89	144

Of all our receivables on underwriting business at the balance sheet date, €379m (346m) was outstanding for more than 90 days. The average defaults of the last three years amount to €282m (261m).

13 Deferred acquisition costs

Deferred acquisition costs

€m	31.12.2017	Prev. year
Gross	9,563	9,634
Ceded share	–135	–95
Net	**9,428**	**9,539**

Development of gross deferred acquisition costs

€m	31.12.2017	Prev. year
Status at 31 Dec. previous year	9,634	9,428
Currency translation differences	–257	–44
Change in consolidated group/Other	–4	90
New deferred acquisition costs	2,533	3,823
Changes		
Amortisation	–2,445	–3,512
Impairment losses	102	–152
Status at 31 Dec. financial year	**9,563**	**9,634**

The amortisation includes accrued interest as well as write-downs. The impairment losses comprise impairment losses and reversals of impairment losses stemming from changes in the assumptions underlying the calculations which require an adjustment in the measurement.

In the ERGO Life and Health segment, there was an adjustment in 2017 to the assumptions regarding future lapses, expenses, and long-term interest-rate levels that are geared to the long-term regular return on investments. Overall, these adjustments led to a reversal of impairment losses on deferred acquisition costs.

In the ERGO International segment, there was an adjustment in 2017 to the assumptions regarding future lapses, expenses, and long-term interest-rate levels that are geared to the long-term regular return on investments. Overall, these adjustments led to impairment losses on deferred acquisition costs.

14 Deferred tax

The deferred tax assets and liabilities recognised in the consolidated balance sheet concern the following balance sheet items.

No deferred taxes were posted for temporary differences of €52m (52m) in connection with investments in subsidiaries and associates, also referred to as outside basis differences.

Deferred tax

	31.12.2017		Prev. year	
€m	Assets	Liabilities	Assets	Liabilities
Assets				
A. Intangible assets	119	159	65	216
B. Investments	2,479	3,096	2,533	3,412
C. Insurance-related investments	1	10	5	16
E. Receivables	50	134	48	134
I. Other assets	1,036	1,269	932	1,349
Total assets	**3,685**	**4,668**	**3,583**	**5,127**
Equity and liabilities				
C. Net technical provisions	2,910	4,374	2,612	4,806
E. Other provisions	926	233	994	216
F. Liabilities	220	11	144	–1
Total equity and liabilities	**4,056**	**4,618**	**3,750**	**5,021**
Loss carry-forwards and tax credits	**623**	**0**	**913**	**0**
Total before netting	**8,364**	**9,286**	**8,246**	**10,148**
Netting amount	–7,830	–7,830	–7,918	–7,918
Total	**534**	**1,456**	**328**	**2,230**

The available tax loss carry-forwards and tax credits are broken down as follows.

Tax loss carry-forwards and tax credits

	31.12.2017			Prev. year		
€m	For which deferred tax assets are recognised	For which deferred tax assets are not recognised	Total	For which deferred tax assets are recognised	For which deferred tax assets are not recognised	Total
Corporation tax loss carry-forwards						
Expiring in up to three years	24	43	67	36	65	101
Expiring in over three years and up to ten years	266	66	332	126	86	212
Expiring in over ten years	206	25	231	154	21	175
Not expiring	526	2,080	2,606	1,136	1,814	2,950
	1,022	**2,214**	**3,236**	**1,452**	**1,986**	**3,438**
Trade tax loss carry-forwards						
Not expiring	1,330	176	1,506	2,637	156	2,793
	1,330	**176**	**1,506**	**2,637**	**156**	**2,793**
Loss carry-forwards from capital losses						
Expiring in up to three years	0	0	0	0	0	0
Expiring in over three years and up to ten years	0	0	0	0	0	0
Expiring in over ten years	0	0	0	0	0	0
Not expiring	0	0	0	0	0	0
	0	**0**	**0**	**0**	**0**	**0**
Tax credits						
Expiring in up to three years	13	0	13	0	0	0
Expiring in over three years and up to ten years	104	0	104	40	0	40
Expiring in over ten years	0	0	0	0	0	0
Not expiring	30	0	30	81	0	81
	147	**0**	**147**	**121**	**0**	**121**

15 Other assets

These mainly comprise property, plant and equipment, with owner-occupied property totalling €2,280m (2,374m), and plant and equipment amounting to €241m (272m). Advance payments on insurance amounted to €333m (339m), derivatives totalled €27m (68m), and miscellaneous deferred items came to €170m (177m).

Development of property, plant and equipment

€m	Owner-occupied property 2017	Operating and office equipment 2017	Other 2017	Total 2017
Gross carrying amount at 31 Dec. previous year	3,554	1,038	34	4,625
Accumulated amortisation and impairment losses at 31 Dec. previous year	-1,179	-765	-24	-1,967
Carrying amount at 31 Dec. previous year	2,374	272	11	2,657
Currency translation differences	-23	-3	-1	-27
Additions				
Business combinations	0	0	0	0
Other	16	88	2	106
Disposals				
Loss of control	0	-1	0	-1
Other	-9	-19	-1	-29
Impairment losses reversed	5	0	0	5
Depreciation and impairment losses				
Depreciation	-65	-92	-4	-161
Impairment losses	0	-1	0	-1
Reclassification	-19	-3	0	-22
Carrying amount at 31 Dec. financial year	**2,280**	**241**	**7**	**2,527**
Accumulated amortisation and impairment losses at 31 Dec. financial year	-1,214	-760	-24	-1,998
Gross carrying amount at 31 Dec. financial year	3,494	1,000	31	4,525

→

€m	Owner-occupied property Prev. year	Operating and office equipment Prev. year	Other Prev. year	Total Prev. year
Gross carrying amount at 31 Dec. previous year	3,580	1,049	33	4,662
Accumulated amortisation and impairment losses at 31 Dec. previous year	-1,178	-760	-25	-1,963
Carrying amount at 31 Dec. previous year	2,402	289	8	2,699
Currency translation differences	5	-1	0	4
Additions				
Business combinations	27	1	0	28
Other	60	95	8	163
Disposals				
Loss of control	0	0	0	0
Other	-50	-11	-2	-64
Impairment losses reversed	19	0	0	19
Depreciation and impairment losses				
Depreciation	-66	-99	-4	-168
Impairment losses	-8	0	0	-8
Reclassification	-14	-1	0	-15
Carrying amount at 31 Dec. financial year	**2,374**	**272**	**11**	**2,657**
Accumulated amortisation and impairment losses at 31 Dec. financial year	-1,179	-765	-24	-1,967
Gross carrying amount at 31 Dec. financial year	3,554	1,038	34	4,625

The fair value of the land and buildings amounts to €2,936m (2,912m). This is allocated to Level 3 of the fair value hierarchy; see Assets – B Investments, Determining fair values. The methodology for determining the fair values is described in the Notes to the consolidated balance sheet – Assets (3) Land and buildings, including buildings on third-party land.

The expenditures recognised in the carrying amount for assets in the course of construction totalled €4m (8m) for property and €22m (25m) for plant and equipment. Commitments to acquire property total €3m (3m) and commitments to acquire plant and equipment €12m (15m).

16 Assets held for sale

In the fourth quarter of 2017, we classified two of the ERGO Life and Health Germany segment's investment properties as "held for sale". Their carrying amounts total €22.2m. Both properties were sold in the first quarter of 2018. Taking account of taxes and policyholder participations, the expected gain resulting from the disposal will not be material in terms of the consolidated profit.

In December 2017, ERGO Group AG reached an agreement with Allianz Group about the sale of its legal protection subsidiary, D.A.S. Switzerland. As at 31 December 2017, the assets and liabilities of this company are shown separately as a disposal group in our balance sheet. The portfolios of the D.A.S. legal protection subsidiaries in Luxembourg and Slovakia, which are also to be sold to Allianz Group, have not been reclassified in the balance sheet for lack of materiality. Measurement as "held for sale" in accordance with IFRS 5 did not result in any value adjustments. The sale underpins ERGO's strategic focus. We expect a disposal gain in the low two-digit million euro range. The sale is still subject to approval by the competent authorities. We expect the transaction to be completed – and thus the deconsolidation to take place – in the second quarter of 2018.

Net unrealised gains on investments recognised in "other reserves" comprise €0.4m in net unrealised gains from the disposal groups.

In the segment reporting, we disclose how the non-current assets held for sale are allocated between the segments. Transactions between the disposal group and the Group's continuing operations continued to be fully eliminated. The assets and liabilities of the disposal groups and assets held for sale are shown in the following table:

Non-current assets and disposal groups held for sale

€m	31.12.2017
Assets	
Land and buildings, including buildings on third-party land	22
Other securities available for sale	75
Other investments	3
Other assets of the disposal group	17
Total assets	**118**
Liabilities	
Gross technical provisions	57
Other liabilities of the disposal group	8
Total liabilities	**65**

The "land and buildings, including buildings on third-party land" shown in the table are allocated to Level 3 of the fair value hierarchy. Of the "other securities available for sale", €52m is allocated to Level 1 and €23m to Level 2 of the fair value hierarchy.

Notes to the consolidated balance sheet – Equity and liabilities

17 Equity

The total share capital of €587,725,396.48 as at 31 December 2017 is divided into 155,027,908 no-par-value registered shares, each fully paid up and entitled to one vote. The number of shares in circulation was as follows

Development of shares in circulation

Number of shares	2017	Prev. year
Status at 31 Dec. previous year	156,902,293	162,782,591
Additions		
Disposals from hedging stock appreciation rights under long-term incentive plans	200	471
Reductions		
Acquisition of shares for retirement (share buy-back programme)	–5,643,062	–5,880,769
Status at 31 Dec. financial year	**151,259,431**	**156,902,293**

On 31 December 2017, a total of 3,768,477 Munich Reinsurance Company shares with a calculated nominal value of around €14.3m were held by Group companies. This represents around 2.4% of the share capital.

In the financial year, Munich Re bought back 5,643,062 shares. This includes the 2016/2017 share buy-back programme completed on 11 April 2017, and the 2017/2018 programme approved by the Board of Management of Munich Reinsurance Company on 15 March 2017, which provides for the acquisition of shares up to a value of €1bn before the 2018 Annual General Meeting.

The acquisition costs of all Munich Re shares in the possession of Group companies at the end of the financial year totalled €683,557,316.33.

A total of €1,333m was distributed to Munich Reinsurance Company's equity holders for the financial year 2016 in the form of a dividend of €8.60 per dividend-bearing share.

Composition of the authorised capital

€m	31.12.2017
Authorised Capital 2013 (until 24 April 2018)	10
Authorised Capital 2015 (until 22 April 2020)	280
Total	**290**

Composition of contingent capital

€m	31.12.2017
Contingent Capital 2015 (until 22 April 2020)	117
Total	**117**

Composition of equity

€m	31.12.2017	Prev. year
Issued capital	573	573
Capital reserve	6,845	6,845
Retained earnings	15,036	14,890
Other reserves	5,183	6,628
Consolidated result attributable to Munich Reinsurance Company equity holders	375	2,580
Non-controlling interests	186	269
Total equity	**28,198**	**31,785**

The "other reserves" include €365m (2,195m) from currency translation and €7m (–8m) resulting from valuation of cash flow hedges. In addition, "other reserves" contain unrealised gains and losses distributed between the different items as follows:

Unrealised gains and losses

€m	31.12.2017	Prev. year
Unconsolidated affiliated companies, associates and joint ventures not accounted for using the equity method	78	90
Associates and joint ventures accounted for using the equity method	89	80
Other securities available for sale		
Fixed-interest	7,622	8,649
Non-fixed-interest	3,261	2,924
Less		
Provision for deferred premium refunds recognised in equity	–4,837	–5,609
Deferred taxes recognised in equity	–1,193	–1,381
Non-controlling interests	–10	–16
Consolidation and currency translation effects	–200	–297
Adjustment item for disposal group	0	0
Total	**4,811**	**4,441**

Tax effects in the income and expenses recognised directly in equity

			2017			Prev. year
€m	Before tax	Tax	After tax	Before tax	Tax	After tax
Currency translation	–1,837	0	–1,837	345	0	345
Unrealised gains and losses on investments	167	193	360	241	25	265
Change resulting from equity method measurement	–15	–5	–20	12	0	12
Change resulting from cash flow hedges	–1	0	–1	–2	1	–1
Remeasurements of defined benefit plans	31	–67	–36	–108	32	–76
Other changes	4	0	4	0	0	0
Income and expense recognised directly in equity	**–1,651**	**121**	**–1,530**	**487**	**57**	**544**

The taxes of €121m (57m) recognised directly in equity comprise an amount of €120m (23m) for deferred tax assets, and current taxes on unrealised gains of €1m (34m) on assets.

Information on capital management is provided in the management report under “Financial position – Capital position”.

18 Fair value hierarchy of liabilities

All financial liabilities that are recognised at fair value, and such financial instruments that are not recognised at fair value but for which a fair value is disclosed in the notes, are allocated to one of the fair value hierarchy levels of IFRS 13.

At each reporting date, we assess whether the allocation of these liabilities to the levels of the fair value hierarchy is still appropriate. If changes in the basis of valuation have occurred – for instance, if a market is no longer active or the valuation was performed using inputs requiring another allocation – we make the necessary adjustments.

For information on the valuation models used for measuring derivatives, please see the table and explanations in the Notes to the consolidated balance sheet – Assets (4) Hierarchy for the fair value measurement of assets. The measurement of subordinated bonds for which no market prices are available is conducted using the present-value method and taking observable market inputs into account. For the bonds we have issued, we use the market prices provided by price quoters for the corresponding assets. The fair values of our amounts due to banks are determined using the present-value method, in part exclusively using observable market inputs, and partly also taking into account non-observable inputs.

The following table shows the allocation of the financial liabilities to levels of the fair value hierarchy.

Allocation of liabilities to levels of the fair value hierarchy

				31.12.2017
€m	Level 1	Level 2	Level 3	Total
Liabilities measured at fair value				
Other liabilities				
Derivatives	32	881	471	1,385
Total	**32**	**881**	**471**	**1,385**
Liabilities not measured at fair value				
Subordinated liabilities	3,250	57	2	3,309
Bonds and notes issued	354	0	0	354
Amounts due to banks	0	120	485	606
Other liabilities from financial transactions	0	352	16	368
Total	**3,604**	**530**	**503**	**4,637**

→				Prev. year
€m	Level 1	Level 2	Level 3	Total
Liabilities measured at fair value				
Other liabilities				
Derivatives	104	1,163	545	1,811
Total	**104**	**1,163**	**545**	**1,811**
Liabilities not measured at fair value				
Subordinated liabilities	4,659	66	1	4,725
Bonds and notes issued	410	0	0	410
Amounts due to banks	0	139	266	405
Total	**5,069**	**205**	**267**	**5,541**

Only derivatives with a negative fair value are currently recognised at fair value. Of these, we allocate the insurance derivatives to level 3 of the fair value hierarchy.

The following table presents the reconciliation from the opening balances to the closing balances for these insurance derivatives:

Reconciliation for liabilities allocated to Level 3

	Other liabilities at fair value through profit or loss	
€m	31.12.2017	Prev. year
Carrying amount at 31 Dec. previous year	545	413
Gains and losses	51	-90
Gains (losses) recognised in the income statement	1	-82
Gains (losses) recognised in equity	50	-7
Acquisitions	185	132
Disposals	-211	-92
Transfer to Level 3	0	2
Transfer out of Level 3	0	0
Change in the fair value of derivatives	3	0
Carrying amount at 31 Dec. financial year	**471**	**545**
Gains (losses) recognised in the income statement that are attributable to liabilities shown at the end of the financial year	143	-71

Gains (losses) recognised in the consolidated income statement are shown in the insurance-related investment result, while gains (losses) recognised in equity are shown in the statement of recognised income and expense for the 2017 financial year in the item Unrealised gains and losses on investments, Gains (losses) recognised in equity. Gains (losses) recognised in the consolidated income statement that are attributable to liabilities shown at the end of the financial year are shown in the statement of recognised income and expense for the 2017 financial year, in the item Unrealised gains and losses on investments, Recognised in the consolidated income statement.

19 Subordinated liabilities

In the case of Munich Reinsurance Company bonds, annual outflows of liquidity amounting to the respective interest payments occur until the first possible call dates. In the financial year, these amounted to €254m (263m). Thereafter, the liquidity outflows will vary, depending on the respective interest-rate level. For the registered bonds of ERGO Versicherung Aktiengesellschaft, and for the HSB Group bonds, the annual outflow is variable, depending on the respective interest-rate levels. ↗

The fair value of the subordinated liabilities at the balance sheet date amounted to €3,309m (4,725m). For the Munich Reinsurance Company bonds, we take the stock market prices as fair values. For the other subordinated liabilities, we determine the fair values using net present-value methods with observable market inputs.

Breakdown of subordinated liabilities

€m	A.M. Best	Fitch	Moody's	S&P	31.12.2017	Prev. year
Munich Reinsurance Company, Munich, 6.25% until 2022, thereafter floating, €900m, Bonds 2012/2042	a+	A	–	A	896	896
Munich Reinsurance Company, Munich, 6.625% until 2022, thereafter floating, £450m, Bonds 2012/2042	a+	A	–	A	506	526
Munich Reinsurance Company, Munich, 6.00% until 2021, thereafter floating, €1,000m, Bonds 2011/2041	a+	A	–	A	995	994
Munich Reinsurance Company, Munich, 5.767% until 2017, thereafter floating, €1,349m[1], Bonds 2007/perpetual	–	–	–	–	0	1,380
Munich Reinsurance Company, Munich, 7.625% until 2018, thereafter floating, £300m, Bonds 2003/2028	aa–	A+	A2 (hyb)	A	338	351
ERGO Versicherung Aktiengesellschaft, Vienna, secondary market yield on federal government bonds (Austria) +70 BP, €12m[2], Registered bonds 2001/perpetual	–	–	–	–	6	12
ERGO Versicherung Aktiengesellschaft, Vienna, secondary market yield on federal government bonds (Austria) +70 BP, €13m[3], Registered bonds 1998/perpetual	–	–	–	–	7	13
HSB Group Inc., Delaware, LIBOR +91 BP, US$ 76m, Bonds 1997/2027	–	–	–	–	42	47
Total					**2,790**	**4,218**

1 In the second quarter 2017, the issuer redeemed the entire bond.
2 In the first quarter 2017, the issuer redeemed bonds with a nominal value of €6m.
3 In the first quarter 2017, the issuer redeemed bonds with a nominal value of €7m.

20 Unearned premium

Unearned premiums

€m	31.12.2017	Prev. year
Gross	8,857	8,984
Ceded share	–328	–317
Net	**8,529**	**8,667**

Development of gross unearned premiums

€m	31.12.2017	Prev. year
Status at 31 Dec. previous year	8,984	8,841
Currency translation effects	–535	–45
Changes in consolidated group/Other	–16	0
Gross premiums written	49,115	48,851
Earned premiums	–48,691	–48,664
Status at 31 Dec. financial year	**8,857**	**8,984**

21 Provision for future policy benefits

Provision for future policy benefits

€m	31.12.2017	Prev. year
Gross	108,956	108,108
Ceded share	-760	-862
Net	**108,196**	**107,246**

Gross provision for future policy benefits according to type of insurance cover

€m	31.12.2017	Prev. year
Life and health	**108,287**	**107,436**
Reinsurance	10,825	11,221
ERGO	97,462	96,215
Term life insurance	3,317	3,363
Other life insurance	25,490	26,718
Annuity insurance	33,210	32,268
Disability insurance	1,337	1,292
Contracts with combination of more than one risk	47	31
Health	34,061	32,543
Property-casualty	**668**	**672**
Reinsurance	26	26
ERGO	643	646
Total	**108,956**	**108,108**

The provision for future policy benefits in life reinsurance largely involves contracts where the mortality or morbidity risk predominates. In reinsurance, annuity contracts have a significantly lower weight than in primary insurance.

Essentially the same actuarial assumptions have been used as in the previous year for measuring the provisions for future policy benefits for business in force. In the ERGO Life and Health Germany segment, there was an adjustment in 2017 to the assumptions regarding future lapses, expenses, and long-term interest-rate levels that are geared to the long-term regular return on investments. The provision for future policy benefits increased as a result of these adjustments.

Further information on the underwriting risks can be found in the risk report in the section "Significant risks".

Development of gross provision for future policy benefits

€m	2017	Prev. year
Status at 31 Dec. previous year	108,108	108,572
Currency translation differences	-175	-520
Changes in consolidated group/Other	301	-694
Changes		
Scheduled	629	47
Unscheduled	92	704
Status at 31 Dec. financial year	**108,956**	**108,108**

The change shown under "Changes in consolidated group/other" contains €321m (462m) in savings premiums for capitalisation products and –€517m (–2,434m) for portfolio entries and withdrawals.

Scheduled changes in the provision for future policy benefits contain the changes deriving from prospective calculation as a result of premium payments, benefit cases and the unwinding of discount in the 2017 financial year.

22 Provision for outstanding claims

Provision for outstanding claims

€m	31.12.2017	Prev. year
Gross	63,965	61,362
Ceded share	-2,957	-2,491
Net	**61,008**	**58,871**

Gross provision by type

€m	31.12.2017	Prev. year
Annuity claims provision	7,105	7,222
Case reserve	24,592	24,895
IBNR reserve	32,268	29,245
Total	**63,965**	**61,362**

The annuity claims provision involves periodic payments for occupational and other disability cases and is usually due long term. A major part of this provision is established in the life and health reinsurance and ERGO Life and Health Germany segments for future annuity payments; a small part refers to provisions for annuities in personal accident, liability and workers' compensation insurance. The biometric actuarial assumptions are selected using appropriate actuarial principles.

Provisions for annuity claims are calculated as the present value of the expected future payments. The discount rates used are presented in the disclosures on risks from insurance contracts under (39) Disclosures on risks from life and health insurance business and (40) Disclosures on risks from property-casualty insurance business.

The case reserve reflects the amount which is expected to be needed to settle claims which are known and have already been reported at the balance sheet date. The major part of this provision is measured at face value. The IBNR reserve is calculated using actuarial methods on the basis of historical claims development data and taking into account foreseeable future trends.

Expected payments from the provisions for outstanding claims (property-casualty only)

		Reinsurance		ERGO
%	31.12.2017	Prev. year	31.12.2017	Prev. year
Up to one year	34.9	32.2	32.8	34.0
Over one year and up to five years	44.5	44.9	37.8	39.4
Over five years and up to ten years	11.7	12.5	15.1	14.8
Over ten years and up to fifteen years	3.9	4.6	5.2	5.0
Over fifteen years	5.0	5.8	9.1	6.8

The expected timing of payments from the provisions for outstanding claims may involve considerable uncertainty.

Development of the claims reserve in the property-casualty segment[1]

			2017			Prev. year
€m	Gross	Ceded share	Net	Gross	Ceded share	Net
Balance at 31 Dec. previous year	48,877	-2,235	46,643	48,218	-2,208	46,009
Currency translation differences	-3,266	164	-3,102	540	-67	473
Changes in consolidated group/Other	-30	0	-30	0	0	0
Claims expenses						
For the year under review	19,201	-1,209	17,992	15,978	-602	15,376
For previous years	-1,084	-20	-1,104	-1,624	153	-1,471
Total claims expenses	18,118	-1,230	16,888	14,353	-449	13,905
Unwinding of discount	49	-2	48	61	-2	58
Less payments						
For the year under review	-5,239	132	-5,107	-5,737	151	-5,587
For previous years	-6,678	413	-6,265	-8,557	341	-8,216
Total payments	-11,917	545	-11,372	-14,294	491	-13,803
Balance at 31 Dec. financial year	**51,831**	**-2,757**	**49,074**	**48,877**	**-2,235**	**46,643**

1 Comprises the segments property-casualty reinsurance, ERGO Property-casualty Germany and the property-casualty section of the ERGO International segment.

The claims expenses for the financial year show payments made for the financial year and expenses for posting the claims reserve in that year. The provisions set up for claims from previous years are regularly updated using best estimates based on exposure and claims information and past claims experience. The respective change is shown under "claims expenses for previous years". The gross provision for outstanding claims of the disposal group amounting to €30m is recognised under Changes in consolidated group/Other.

In the financial year, most sectors experienced comparatively low claims-reporting activity from previous years, which had a positive influence on the ultimate-loss projection.

Net run-off results in property-casualty business

The values in the following run-off triangles cover more than 99% of our Group's portfolio of property-casualty business.

Claims payments for the individual accident years (per calendar year, net)

€m	Accident year											
Calendar year	≤ 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
2007	10,783											
2008	7,537	4,288										
2009	4,342	3,257	4,344									
2010	3,093	1,651	3,157	4,820								
2011	2,799	605	1,298	3,211	5,678							
2012	1,495	437	495	1,593	4,100	5,606						
2013	966	196	350	696	1,944	2,894	5,514					
2014	1,207	278	343	593	1,070	1,369	3,182	5,245				
2015	994	150	255	377	541	440	1,218	2,849	4,972			
2016	1,246	125	158	323	436	347	670	1,451	2,701	5,254		
2017	428	29	16	123	120	189	447	658	1,324	2,652	4,981	10,967

Claims reserves for the individual accident years at the respective reporting dates (net)

€m	Accident year											
Date	≤ 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
31 Dec. 2007	38,275											
31 Dec. 2008	30,409	8,820										
31 Dec. 2009	25,888	5,963	8,690									
31 Dec. 2010	22,209	4,279	5,472	8,592								
31 Dec. 2011	19,207	3,401	3,729	5,547	11,563							
31 Dec. 2012	16,866	2,826	3,123	3,841	7,529	8,594						
31 Dec. 2013	15,596	2,458	2,762	3,230	5,317	5,482	8,642					
31 Dec. 2014	14,046	1,924	2,097	2,668	3,877	3,917	5,665	8,868				
31 Dec. 2015	12,523	1,626	1,638	2,099	3,201	3,278	4,408	6,048	8,477			
31 Dec. 2016	11,041	1,437	1,445	1,560	2,326	2,895	3,455	4,577	5,825	9,116		
31 Dec. 2017	10,511	1,361	1,412	1,316	2,185	2,600	2,906	3,707	4,300	6,338	12,409	49,044

Ultimate loss for the individual accident years at the respective reporting dates (net)

€m	Accident year											
Date	≤ 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
31 Dec. 2007	49,058											
31 Dec. 2008	48,729	13,108										
31 Dec. 2009	48,550	13,508	13,034									
31 Dec. 2010	47,965	13,474	12,973	13,412								
31 Dec. 2011	47,761	13,202	12,529	13,578	17,241							
31 Dec. 2012	46,915	13,064	12,418	13,466	17,307	14,200						
31 Dec. 2013	46,611	12,892	12,407	13,550	17,039	13,982	14,155					
31 Dec. 2014	46,267	12,636	12,085	13,581	16,668	13,786	14,360	14,113				
31 Dec. 2015	45,738	12,488	11,881	13,390	16,534	13,587	14,321	14,143	13,449			
31 Dec. 2016	45,502	12,424	11,846	13,174	16,095	13,551	14,038	14,122	13,499	14,370		
31 Dec. 2017	45,401	12,377	11,829	13,053	16,075	13,445	13,935	13,910	13,297	14,244	17,390	184,956
Net run-off result	3,658	731	1,205	360	1,166	755	220	203	152	126	n/a	8,575
Change 2016 to 2017	102	47	17	122	20	106	102	212	202	126	n/a	1,056

The ultimate loss of an accident year comprises all payments made for that accident year up to the reporting date, plus the claims reserve at the reporting date. Given complete information regarding all losses incurred up to the balance sheet date, the ultimate-loss status for each accident-year period would remain the same. In practice, however, the ultimate-loss status (based on estimates) is exposed to fluctuations that reflect the growth in knowledge about the claims cases. Changes in the consolidated group, especially new acquisitions or the composition of segments to be reported, can also have an influence on the ultimate-loss status.

The run-off triangles are prepared on a currency-adjusted basis. For this purpose, all figures are translated from the respective local currency into the Group currency (euro). This ensures that currency translation does not lead to run-off effects.

23 Other technical provisions

Breakdown of other technical provisions

€m	31.12.2017	Prev. year
Provision for premium refunds based on national regulations	8,642	8,209
Provision for deferred premium refunds	9,709	10,155
Thereof resulting from unrealised gains and losses on investments (recognised directly in equity)	4,820	5,589
Thereof resulting from other remeasurements (recognised in profit or loss)	4,889	4,566
Provision for profit commission	676	513
Other	147	148
Total (gross)	**19,174**	**19,026**

Of the provision for premium refunds based on national regulations, €77m (84m) is apportionable to property-casualty insurance. The provision for deferred premium refunds is established solely for life and health insurance.

The ceded share of "other technical provisions" amounts to €125m (–1m), of which €0m (1m) is apportionable to the ceded share of the provision for premium refunds based on national regulations.

Development of provision for premium refunds based on national regulations

€m	2017	Prev. year
Status at 31 Dec. previous year	8,209	7,730
Changes in consolidated group	0	0
Allocations/Withdrawals	433	479
Status at 31 Dec. financial year	**8,642**	**8,209**

Development of provision for deferred premium refunds

€m	2017	Prev. year
Status at 31 Dec. previous year	10,155	9,190
Changes in consolidated group	0	–337
Change resulting from unrealised gains and losses on investments (recognised directly in equity)	–769	748
Change resulting from other remeasurements (recognised in profit or loss)	323	553
Status at 31 Dec. financial year	**9,709**	**10,155**

The above change resulting from unrealised gains and losses on investments reflects the proportional allocation to expected future policyholders' bonuses of the change in fair values that occurred in the past year.

To determine the portion of the measurement differences allocable to the provision for deferred premium refunds, rates of between 50% and 92.5% after tax were used.

24 Gross technical provisions for unit-linked life insurance

Development of gross provisions

€m	2017	Prev. year
Balance at 31 Dec. previous year	8,429	8,201
Changes in consolidated group/Other	43	47
Savings premiums	755	659
Unrealised gains/losses on fund asset	414	178
Withdrawal for expenses and risk	–63	–59
Withdrawal for benefits	–606	–597
Balance at 31 Dec. financial year	**8,971**	**8,429**

These provisions are measured retrospectively. The withdrawal for underwriting risks from the premiums and provision for future policy benefits is made on the basis of prudent assumptions regarding expected mortality and morbidity. Here, as with the provision for future policy benefits for non-unit-linked life insurance, we base the underlying calculation on best estimates, with appropriate provisions for adverse deviation.

The provisions are directly covered by the investments for unit-linked life insurance contracts. Small differences in relation to these investments arise as a result of including unearned revenue liability in these provisions.

25 Other provisions

Breakdown of other provisions

€m	31.12.2017	Prev. year
Provisions for post-employment benefits	2,982	3,058
Other provisions	1,526	1,837
Total	**4,508**	**4,895**

Provisions for post-employment benefits

Munich Re companies generally give pension commitments to their employees in the form of defined contribution plans or defined benefit plans. Special regional economic, legal and tax features are taken into account. The type and amount of the pension obligations are determined by the conditions of the respective pension plan. The pension commitments comprise obligations towards active members or retired members with vested benefits, and current pension payments. Defined benefit plans are funded internally through provisions for post-employment benefits, and externally through funds and insurance contracts concluded to cover the benefit obligations.

Expenses for defined contribution plans in the year under review totalled €66m (67m), with €113m (111m) for contributions to state plans.

The present value of obligations under defined pension plans is €5,924m (6,095m), and the plan assets to be offset amount to €3,253m (3,388m). Defined benefit plans comprise the following main plans:

Munich Reinsurance Company's pension obligations account for €1,490m (1,550m) of the present value of obligations under defined pension plans and €1,619m (1,718m) of plan assets. The obligations include disability and old-age pensions, and pensions for surviving dependants. The amount of the pensions generally depends on salary and length of service. The defined benefits granted up to 31 December 2007 are financed through a fund. New members on or after 1 January 2008 receive pension commitments in the form of defined contribution plans financed by means of intra-Group insurance contracts securing the obligations under pension schemes. The fund and insurance contracts have been grouped in a contractual trust agreement (CTA). Owing to reduced expectations with regard to participations in surplus deriving from insurance concluded to cover benefit obligations, the present value of obligations under defined pension plans and plan assets is down by €110m.

The pension obligations of the ERGO Group account for €2,960m (2,967m) of the present value of obligations under defined pension plans and €422m (420m) of plan assets. The obligations include disability and old-age pensions, and pensions for surviving dependants. The amount of the pensions generally depends on salary and length of service. The commitments are generally funded through pension provisions. New members receive pension commitments in the form of defined contribution plans financed by means of intra-Group insurance contracts securing the obligations under pension schemes. There are also medical-care benefit obligations.

The pension obligations of Munich Reinsurance America, Inc. account for €694m (771m) of the present value of obligations under defined benefit plans, and €501m (530m) of plan assets. The obligations include pensions for employees and surviving dependants. The amount of the pensions generally depends on includable compensation and length of service. The plan is financed through a trust and pension provisions. The plan was closed to new members effective 1 January 2006, and to all remaining members effective 31 December 2011. With effect from 1 January 2012, all members now receive pension commitments in the form of defined contribution plans. There are also retiree medical-care benefit obligations.

Change in the present value of the defined benefit obligations

€m	2017	Prev. year
Status at 31 Dec. previous year	6,095	5,389
Currency translation differences	–150	–4
Changes in consolidated group	1	4
Current service cost	163	157
Past service cost	–41	–1
Gains and losses from plan settlements	0	–1
Contributions by plan participants	7	8
Interest expense	120	136
Payments	–145	–142
Payments from plan settlements	–3	–3
Transfer of obligations	4	0
Actuarial gains/losses: Change in demographic assumptions	–9	–13
Actuarial gains/losses: Change in financial assumptions	–58	384
Actuarial gains/losses: Experience adjustments	–30	–23
Other	–29	205
Status at 31 Dec. financial year	**5,924**	**6,095**

The present value of medical-care benefit obligations amounted to €281m (310m) at the balance sheet date.

The present value of the obligations under defined benefit plans breaks down as follows:

Breakdown of the present value of defined benefit obligations

%	31.12.2017	Prev. year
Active members	50	52
Deferred members	15	14
Pensioners	35	34
Total	**100**	**100**

Pension obligations are measured using assumptions about future developments. The consolidated companies used the following actuarial assumptions (weighted-average values):

Actuarial assumptions

%	2017	Prev. year
Discount rate	2.1	2.2
Future increases in entitlement/salary	2.0	1.9
Future pension increases	1.4	1.4
Medical cost trend rate	3.7	4.3

Munich Re uses generally recognised biometric actuarial assumptions, adjusted as a rule to take account of company-specific circumstances. The average remaining life expectancy of a 65-year-old plan participant is 24.2 years for women and 24.2 years for men.

Change in the fair value of plan assets for defined benefit plans

€m	2017	Prev. year
Balance at 31 Dec. previous year	3,388	2,847
Currency translation differences	-109	-19
Changes in consolidated group	0	0
Interest income	74	79
Return excluding interest income	-75	322
Contributions by the employer	84	75
Contributions by plan participants	6	5
Payments	-78	-54
Payments from plan settlements	-5	-6
Transfer of assets	-1	0
Other	-30	140
Balance at 31 Dec. financial year	**3,253**	**3,388**

Breakdown of the fair value of plan assets for defined benefit plans

%	31.12.2017	Prev. year
Quoted market price in an active market		
Fixed-interest securities	40	41
Non-fixed-interest securities	23	24
Equities	4	4
Investment funds	19	20
Other	0	0
Other	0	0

Breakdown of the fair value of plan assets for defined benefit plans

%	31.12.2017	Prev. year
No quoted market price in an active market		
Cash or cash equivalents	1	1
Real estate	1	0
Fixed-interest securities	1	1
Non-fixed-interest securities	4	4
Equities	0	0
Investment funds	4	4
Other	0	0
Insurance contracts	29	29
Other	1	0

As in the previous year, the plan assets do not include any own shares.

For the financial year 2017, capital transfers of €81m (103m) to plan assets are expected.

Change in the reimbursement rights for defined benefit plans

€m	2017	Prev. year
Balance at 31 Dec. previous year	276	252
Changes in consolidated group	1	0
Interest income	5	5
Return excluding interest income	-4	10
Contributions by the employer	20	18
Contributions by plan participants	0	0
Payments	-7	-8
Transfer of assets	-10	0
Other	-1	0
Balance at 31 Dec. financial year	**280**	**276**

The reimbursement rights derive from insurance concluded to cover the benefit obligations.

There was an effect of €13m (9m) resulting from the asset ceiling on overfunded defined benefit plans.

Funded status of defined benefit plans

€m	31.12.2017	Prev. year
Obligations funded through provisions		
Present value of defined benefit obligations	2,743	2,760
Other	–1	0
Net balance sheet liability	2,741	2,760
Obligations funded through plan assets		
Present value of defined benefit obligations	3,181	3,335
Fair value of plan assets	–3,253	–3,388
Assets from the defined benefit plan	303	343
Effect of asset ceiling	13	9
Other	–4	0
Net balance sheet liability	241	299
Obligations independent of funded obligations		
Present value of defined benefit obligations	5,924	6,095
Fair value of plan assets	–3,253	–3,388
Assets from the defined benefit plan	303	343
Effect of asset ceiling	13	9
Other	–5	0
Net balance sheet liability	**2,982**	**3,058**

The plan assets have the exclusive purpose of fulfilling the defined benefit obligations to which they are allocated and making provision for future outflows. This is required by law in several countries, whilst in other countries plan assets are provided on a voluntary basis.

The relationship between the fair value of the plan assets and the present value of the defined benefit obligations is referred to as the funded status. If the present value of defined benefit obligations exceeds the fair value of the plan assets, this excess of liabilities over assets is financed by means of provisions for post-employment benefits.

If the fair value of the plan assets exceeds the present value of the defined benefit obligations, an asset arises out of the defined benefit plan. As each plan is analysed individually, this may give rise to both a provision for post-employment benefits and an asset from the defined benefit plan.

Market fluctuations may give rise to changes in the fair value of the plan assets over time. Adjustments to the actuarial assumptions (e.g. life expectancy, actuarial interest rate) or deviations in actual risk experience from the risk experience assumed may result in changes in the present value of the defined benefit obligations. Both factors may therefore lead to fluctuations in the funded status. To avoid these fluctuations wherever possible, care is taken, when choosing investments, that fluctuations in the fair value of the plan assets and in the present value of defined benefit obligations offset each other as far as possible whenever changes in certain influencing variables occur (asset-liability matching).

Change in the provision for defined benefit plans

€m	2017	Prev. year
Balance at 31 Dec. previous year	3,058	2,751
Currency translation differences	–45	8
Changes in consolidated group	1	4
Expenses	172	215
Payments	–67	–88
Payments from plan settlements	2	3
Capital transfer to plan assets	–90	–80
Transfer of assets	5	0
Transfer to other receivables	–36	142
Actuarial gains/losses recognised in equity	–14	91
Other	–4	13
Balance at 31 Dec. financial year	**2,982**	**3,058**

Breakdown of expenses booked in the financial year

€m	2017	Prev. year
Net interest income or expense	42	52
Service cost	129	162
Other	1	1
Total	**172**	**215**

The expenses are distributed between the functional areas and shown mainly under “operating expenses” and “expenses for claims and benefits” in the consolidated income statement.

The actual losses on plan assets amount to €1m (actual gains of €400m), and the actual gains on reimbursements to €1m (15m).

Contractual period to maturity of pension obligations

€m	31.12.2017	Prev. year
Up to one year	151	157
Over one year and up to five years	679	690
Over five years and up to ten years	975	996
Over ten years and up to twenty years	2,398	2,536
Over twenty years	6,037	6,852
Total	**10,241**	**11,231**

The weighted average contractual period to maturity of our pension obligations is 20 (21) years.

An increase or decrease in the following essential actuarial assumptions has an impact on the present value of defined benefit obligations: ↗

Sensitivity analysis

€m	31.12.2017	Prev. year
Increase in actuarial discount rate by 50 BP	-534	-564
Decrease in actuarial discount rate by 50 BP	627	653
Increase in salary/entitlement trends by 10 BP	22	28
Decrease in salary/entitlement trends by 10 BP	-22	-28
Increase in pension trends by 10 BP	61	66
Decrease in pension trends by 10 BP	-59	-60
Increase in medical cost trend rate by 100 BP	47	51
Decrease in medical cost trend rate by 100 BP	-39	-42
Increase in mortality rate by 10%	-161	-163
Decrease in mortality rate by 10%	171	172

The calculations for the actuarial assumptions classified as essential were carried out individually in order to display their effects separately.

Miscellaneous provisions

Miscellaneous provisions

€m	Prev. year	Additions	Withdrawals	Reversal	Other changes	31.12.2017
Restructuring	846	92	-308	-33	5	601
Earned commission	177	1,871	-1,868	-5	1	176
Multi-year variable compensation	131	31	-26	-16	-10	109
Early retirement benefits/semi-retirement	65	46	-5	0	-3	102
Anniversary benefits	104	3	-6	0	0	100
Salary obligations and other remuneration for desk and field staff	122	96	-117	-17	-1	84
Miscellaneous	393	303	-294	-32	-18	353
Total	**1,837**	**2,442**	**-2,624**	**-103**	**-26**	**1,526**

The provisions for restructuring mainly concern €39m (69m) for the ERGO Group's "Continuous improvement of our competitive position" project and €170m (214m) for the comprehensive restructuring of the ERGO Group's sales organisations. ERGO also posted restructuring provisions of €333m (391m) for the ERGO Strategy Programme, plus another €30m (136m) for the discontinuation of new business and the winding up of the sales organisation in Belgium. The provision for multi-year variable remuneration includes ↗ components for multi-year performance and for the medium-term incentive plans. The other miscellaneous provisions comprise a large number of different items. The provisions for restructuring, early-retirement benefits/semi-retirement, anniversary benefits, multi-year performance and medium-term incentive plans are mainly long term, whereas the provisions for earned commission, salary obligations, other remuneration for desk and field staff, and miscellaneous are essentially short term.

26 Bonds and notes issued

Breakdown of bonds and notes issued

€m	A.M. Best	Fitch	Moody's	S&P	31.12.2017	Prev. year
Munich Re America Corporation, Wilmington, 7.45%, US$ 334m[1], Senior Notes 1996/2026	a	A+	A2	A–	277	324
Total					**277**	**324**

1 In the second quarter 2017, and in the third quarter 2017, the issuer redeemed bonds each time with a nominal value of US$ 4m.

Outflows of liquidity occur annually in the amount of the interest payments until the notes mature. These totalled US$ 25m (25m) in the financial year. The fair value at the reporting date amounts to €354m (410m).

27 Deposits retained on ceded business

Deposits retained on ceded business are collateral for technical provisions covering business ceded to reinsurers and retrocessionaires. As a rule, the changes in deposits retained on ceded business derive from the changes in the relevant technical provisions covering ceded business. Deposits retained on ceded business thus do not have a fixed maturity date, their release generally being dependent on run-off of the corresponding provisions.

28 Other liabilities

Breakdown of other liabilities

€m	31.12.2017	Prev. year
Amounts payable on primary insurance business	3,243	2,734
Accounts payable on reinsurance business	4,690	5,477
Amounts due to banks	602	396
Miscellaneous liabilities	6,937	6,580
Total	**15,472**	**15,187**

The accounts payable on primary insurance business mainly contain liabilities towards policyholders resulting from accumulated participation in surplus, premium deposits and insurance contracts without significant risk transfer.

Of the amounts due to banks, €110m (127m) is attributable to bank borrowing by Group companies acquired by Munich Re under its infrastructure investment strategy.

The miscellaneous liabilities contain liabilities of €1,622m (1,439m) resulting from reinsurance contracts without significant risk transfer, derivative financial instruments with a negative fair value of €665m (872m), and negative fair values totalling €719m (939m) for insurance-linked derivatives and hedging derivatives of variable annuities. The miscellaneous liabilities also include €25m (24m) for social security and €131m (175m) for interest and rent.

The following table provides information on the remaining contractual maturities of the items shown under "other liabilities". The amounts payable on primary insurance business are directly linked to the underlying insurance business, and therefore not taken into account here. This currently also applies to the derivatives embedded in variable annuity business; see Disclosures on risks from insurance contracts, (39) Disclosures on risks from life and health insurance business. The derivatives listed below are recognised at fair value.

Remaining terms of the other liabilities according to carrying amounts
(excluding amounts payable on primary insurance business and excluding liabilities from derivative components embedded in variable annuities)

	Carrying amounts	
€m	31.12.2017	Prev. year
Up to one year	8,549	8,948
Over one year and up to two years	125	102
Over two years and up to three years	770	237
Over three years and up to four years	48	37
Over four years and up to five years	159	82
Over five years and up to ten years	1,069	1,153
Over ten years	820	998
Total	**11,540**	**11,556**

The major portion of the liabilities up to one year involve interest-free items, where the carrying amounts and the undiscounted cash flows are identical. A total of €59m (47m) of the amounts owed to banks and €674m (391m) of the liabilities from derivatives are due within one year. Any deviations in the liabilities with remaining terms of over one year from the undiscounted cash flows are not material for presenting the significance of the financial liabilities for our financial position and performance.

29 Liabilities from financing activities

Between the beginning of the financial year and the balance sheet date, there were the following cash and non-cash changes in liabilities arising from financing activities:

Breakdown of reconciliation for liabilities from financing activities

€m	Short-term borrowings	Long-term borrowings	Assets held to hedge long-term borrowings	Liabilities from financing activities
Carrying amount at 31.12.2016	396	4,542	–31	4,907
Cash changes	–13	–1,368	0	–1,382
Currency translation effects	0	–79	0	–79
Changes in fair value	0	–31	31	–1
Changes in consolidated group/Other	220	5	0	224
Carrying amount at 31.12.2017	**602**	**3,068**	**0**	**3,670**

Long-term borrowings include subordinated liabilities and bonds and notes issued.

Notes to the consolidated income statement

30 Premiums

Premiums

€m	2017	Prev. year
Total gross premiums	50,251	50,052
Gross premiums written	49,115	48,851
Change in gross unearned premiums	–424	–188
Gross earned premiums	**48,691**	**48,664**
Ceded premiums written	–1,565	–1,526
Change in unearned premiums – Ceded share	37	–20
Earned premiums ceded	**–1,528**	**–1,546**
Net earned premiums	**47,164**	**47,118**

The total gross premiums include not only the gross premiums written but also savings premiums from unit-linked life insurance and capitalisation products. Premiums from long-term insurance business, especially in life primary insurance, are recognised in full as earned premiums and income when they become due. Under gross premiums written, only those parts of the premium from unit-linked life business are included that are used to cover the risks and associated costs.

Of the gross premiums written from short-term insurance business, the portions attributable to periods after the balance sheet date are recognised as unearned premiums; see Notes to the consolidated balance sheet – Equity and liabilities under (20) Unearned premiums. Over the duration of the contracts, unearned premiums are reversed in accordance with the reduction in risk.

31 Interest income on technical provisions

The income from technical interest is the amount earned by assumed insurance business from the mainly risk-free investment of assets covering the technical provisions. The deposits retained on ceded business are also taken into account as a basis for the technical interest. Thus the portion of investment income corresponding to the deposit interest expense is included as a component in the calculation of the technical interest and reallocated to the technical result.

Quantitative information on technical interest can be found in the segment income statement.

In terms of the assets required to cover the technical provisions, the composition of the technical interest varies from segment to segment, depending on the type of insurance business conducted and the related statutory regulations.

In the life and health reinsurance segment, the income from technical interest in life reinsurance business corresponds to the risk-free interest on our technical provisions. For deposited provisions, income from technical interest corresponds to the agreed interest rate. In health reinsurance business, the interest on long-term reinsurance treaties corresponds to the contractually agreed allocations of interest. For short-term reinsurance business, the income from technical interest is calculated on the basis of the risk-free interest on technical provisions at the relevant national interest rate.

In property-casualty reinsurance, we allow for the fact that provisions established in prior years were invested at higher interest rates than the current level of market interest rates. The income from technical interest therefore corresponds to the risk-free interest on our discounted technical provisions at the respective historical interest rate, taking into account the relevant period of insurance and currency. Short-term interest rates are applied to the difference between the discounted provisions and balance sheet provisions.

In the ERGO Life and Health Germany segment, the income from technical interest for life primary insurance companies comprises the gains and losses from unit-linked life insurance, plus the guaranteed interest rate and profit sharing on the basis of the non-technical result sources. For health primary insurance companies, the income from technical interest corresponds to the allocation of interest to the ageing reserve (actuarial interest) and the allocation to the provision for premium refunds. The latter is based on the allocation of interest to the provision for non-performance-related premium refunds, on the investment result exceeding the actuarial interest rate, and on policyholders' participation in the other non-technical result components.

In the ERGO Property-casualty Germany segment, the income from technical interest is calculated analogously to the procedure in the property-casualty reinsurance segment.

In the ERGO International segment, the income from technical interest for life primary insurance companies corresponds to the risk-free interest on the provision for future policy benefits at the relevant national interest rate, the gains and losses from unit-linked life insurance, and profit sharing where there are types of contract providing for this. The income from technical interest for property-casualty primary insurance companies is calculated analogously to the procedure in the property-casualty reinsurance segment.

The income from technical interest for health primary insurance business is based on the interest on other technical provisions at the relevant national risk-free interest rate and, where applicable, on the interest allocated to the provision for future policy benefits.

32 Expenses for claims and benefits

Expenses for claims and benefits

€m	2017	Prev. year
Gross		
Claims and benefits paid	-33,480	-35,973
Change in technical provisions		
Provision for future policy benefits	-914	-322
Provision for outstanding claims	-6,577	-799
Provision for premium refunds	-1,968	-1,969
Other technical result	-255	-104
Gross expenses for claims and benefits	**-43,194**	**-39,167**
Ceded share		
Claims and benefits paid	934	1,188
Change in technical provisions		
Provision for future policy benefits	-12	-33
Provision for outstanding claims	646	-420
Provision for premium refunds	-1	0
Other technical result	-17	-67
Expenses for claims and benefits – Ceded share	**1,549**	**669**
Net		
Claims and benefits paid	-32,547	-34,785
Change in technical provisions		
Provision for future policy benefits	-926	-354
Provision for outstanding claims	-5,931	-1,219
Provision for premium refunds	-1,969	-1,969
Other technical result	-272	-170
Net expenses for claims and benefits	**-41,645**	**-38,498**

The change in the provision for future policy benefits (net) contains €414m (178m) in unrealised gains/losses from unit-linked life insurance. Expenses for claims and benefits include expenses for policyholders' bonuses. Of this, €1,009m (985m) is for the allocation to the provision for premium refunds on the basis of national regulations, €319m (208m) for the change in the provision for deferred premium refunds recognised in the income statement, and €107m (166m) for direct crediting. The other technical result for life primary insurance mainly includes interest on policyholders' accumulated credit.

Expenses for profit commission in reinsurance are shown under "operating expenses", not under "expenses for claims and benefits".

33 Operating expenses

Operating expenses

€m	2017	Prev. year
Gross		
Acquisition costs, profit commission and reinsurance commission paid	-9,615	-9,753
Administrative expenses	-2,962	-2,945
Change in deferred acquisition costs and contingent commissions, amortisation and impairment losses on acquired insurance portfolios	78	42
Gross operating expenses	**-12,498**	**-12,655**
Ceded share		
Acquisition costs, profit commission and reinsurance commission paid	355	355
Change in deferred acquisition costs and contingent commissions	-42	6
Operating expenses – Ceded share	**313**	**360**
Net operating expenses	**-12,186**	**-12,295**

34 Investment result

Investment result by type of investment (before deduction of income from technical interest)

€m	2017	Prev. year
Land and buildings, including buildings on third-party land	**324**	**383**
Investments in affiliated companies	**-40**	**-159**
Investments in associates and joint ventures	**146**	**124**
Loans	**2,825**	**2,633**
Other securities available for sale		
Fixed-interest	3,637	4,857
Non-fixed-interest	1,359	672
Other securities at fair value through profit or loss		
Held for trading		
Fixed-interest	0	0
Non-fixed-interest	7	4
Derivatives	-364	-608
Designated at fair value through profit or loss		
Fixed-interest	-1	13
Non-fixed-interest	26	4
Deposits retained on assumed reinsurance, and other investments	**247**	**174**
Expenses for the management of investments, other expenses	**-554**	**-530**
Total	**7,611**	**7,567**

The result for land and buildings includes rental income of €427m (405m). The expenses for the management of investments include running costs and expenses for repair and maintenance of property totalling €79m (69m). We earned interest income of €1,929m (2,063m) on loans. Other securities available for sale produced regular income of €3,547m (3,755m), while derivatives generated €112m (114m). Interest expenses on non-derivative investments amounted to €12m (12m), administrative expenses to €380m (375m), and other expenses to €96m (86m).

Write-downs of non-derivative investments

€m	2017	Prev. year
Land and buildings, including buildings on third-party land	-141	-101
Investments in affiliated companies	-3	-7
Investments in associates and joint ventures	-11	-14
Loans	-11	-38
Other securities available for sale	-137	-353
Other securities at fair value through profit or loss	-22	-44
Other investments	-44	-52
Total	**-371**	**-608**

35 Insurance-related investment result

Result from insurance-related investments

€m	2017	Prev. year
Result from investments for unit-linked life insurance contracts	479	238
Result from other insurance-related investments	-36	88
Total	**443**	**326**

36 Other operating result

Other operating result

€m	2017	Prev. year
Other operating income	778	744
Thereof:		
Interest income	111	70
Write-ups of other operating assets	21	33
Other operating expenses	-924	-938
Thereof:		
Interest charges	-119	-89
Write-downs of other operating assets	-34	-71

Other operating income mainly comprises income of €497m (527m) from services rendered, interest and similar income of €111m (70m), income of €29m (57m) from the release/reduction of miscellaneous provisions and provisions for bad and doubtful debts, and income of €30m (48m) from owner-occupied property, some of which is also leased out.

In addition to expenses of €399m (431m) for services rendered, other operating expenses chiefly include interest charges and similar expenses of €131m (92m), other write-downs of €29m (57m), and other tax of €127m (107m). They also contain expenses of €13m (24m) for owner-occupied property, some of which is also leased out.

The other operating result includes the result from reinsurance treaties with insufficient risk transfer totalling €55m (43m), of which €51m (41m) derives from the life and health reinsurance segment.

37 Other non-operating result, impairment losses on goodwill and net finance costs

Other non-operating result, impairment losses on goodwill and net finance costs

€m	2017	Prev. year
Other non-operating result	-926	-437
Impairment losses on goodwill	-9	-28
Net finance costs	-211	-219

The other non-operating result is unrelated to the conclusion, administration or settlement of insurance contracts or the administration of investments. It essentially comprises a foreign-currency result of –€294m (+485m), the other non-technical result of –€497m (–245m), write-downs of €68m (96m) on other intangible assets, and restructuring expenses of €76m (583m).

Net finance costs include all interest income, interest expenses and other expenses directly attributable to strategic debt. Debt has a strategic character for us if it does not have an original, direct link with our operative business.

Net finance costs by financing instrument

€m	2017	Prev. year
Subordinated bonds of Munich Reinsurance Company, Munich	-181	-192
Senior notes of Munich Re America Corporation, Wilmington	-25	-23
Subordinated bonds of HSB Group Inc., Delaware	-3	-2
Other	-2	-1
Total	**-211**	**-219**

38 Taxes on income

This item shows the corporation tax and municipal trade earnings tax paid by the German consolidated companies (including solidarity surcharge and interest on back tax) and the comparable taxes on earnings paid by the foreign consolidated companies in the Group. The determination of taxes on income includes the calculation of deferred taxes.

Main components of tax expenses/income

€m	2017	Prev. year
Current tax for financial year	-787	-1,093
Current tax for other periods	193	286
Deferred tax resulting from the occurrence or reversal of temporary differences	1,038	174
Deferred tax resulting from the occurrence or utilisation of loss carry-forwards	-224	-254
Valuation allowances for deferred taxes/loss carry-forwards	-38	126
Effects of changes in tax rates on deferred tax	116	1
Taxes on income	**298**	**-760**

The following table shows the reconciliation between the expected taxes on income and the tax on income actually shown. The expected tax expenses are calculated by multiplying the consolidated result before taxes on income (after “other tax”) by the Group tax rate. The applicable Group tax rate amounts to 33%. This takes into account corporation tax including solidarity surcharge, and trade tax (GewSt). Trade-tax municipal factors range from 240% to 490%.

Reconciliation to effective tax expenses/income

€m	2017	Prev. year
Result before taxes on income (after “other tax”)	94	3,341
Group tax rate in %	33	33
Derived taxes on income	-31	-1,102
Tax effect of:		
Tax rate differences	104	279
Tax-free income	129	1
Non-deductible expenses	-206	-299
Valuation allowances for deferred taxes/loss carry-forwards	-38	126
Change in tax rates and tax legislation[1]	91	1
Tax for prior years	297	310
Trade tax adjustments	-6	-21
Other	-42	-55
Taxes on income shown	**298**	**-760**

1 €79m impact of US tax reform, including the one-off taxation of reinvested foreign profits.

The effective tax burden is the ratio between the “taxes on income shown” and the “result before taxes on income (after “other tax”)”. In the 2017 financial year, there was tax relief of 315.0% (previous year: tax burden of 22.7%).

Disclosures on risks from insurance contracts and financial instruments

Munich Re's reporting is based on various legal regulations governing risks it is exposed to as a result of its business operations:

In the notes to the financial statements, risks from insurance contracts must be reported in accordance with IFRS 4 and risks from financial instruments in accordance with IFRS 7. Further disclosures on risks are required in the management report under Section 315 (2) no. 2 of the German Commercial Code (HGB) and German Accounting Standard no. 20 (DRS 20) for management reports.

Since risk reporting concerns not only accounting but also the activities of integrated risk management (IRM) at Munich Re, information on risks is provided in the risk report within the management report, in the disclosures on risks from insurance contracts, and in the disclosures on technical provisions and financial instruments in the notes to the financial statements. Where necessary, we refer to the relevant information in the risk report and information on the respective items.

The disclosures in the risk report largely adopt a purely economic view. The report provides an account of the organisation of risk management and Munich Re's risk strategy, briefly outlines the main risks we are exposed to, and describes the economic risk capital calculated by means of our internal risk model. The report also contains information on specific risk complexes.

The provision – stipulated by the requirements of IFRS 4 – of quantitative data on the effects of changes in the assumptions underlying the measurement of insurance contracts and/or in the market environment is also covered by information about economic risk capital stated in the risk report.

In the notes to the financial statements, we describe in detail uncertainties involved in measuring insurance contracts. For risks from financial instruments, IFRS 7 stipulates that the disclosures must comprise information on the remaining terms and the rating.

39 Disclosures on risks from life and health insurance business

Significant risks from life and health insurance business comprise underwriting risks, market risks and liquidity risks. These risks are described in detail in the risk report.

Underwriting risk Of importance for the underwriting risks are biometric risks and lapse risks. Biometric risks mainly relate to mortality, disability, morbidity and longevity. The biometric assumptions we use for measuring insurance contracts in our portfolios are regularly reviewed on the basis of updated portfolio information. Especially in primary insurance, this includes considering country-specific reviews by supervisory authorities. We also take account of market standards when checking the adequacy of biometric actuarial assumptions and the trend assumptions included in them. In reinsurance, a lapse risk also derives from the indirect transfer of lapse risks from cedants. As a rule, both this risk and the financial risk from extraordinary termination of reinsurance contracts are largely ruled out through appropriate contract design. The lapse risk in primary insurance is allowed for by means of appropriate liquidity planning and adequate calculation of the surrender value.

Market risk With regard to our technical provisions, we are particularly exposed to interest-rate risk. A distinction must be made between risks of changes in interest rates on the one hand and interest-rate guarantee risks on the other. Risks of changes in interest rates would result from the discounting of the provision for future policy benefits and of parts of the provision for outstanding claims. In accordance with accounting valuation rules, the discount rate is fixed at contract commencement and will generally not be adjusted during the term of the contract. To this extent, the accounting valuation of these technical provisions does not depend directly on the level of the market interest rates. Economically, however, an interest-rate risk derives in principle from the need to earn a return on the investments covering the provision that is commensurate with the discount rate used in measuring the provision.

In reinsurance, we use the following discount rates for the provision for future policy benefits and the provision for outstanding claims:

Discount rates used for provisions – Reinsurance (gross)

€m	31.12.2017	Prev. year
Without discount rate	3,760	4,149
Discount rate ≤ 2.0%	606	617
2.0% < discount rate ≤ 3.0%	681	383
3.0% < discount rate ≤ 4.0%	4,431	5,051
4.0% < discount rate ≤ 5.0%	3,328	3,640
5.0% < discount rate ≤ 6.0%	2,326	2,487
6.0% < discount rate ≤ 7.0%	124	115
7.0% < discount rate ≤ 8.0%	433	456
Discount rate > 8.0%	220	203
Covered by deposits retained on assumed reinsurance	3,630	3,344
Total	**19,538**	**20,444**

If provisions are covered by deposits retained on assumed reinsurance, the interest is directly secured by an inflow of investment income generally guaranteed by the cedants. Consequently, for provisions for which at least the discount rate is guaranteed by the cedants, there is no interest-rate risk. As in the previous year, cedants provide an interest-rate guarantee for all deposits retained. ↗

In life primary insurance, an implicit or explicit interest-rate guarantee is granted for the majority of contracts over their whole duration, based on a fixed interest rate applying at the time the contract is concluded. The discount rate used to calculate the provision for future policy benefits is identical with this interest rate for the majority of contracts in our portfolios. An appropriate minimum return needs to be earned in the long term from the investment result (possibly also with assistance from the technical result) for the contractually guaranteed benefits. In long-term health primary insurance, a discount rate is also used for calculating the provision for future policy benefits. However, this rate can generally be altered by way of premium adjustment. For short-term business, there is no direct interest-rate risk.

In primary insurance, the discount rates relevant for the portfolio in calculating the provision for future policy benefits and the provision for outstanding claims are as follows:

Discount rates used for provisions – Primary insurance (gross)

		Life		Health		Total
€m	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year
Without discount rate	4,271	4,129	1,540	1,403	5,811	5,533
Discount rate ≤ 2.0%	5,528	4,281	4	50	5,532	4,330
2.0% < discount rate ≤ 3.0%	21,983	21,915	12,055	10,049	34,038	31,964
3.0% < discount rate ≤ 4.0%	32,962	35,458	8,617	5,786	41,579	41,244
4.0% < discount rate ≤ 5.0%	1,034	101	12,563	16,017	13,597	16,118
Discount rate > 5.0%	2	0	1	2	3	2
Total	**65,779**	**65,884**	**34,781**	**33,307**	**100,560**	**99,191**

Besides this, in German health primary insurance, discount rates of 1.5–3.5% are applied for calculating the provision for premium loadings and the provision for future premium reductions, which are both part of the provision for premium refunds and total €5,148m (4,981m). These discount rates can be altered in the case of a premium adjustment.

Other market risks are of particular importance to unit-linked life insurance policies, the lump-sum option in the case of deferred annuity policies and derivatives embedded in variable annuities.

For the unit-linked life insurance contracts in our portfolios, the investments are held for the benefit of life insurance policyholders who bear the investment risk, meaning that there is no direct market risk. Appropriate product design ensures that the necessary premium portions for payment of a guaranteed minimum benefit on occurrence of death are based on the current fund assets. ↗

The lump-sum option in the case of deferred annuity policies gives policyholders the option of having their annuity paid out in a single payment at a fixed date. As a result, there is a potential risk if an unexpectedly large number of policyholders exercise their option at an interest-rate level markedly higher than the discount rate used for the annuity calculation. But there is no direct interest-rate sensitivity or market sensitivity, since the exercise of the option by the policyholder is determined to a crucial extent by individual factors and relates to the insurance components.

Some primary insurance and reinsurance contracts contain derivative components of variable annuities. These are measured separately from the underlying contract and their changes in value are recognised in the insurance-related investment result. The valuation of these embedded derivatives is sensitive to share prices, exchange rates, commodity prices and interest rates, but these sensitivities are nearly fully compensated for by the fact that such derivatives are for the most part directly matched by financial derivatives for hedging purposes.

Liquidity risk For Munich Re, there could be a liquidity risk if the cash outflow for insurance claims payments and the costs related to the business were to exceed the cash inflow from premiums and investments. For our mainly long-term business, we therefore analyse the expected future balance from cash inflows due to premium payments and outflows for payment of insurance claims and benefits plus costs.

At the balance sheet date, this results in the expected future technical payment balances (including variable annuities) shown in the following table according to duration bands. As only the technical payment flows are considered, inflows from investment income and investments that become free are not included in the quantifications.

Expected future technical cash flow (gross)[1]

€m	31.12.2017	Prev. year
Up to one year	–3,401	–3,602
Over one year and up to five years	–10,431	–10,207
Over five years and up to ten years	–16,690	–15,798
Over ten years and up to 20 years	–40,157	–39,076
Over 20 years	–103,567	–102,062

1 Premiums less benefits guaranteed at the balance sheet date and costs (excluding unit-linked products).

With these numerical estimates, it should be borne in mind that this forward-looking data may involve considerable uncertainty.

40 Disclosures on risks from property-casualty insurance business

Of particular importance for property-casualty insurance contracts is the estimation risk with regard to the amount of the expected claims expenditure for future claims from current insurance contracts (premium risk) and for claims already incurred (reserve risk). There is an interest-rate risk for parts of the portfolio. Besides this, the liquidity risk has to be taken into account.

Premium risk The degree of exposure to premium risks differs according to class of business and also between primary insurance and reinsurance. On the basis of the loss ratios and combined ratios of past years shown in the following table, conclusions can be drawn about the historical volatilities in the different classes of business and about possible interdependencies. The differences in volatility are due equally to fluctuations in claims expenditure and fluctuations in the respective market-price level for the covers granted.

Premiums, loss ratios and combined ratios by class of business

	2017	2016	2015	2014	2013
Gross premiums written in €m					
Reinsurance					
Liability	3,013	2,911	2,869	2,473	2,348
Accident	393	316	274	282	275
Motor	3,978	3,943	3,707	3,557	3,377
Marine, aviation, space	1,268	1,308	1,546	1,596	1,639
Fire	4,308	4,375	4,238	4,247	4,560
Engineering	1,311	1,438	1,550	1,476	1,490
Credit and surety	634	641	617	644	709
Other classes of business	2,938	2,895	2,877	2,455	2,615
Primary insurance	6,531	6,135	5,985	5,755	5,507
Loss ratio in %					
Reinsurance					
Liability	84.8	73.2	71.0	65.4	91.8
Accident	58.0	74.2	83.3	67.1	65.2
Motor	77.0	72.3	69.3	72.5	75.0
Marine, aviation, space	50.3	56.7	46.7	50.8	45.3
Fire	109.5	59.7	42.2	49.9	51.0
Engineering	60.1	48.3	44.8	57.1	39.4
Credit and surety	59.7	71.1	65.7	56.2	64.5
Other classes of business	71.0	55.1	57.0	62.1	58.1
Primary insurance	59.8	59.7	63.6	60.0	62.5
Combined ratio in %					
Reinsurance					
Liability	119.3	107.4	104.3	97.1	122.3
Accident	94.2	99.2	121.7	107.4	102.2
Motor	107.9	100.9	99.7	104.9	105.1
Marine, aviation, space	81.8	92.3	80.2	84.0	75.1
Fire	137.8	86.3	70.2	76.9	76.0
Engineering	107.8	93.1	89.2	101.9	82.2
Credit and surety	101.8	110.8	109.0	98.7	101.7
Other classes of business	105.9	90.3	88.6	92.3	89.0
Primary insurance	96.0	97.5	100.1	95.7	97.2

In the pricing of risks assumed in the accident, fire and marine lines of business, and also in sections of engineering reinsurance and in primary insurance, there is a high degree of sensitivity regarding the underlying ↗ assumptions about natural catastrophes. The following table therefore shows the combined ratios for property-casualty reinsurance including and excluding natural catastrophe losses.

Combined ratio in reinsurance for the last ten years[1]

%	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Including natural catastrophes[2]	114.1	95.7	89.7	92.7	92.1	91.0	113.8	100.5	95.3	99.4
Excluding natural catastrophes	92.1	90.2	88.8	89.4	87.4	83.3	84.4	89.5	93.9	93.2

1 In 2012, our segment reporting was modified and no longer has a consolidation column. The figures for the previous year have been adjusted accordingly. Comparability with the years up to and including 2010 is thus limited.
2 The figure for 2011 is not adjusted for relief of 1.4 percentage points from economic risk transfer to the capital markets.

Major losses, by which we mean individual losses exceeding €10m, are of particular relevance for the volatility of property-casualty business in reinsurance. The analysis below shows that the volatility of the individual years in this loss category is mainly attributable to the respective intensity of natural catastrophe losses, whilst the other accumulation risks exhibit a distinctly less volatile pattern.

Large losses in reinsurance according to individual calendar years (net)

€m	2017	2016	2015	2014	2013
Large losses	–4,314	–1,542	–1,046	–1,162	–1,689
Thereof losses from natural catastrophes	–3,678	–929	–149	–537	–764
Thereof other accumulation losses	–636	–613	–897	–625	–925

Major losses in 2017 were mainly attributable to hurricanes Harvey, Irma and Maria. Further information on risks from large and accumulation losses can be found in the section on business performance, and in the risk report.

Reserve risk The provision for outstanding claims is subject to the risk that actual claims settlement may be less than or exceed the amount reserved.

A particular sensitivity to reserve risks exists in the case of contracts with long run-off periods. This characteristic applies especially to casualty insurance, where liabilities may manifest themselves after a considerable latency period. Particularly with regard to asbestos insurance liabilities, we cover losses from policies taken out decades ago that manifest themselves after a latency period of as long as 30–50 years. In response, we have posted provisions for claims under long-cancelled general liability policies which provided coverage according to the legal environment applicable at that time.

Provisions for asbestos and environmental claims

	31.12.2017		Prev. year	
€m[1]	Gross	Net	Gross	Net
Asbestos	1,263	1,095	1,352	1,160
Environmental	383	312	411	339

1 The previous year's figures have been adjusted to eliminate currency translation effects.

The development of our claims reserves and the corresponding run-off results are shown in the Notes to the consolidated balance sheet – Equity and liabilities (22) Provision for outstanding claims.

Interest-rate risks Economically, an interest-rate risk derives from the need to earn a return on the investments covering the provision that is commensurate with the discount rate used in measuring the provision. In balance sheet terms, the interest-rate risk affects only those parts of the technical provisions that are discounted and for which an inflow of investment income from deposits retained is not secured from cedants in at least the same amount. For discounting technical provisions, we use the interest rates shown in the table below.

Discounted technical provisions according to discount rates (gross)

		Reinsurance		Primary insurance		Total
€m	31.12.2017	Prev. year	31.12.2017	Prev. year	31.12.2017	Prev. year
Discount rate ≤ 2.0%	39	14	315	254	354	268
2.0% < discount rate ≤ 3.0%	225	300	288	301	513	601
3.0% < discount rate ≤ 4.0%	95	112	415	426	510	538
4.0% < discount rate ≤ 5.0%	1,022	1,280	0	0	1,022	1,280
Discount rate > 5.0%	0	0	0	0	0	0
Total	**1,381**	**1,706**	**1,018**	**981**	**2,399**	**2,687**

The major part of the discounted provisions in reinsurance are for US workers' compensation business, for which the discount rates are governed by supervisory law and are determined prospectively per accident year. The discounting of the provisions in primary insurance is also largely governed by supervisory law.

Liquidity risk For Munich Re, liquidity risks could arise if the cash outflow for insurance claims payments and the costs related to the business were to exceed the cash inflow from premiums and investments. The following table shows that in the past calendar years the liquidity situation in underwriting has always been positive. Besides this, we also have extensive, sufficiently liquid investments available to fulfil our liquidity obligations.

Payment flows and liquid funds in the individual calendar years (gross)

€m	2017	2016	2015	2014	2013
Premiums received	24,293	23,786	23,511	22,335	22,520
Claims payments for financial year	-5,360	-5,882	-5,659	-5,495	-5,617
Claims payments for previous years	-6,675	-8,545	-7,619	-8,193	-7,388
Costs	-8,093	-7,719	-7,501	-7,298	-7,024
Balance	**4,165**	**1,639**	**2,731**	**1,349**	**2,491**

Other information

41 Parent

The Group parent is Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München (Munich Reinsurance Company Joint-Stock Company in Munich), Königinstrasse 107, 80802 München.

Its registered seat is Munich, Germany (Commercial register number: HRB 42039, Registrar of Companies: Local Court [Amtsgericht] in Munich).

In addition to its function as a reinsurer, the parent also fulfils the function of holding company for the Group.

42 Related parties

Information on the remuneration of Board members and transactions with these persons can be found in the management report under the remuneration report, and under (45) Remuneration report. Transactions between Munich Reinsurance Company and subsidiaries that are to be deemed related parties have been eliminated in consolidation and are not disclosed in the Notes. Business relations with unconsolidated subsidiaries are of subordinate importance as a whole; this also applies to business relations with associates and joint ventures.

Munich Reinsurance Company has established a contractual trust agreement in the form of a two-way trust for its unfunded company pension obligations. The Munich Re pension scheme is considered a related party in accordance with IAS 24. Contributions to the pension scheme are recognised as expenses for defined contribution plans; see Notes to the consolidated balance sheet – Equity and liabilities (25) Other provisions. For transactions of related parties with Munich Reinsurance Company shares, please refer to Notes to the consolidated balance sheet – Equity and liabilities (17) Equity.

43 Personnel expenses

The following personnel expenses are included in the operating expenses, in the expenses for claims and benefits (for claims adjustment) and in the investment result:

Breakdown of personnel expenses

€m	2017	Prev. year
Wages and salaries	-2,763	-2,849
Social security contributions and employee assistance	-501	-522
Expenses for employees' pensions	-199	-234
Total	**-3,463**	**-3,605**

44 Mid-Term Incentive Plan

Since 1 January 2009, Munich Reinsurance Company has set up medium-term incentive plans, each with a term of three years. Eligible for participation in these cash-settled share-based remuneration plans are senior management in Munich. The participants receive performance share units (PSUs). In the fourth year after plan commencement, participants are entitled to a bonus payment dependent on the achievement of value-based performance targets and the increase in the total shareholder return (TSR).

The value-based performance targets are set in the form of an average target to be achieved over the following three years of the plan and are allocated according to responsibilities.

The basis for the full and partial allocation of the PSUs is the first plan year.

The final number of PSUs is calculated by multiplying the number of PSUs at plan commencement by the percentage achievement of the performance target at plan termination. The number of PSUs may fluctuate between 0 and 1.5 times the initially allocated number. Payment is capped if the TSR doubles. The maximum amount payable is limited to 300%.

The Mid-Term Incentive Plan at the reporting date is valued indirectly at the fair value of the liabilities. The fair value takes account of the value-based performance target and the total shareholder return (TSR) during the performance period. To this end, the TSR index value observable in the market is updated with the current dividend yield of Munich Re shares at the termination date and discounted with appropriate market interest rates.

In 2017, income of €0.2m (previous year: expenses of €4.0m) was recognised for the Mid-Term Incentive Plan. The provision at the reporting date amounted to €25.3m (35.3m).

Munich Re's Mid-Term Incentive Plans 2014–2017

	Incentive Plan 2014	Incentive Plan 2015	Incentive Plan 2016	Incentive Plan 2017
Plan commencement	1.1.2014	1.1.2015	1.1.2016	1.1.2017
Plan end	31.12.2016	31.12.2017	31.12.2018	31.12.2019
Fair value 2017 for one right	0.00 €	457.30 €	482.59 €	508.69 €
Number of rights (for 100% achievement of objectives) on 1 January 2014	0	0	0	0
Additions	42,233	0	0	0
Number of rights (for 100% achievement of objectives) on 31 December 2014	42,233	0	0	0
Number of rights (for 100% achievement of objectives) on 1 January 2015	42,233	0	0	0
Additions	0	38,217	0	0
Forfeited	584	0	0	0
Number of rights (for 100% achievement of objectives) on 31 December 2015	41,649	38,217	0	0
Number of rights (for 100% achievement of objectives) on 1 January 2016	41,649	38,217	0	0
Additions	0	0	32,525	0
Forfeited	182	213	0	0
Number of rights (for 100% achievement of objectives) on 31 December 2016	41,467	38,004	32,525	0
Number of rights (for 100% achievement of objectives) on 1 January 2017	41,467	38,004	32,525	0
Additions	0	0	120	30,814
Exercised	40,952	0	0	0
Forfeited	515	1,322	1,136	0
Number of rights (for 100% achievement of objectives) on 31 December 2017	0	36,682	31,509	30,814

45 Remuneration report

The members of Munich Reinsurance Company's Board of Management received remuneration totalling €19.8m (23.1m). The total remuneration of Munich Reinsurance Company's Supervisory Board amounted to €2.6m (2.6m); not included in this figure is €0.2m (0.2m) for membership of supervisory boards at other Group companies, so that the overall amount came to €2.8m (2.8m).

Payments to retired members of the Board of Management or their surviving dependants totalled €8.6m (7.4m).

No personnel expenses for pension commitments were incurred for pension commitments to retired members of the Board of Management. After deduction of plan assets held by a separate entity (under a contractual trust agreement), there were no pension provisions or provisions for comparable benefits for retired members of the Board of Management or their surviving dependants.

There are no pension commitments for former members of the Supervisory Board or their surviving dependants.

The Board members did not receive any cash advances or loans in the 2017 financial year. For their service as employees of the Group, Supervisory Board members received remuneration in the amount of €1.3m (1.3m). The Board members hold insurance policies with companies belonging to Munich Re (Group), and have small MEAG fund holdings. Beyond that, there were no significant notifiable transactions between Board members and Munich Re.

All other disclosures on the remuneration and structure of the remuneration system for the Board of Management can be found in the management report under the remuneration report. Information on share trading and shares held by members of the Board of Management and the Supervisory Board is provided in the corporate governance report.

46 Number of staff

The number of staff employed by the Group at year-end totalled 19,960 (21,077) in Germany and 22,450 (22,351) in other countries.

Breakdown of number of staff

	31.12.2017	Prev. year
Reinsurance	12,117	12,375
ERGO	30,293	31,053
Total	**42,410**	**43,428**

47 Auditor's fees

For services rendered to the parent and consolidated subsidiaries by the Group auditor (KPMG Bayerische Treuhandgesellschaft AG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Munich, and its affiliated companies within the meaning of Section 271(2) of the German Commercial Code – HGB), the following fees have been recognised as an expense in the financial year:

Breakdown of auditor's fees

€k	2017
Audit services[1]	–9,240
Other assurance and appraisal services	–240
Tax consultancy services	0
Other services	–4,132
Total	**–13,612**

1 Thereof fees totalling €8,957k for KPMG Bayerische Treuhandgesellschaft AG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft.

The auditor's fees mainly relate to the audits of the consolidated financial statements and the annual financial statements of Munich Reinsurance Company, and to various audits of our subsidiaries' annual financial statements, including statutory extensions of the audit assignment (in particular the audit of the solvency balance sheet). In addition, reviews of interim financial statements and project-related IT audits, and contractual reviews of the effectiveness of a service company's controls, were carried out.

Other assurance and appraisal services concern statutory or contractual audit services, voluntary audit services – in particular, audits of compliance management systems pursuant to accounting standard 980 of the Institute of Public Auditors in Germany (IDW), and mandatory assurance and appraisal services for submission to the competent authorities.

Other services essentially relate to quality assurance support and consulting services in connection with accounting issues, the introduction of regulatory requirements or of new accounting standards based on solutions and concepts produced by us. The auditor also provided administrative support and data storage services on a small scale.

The German public auditor responsible for carrying out the audit within the meaning of Section 24a(2) of the Professional Statutes of German Accountants/Certified Auditors (Berufssatzung WP/vBP) is Dr. Frank Ellenbürger. He first took charge of the audit of the Company and Group financial statements for the financial year ending 31 December 2013.

48 Contingent liabilities, other financial commitments

Munich Re enters into contingent liabilities in connection with its normal business operations. In this context, the obligations from guarantees total €0m (2m) and those from legal disputes €31m (31m). There are other contingent liabilities amounting to €8m (28m). Furthermore, there is a contingent liability of £20m (20m) from our investments in associates and joint ventures. These concerned a payment obligation in the event of an associate's over-indebtedness.

Estimates and judgements are necessary for contingent liabilities where the likely impact cannot be clearly determined. This is the case, for example, with respect to contingent liabilities in legal disputes. Like the evaluation process for other provisions, the assessment is made by experts in the affected units on the basis of the best estimate. Contingent liabilities are stated unless the experts estimate that the possibility of an outflow of resources is remote.

ERGO companies have assumed unlimited liability for the sale of insurance products by insurance intermediaries acting exclusively on their behalf. In this respect, there is a risk of a claim being made by customers. In case of a claim, there is a general possibility of recourse against the insurance intermediary or the latter's fidelity guarantee insurance carrier.

The application of fiscal regulations may yet be unresolved at the time of calculation of tax refund claims and tax liabilities. The calculation of tax items is based on the regulations most likely to be applied in each case. Regardless of this, the tax authorities may take a different view, which may give rise to additional tax liabilities.

In accordance with the German Insurance Supervision Act (VAG), all German life and health insurers of our Group are obliged to be members of a protection fund. For life insurers, the protection fund can levy special contributions of up to one per mille of total net technical provisions, in addition to a regular contribution of 0.2 per mille of total net technical provisions. For the health insurers, there is no pre-financing, but the fund may levy special contributions of up to two per mille of net technical provisions to fulfil its functions. This could give rise to a potential payment obligation of €161m (149m) at Group level. The functions and powers of the statutory protection fund for life insurance rest with Protektor Lebensversicherungs-AG, and those of the statutory protection fund for health insurance with Medicator AG.

Munich Re is a member of the German Nuclear Reactor Insurance Association (DKVG) and the Pharma Reinsurance Community. If other members of these pools are not able to meet their payment obligations, we may be held liable for a proportional share of their obligations. However, we consider the risk of such a liability arising to be remote.

Besides this, Munich Re has entered into various other financial obligations amounting to €395m (380m) for work and service contracts and €1,821m (1,265m) for investment obligations, of which €74m (79m) is from our investments in joint ventures. At the reporting date, there were loan commitments amounting to €1,093m (1,029m). These figures represent undiscounted nominal amounts. There are other financial commitments amounting to €7m (7m).

There are no other financial commitments of significance for the assessment of Munich Re's financial position. No contingent liabilities have been entered into for the benefit of Board members.

49 Significant restrictions

Regulatory, legal or contractual restrictions and protective rights of non-controlling interests may restrict the Group's ability to access or use assets, and settle liabilities.

The carrying amounts of Group assets with restrictions on title can be found in the Notes to the consolidated balance sheet – Assets. The restrictions primarily result from contractual agreements, including pledged securities deposits to collateralise payment obligations from insurance business, the collateralisation of derivative transactions with securities and cash collateral or of bank liabilities with non-financial assets.

Individual national regulations require that assets held to cover insurance liabilities be managed separately. In principle, there are special supervisory regulations governing access to these assets and their use.

In addition, we are subject to supervisory requirements that may restrict dividend payments or other capital distributions, loans and advance payments within the Group.

Our subsidiary Munich American Reassurance Company reported a negative earned surplus in its local financial statements as at 31 December 2017 (Statutory Accounting Principles). For this reason, the company can only pay dividends or transfer capital to the parent company with the approval of the competent US regulatory authority.

Our companies based in Greece are subject to the capital controls introduced in 2015, and are required to go through the relevant approval processes when transferring assets.

50 Leasing

Munich Re as lessee The operating leases mainly concern offices and business premises of the Group, IT infrastructure, and land. They include extension options as well as restrictions regarding the agreement of subleases. In the period under review, minimum lease payments of €91m (104m) and contingent lease payments of €10m (10m) were recognised as an expense.

Future minimum lease payments under operating leases

€m	31.12.2017	Prev. year
Up to one year	92	97
More than one year and up to five years	184	236
More than five years	133	162
Total	**409**	**495**

Munich Re as lessor Operating leases mainly involve leased property.

Future minimum lease payments under operating leases

€m	31.12.2017	Prev. year
Up to one year	255	205
More than one year and up to five years	691	575
More than five years	574	501
Total	**1,520**	**1,281**

There were several finance leases for property at the balance sheet date, which are listed in the following table:

Due dates

			31.12.2017			Prev. year
€m	Gross investment	Interest element	Net investment	Gross investment	Interest element	Net investment
Minimum lease payments up to one year	0	0	0	0	0	0
Minimum lease payments of more than one year and up to five years	2	1	1	2	1	1
Minimum lease payments of more than five years	71	56	15	72	56	15
Total minimum lease payments	**74**	**57**	**17**	**74**	**57**	**17**
Unguaranteed residual values	41	33	8	41	34	7
Total	**115**	**90**	**25**	**116**	**91**	**25**

51 Events after the balance sheet date

Under the share buy-back programme decided on by Munich Reinsurance Company's Board of Management in March 2017, we repurchased a further 1.3 million Munich Re shares with a volume of €236m from the balance sheet date to the end of February 2018.

52 Earnings per share

There were no diluting effects to be disclosed for the calculation of earnings per share either in the financial year or in the previous year. Earnings per share can be potentially diluted in future through the issue of shares or subscription rights from amounts authorised for increasing the share capital and from contingent capital.

Earnings per share

		2017	Prev. year
Consolidated result attributable to Munich Reinsurance Company equity holders	€m	375	2,580
Weighted average number of outstanding shares		154,060,991	159,975,155
Earnings per share	€	2.44	16.13

The retrospective adjustment of the previous year's figures did not result in a change to the earnings per share in the previous year (see Recognition and measurement – Changes in accounting policies and other adjustments). The number of outstanding shares decreased by 5,642,862 (5,880,298) over the course of the financial year 2017, essentially owing to the share buy-back programme.

53 Proposal for appropriation of profit

Munich Reinsurance Company's net retained profits for 2017 according to its financial statements prepared on the basis of German GAAP accounting amount to €1,333,240,008.80. The Board of Management will propose to shareholders at the Annual General Meeting that these net retained profits be used for payment of a dividend of €8.60 per dividend-bearing share, with the remaining amount being carried forward to new account.

List of shareholdings as at 31 December 2017 pursuant to Section 313(2) of the German Commercial Code (HGB)

The following disclosures relate to our aggregated directly and indirectly held shareholdings (pursuant to Section 16(2) and (4) of the German Stock Corporation Act – AktG) in entities included in consolidation pursuant to Section 315a of the German Commercial Code, and in participating interests as defined in Section 271(1) of the German Commercial Code.

Company and registered seat	% share of capital
Consolidated subsidiaries	
13th & F Associates Limited Partnership, Washington, D.C.[4]	98.0000
40, Rue Courcelles SAS, Paris	100.0000
Adelfa Servicios a Instalaciones Fotovoltaicas S.L., Santa Cruz de Tenerife	100.0000
AEVG 2004 GmbH, Frankfurt am Main[4]	0.0000
AGROTIKI Insurance S.A., Athens	100.0000
ALICE GmbH, Düsseldorf	100.0000
ALLYSCA Assistance GmbH, Munich	100.0000
American Alternative Insurance Corporation, Wilmington, Delaware	100.0000
American Family Home Insurance Company, Jacksonville, Florida	100.0000
American Modern Home Insurance Company, Amelia, Ohio	100.0000
American Modern Home Service Company, Amelia, Ohio	100.0000
American Modern Insurance Company of Florida Inc., Jacksonville, Florida	100.0000
American Modern Insurance Group Inc., Amelia, Ohio	100.0000
American Modern Lloyds Insurance Company, Dallas, Texas	100.0000
American Modern Property & Casualty Insurance Company, Cincinnati, Ohio	100.0000
American Modern Select Insurance Company, Amelia, Ohio	100.0000
American Modern Surplus Lines Insurance Company, Amelia, Ohio	100.0000
American Southern Home Insurance Company, Jacksonville, Florida	100.0000
American Western Home Insurance Company, Oklahoma City, Oklahoma	100.0000
Amicus Legal Ltd., Bristol	100.0000
ArztPartner almeda AG, Munich	100.0000
ATU Landbau GmbH & Co. KG, Heiligengrabe[11]	94.9000
avanturo GmbH, Düsseldorf	100.0000
Bagmoor Holdings Limited, London	100.0000
Bagmoor Wind Limited, London	100.0000
Beaufort Dedicated No 1 Ltd., London	100.0000
Beaufort Dedicated No 2 Ltd., London	100.0000
Beaufort Dedicated No 5 Ltd., London	100.0000
Beaufort Underwriting Agency Limited, London	100.0000
Bell & Clements (Bermuda) Ltd., Hamilton, Bermuda	100.0000
Bell & Clements (London) Ltd., London	100.0000
Bell & Clements (USA) Inc., Reston, Virginia	100.0000
Bell & Clements Inc., Reston, Virginia	100.0000
Bell & Clements Ltd., London	100.0000
Bos Incasso B.V., Groningen	89.7640
Cannock Chase B.V., Leidschendam	100.0000
Cannock Chase Holding B.V., Amsterdam[4]	98.3300
Cannock Chase Purchase B.V., The Hague	100.0000
Cannock Connect Center B.V., Brouwershaven	100.0000
Ceres Demetra GmbH, Munich	100.0000
Closed Joint Stock Company «ERGO» Insurance Company, Minsk	92.3114
Comino Beteiligungen GmbH, Grünwald	100.0000
Compagnie Européenne d'Assurances (Société en liquidation), Paris	99.9982
Corion Pty Ltd, Sydney	100.0000
Cornwall Power (Polmaugan) Limited, London	100.0000
Countryside Renewables (Forest Heath) Limited, London	100.0000
D.A.S. Defensa del Automovilista y de Siniestros – Internacional S.A. de Seguros y Reaseguros, Barcelona	100.0000
D.A.S. HELLAS Allgemeine Rechtsschutz-Versicherungs-AG, Athens	100.0000
D.A.S. Jogvédelmi Biztosító Részvénytársaság, Budapest	100.0000
D.A.S. Luxemburg Allgemeine Rechtsschutz-Versicherung S.A., Strassen	100.0000
D.A.S. Rechtsschutz Aktiengesellschaft, Vienna	100.0000
D.A.S. Société anonyme belge d'assurances de Protection Juridique, Brussels	100.0000
D.A.S. Towarzystwo Ubezpieczeń Ochrony Prawnej S.A., Warsaw	100.0000
Daman Health Insurance – Qatar LLC, Doha	100.0000
DAS Assistance Limited, Bristol	100.0000
DAS Holding N.V., Amsterdam	51.0000
DAS Law Limited, Bristol	100.0000
DAS Legal Expenses Insurance Co., Ltd., Seoul	100.0000
DAS Legal Expenses Insurance Company Limited, Bristol	100.0000
DAS Legal Finance B.V., Amsterdam	100.0000
DAS Legal Protection Insurance Company Ltd., Toronto, Ontario	100.0000
DAS MEDICAL ASSIST Limited, Bristol	100.0000
DAS Nederlandse Rechtsbijstand Verzekeringmaatschappij N.V., Amsterdam	100.0000

Company and registered seat	% share of capital
DAS Rechtsschutz-Versicherungs-AG, Lucerne	100.0000
DAS Services Limited, Bristol	100.0000
DAS UK Holdings Limited, Bristol	100.0000
DB Platinum IV SICAV (Subfonds Institutional Fixed Income, Inhaber-Anteile I4D), Luxembourg	100.0000
DB Platinum IV SICAV (Subfonds Institutional Fixed Income, Inhaber-Anteile I5D), Luxembourg	100.0000
DB Platinum IV SICAV (Subfonds Institutional Fixed Income, Inhaber-Anteile I6D o.N.), Luxembourg	100.0000
DB Platinum IV SICAV (Subfonds Institutional Fixed Income, Inhaber-Anteile I7D o.N.), Luxembourg	100.0000
DB Platinum IV SICAV (Subfonds Institutional Fixed Income, Inhaber-Anteile I8D o.N.), Luxembourg	100.0000
Digital Porte Inc., Toronto, Ontario	100.0000
DKV BELGIUM S.A., Brussels	100.0000
DKV Deutsche Krankenversicherung Aktiengesellschaft, Cologne	100.0000
DKV Pflegedienste & Residenzen GmbH, Cologne	100.0000
DKV Seguros y Reaseguros S.A. Española, Zaragoza	100.0000
E&S Claims Management Inc., Reston, Virginia	100.0000
EIG Co., Wilmington, Delaware	100.0000
ERGO Asigurări de Viață S.A., Bucharest	100.0000
ERGO Asigurări S.A., Bucharest	100.0000
ERGO Austria International AG, Vienna	100.0000
ERGO Beratung und Vertrieb AG, Düsseldorf	100.0000
ERGO Deutschland AG, Düsseldorf	100.0000
ERGO Digital Ventures AG, Düsseldorf	100.0000
ERGO DIREKT Krankenversicherung AG, Fürth	100.0000
ERGO DIREKT Lebensversicherung AG, Fürth	100.0000
ERGO DIREKT Versicherung AG, Fürth	100.0000
ERGO Életbiztosító Zrt, Budapest	100.0000
ERGO Elfte Beteiligungsgesellschaft mbH, Düsseldorf	100.0000
ERGO General Insurance Company S.A., Athens	100.0000
ERGO Generales Seguros y Reaseguros S.A., Madrid	100.0000
ERGO Group AG, Düsseldorf	100.0000
ERGO Grubu Holding A.Ş., Istanbul	100.0000
ERGO Grundstücksverwaltung GbR, Düsseldorf	100.0000
ERGO Insurance Company, Moscow	100.0000
ERGO Insurance N.V., Brussels	100.0000
ERGO Insurance Pte. Ltd., Singapore	100.0000
ERGO Insurance SE, Tallinn	100.0000
ERGO International Aktiengesellschaft, Düsseldorf	100.0000
ERGO International Services GmbH, Düsseldorf	100.0000
ERGO Invest SIA, Riga	100.0000
ERGO Lebensversicherung Aktiengesellschaft, Hamburg	100.0000
ERGO Life Insurance Company S.A., Thessaloniki	100.0000
ERGO Life Insurance SE, Vilnius	100.0000
ERGO Life S.A., Grevenmacher	100.0000
ERGO Neunte Beteiligungsgesellschaft mbH, Düsseldorf	100.0000
ERGO osiguranje d.d., Zagreb	100.0000
ERGO Partners N.V., Brussels	100.0000
ERGO Pensionsfonds Aktiengesellschaft, Düsseldorf	100.0000
ERGO Pensionskasse AG, Düsseldorf	100.0000
ERGO Poisťovňa a.s., Bratislava	100.0000
ERGO pojišťovna, a.s., Prague	100.0000
ERGO Private Capital Dritte GmbH & Co. KG, Düsseldorf	100.0000

Company and registered seat	% share of capital
ERGO Private Capital Gesundheit GmbH & Co. KG, Düsseldorf	100.0000
ERGO Private Capital Komposit GmbH & Co. KG, Düsseldorf	100.0000
ERGO Private Capital Leben GmbH & Co. KG, Düsseldorf	100.0000
ERGO Private Capital Vierte GmbH & Co. KG, Düsseldorf	100.0000
ERGO Private Capital Zweite GmbH & Co. KG, Düsseldorf	100.0000
ERGO Sigorta A.Ş., Istanbul	100.0000
ERGO Versicherung Aktiengesellschaft, Düsseldorf	100.0000
ERGO Versicherung Aktiengesellschaft, Vienna	100.0000
ERGO Vida Seguros y Reaseguros S.A., Zaragoza	100.0000
ERGO Vorsorge Lebensversicherung AG, Düsseldorf	100.0000
ERGO životno osiguranje d.d., Zagreb	100.0000
ERV Evropská pojišťovna, a.s., Prague	90.0000
Euro-Center Holding SE, Prague	83.3332
Europaeiske Rejseforsikring A/S, Copenhagen	100.0000
EUROPÄISCHE Reiseversicherung Aktiengesellschaft, Munich	100.0000
Everything Legal Ltd., Bristol	100.0000
FAIRANCE GmbH, Düsseldorf	100.0000
Flexitel Telefonservice GmbH, Berlin	100.0000
Forst Ebnath AG, Ebnath	100.0000
FOTOUNO S.r.l., Brixen	100.0000
FOTOWATIO ITALIA GALATINA S.r.l., Brixen	100.0000
Fundo Invest Exclusivo referenciado di Munich Re Brasil, São Paulo[4]	98.2000
Gaucheret S.A., Brussels	100.0000
GF 65, Vienna[4]	100.0000
Global Standards LLC, Dover, Delaware	100.0000
Globality S.A., Luxembourg	100.0000
Great Lakes Insurance SE, Munich	100.0000
Group Risk Services Limited, London	100.0000
Groves, John & Westrup Limited, London	100.0000
Habiriscos – Investimentos Imobiliários e Turísticos S.A., Lisbon	100.0000
Hartford Steam Boiler (M) SDN BHD, Kuala Lumpur	100.0000
Hartford Steam Boiler (Singapore) Pte. Ltd., Singapore	100.0000
Hartford Steam Boiler International GmbH, Rheine	100.0000
HMV GFKL Beteiligungs GmbH, Düsseldorf	100.0000
HSB Brasil Serviços de Engenharia e Inspeção Ltda, São Paulo	100.0000
HSB Engineering Finance Corporation, Dover, Delaware	100.0000
HSB Engineering Insurance Limited, London	100.0000
HSB Engineering Insurance Services Limited, London	100.0000
HSB Group Inc., Dover, Delaware	100.0000
HSB International (India) Private Limited, Gujarat	100.0000
HSB Japan K.K., Minato-KU, Tokyo	100.0000
HSB Secure Services Inc., Hartford, Connecticut	100.0000
HSB Solomon Associates Canada Ltd., Saint John, New Brunswick	100.0000
HSB Solomon Associates LLC, Dover, Delaware	100.0000
HSB Specialty Insurance Company, Hartford, Connecticut	100.0000
HSB Technical Consulting & Service (Shanghai) Co., Ltd., Shanghai	100.0000
Ibero Property Portugal – Investimentos Imobiliários S.A., Lisbon	100.0000

Company and registered seat	% share of capital
Ibero Property Trust S.A., Madrid	100.0000
IDEENKAPITAL Financial Engineering GmbH, Düsseldorf	100.0000
IDEENKAPITAL Financial Service GmbH i. L., Düsseldorf	100.0000
IDEENKAPITAL GmbH, Düsseldorf	100.0000
IDEENKAPITAL Media Finance GmbH, Düsseldorf	50.1000
IDEENKAPITAL Metropolen Europa GmbH & Co. KG, Düsseldorf	72.3477
iii, Munich[4]	100.0000
IK Einkauf Objekt Eins GmbH & Co. KG, Düsseldorf	100.0000
IK Einkauf Objektmanagement GmbH, Düsseldorf	100.0000
IK Einkaufsmärkte Deutschland GmbH & Co. KG, Düsseldorf	52.0387
IK Premium Fonds GmbH & Co. KG, Düsseldorf	100.0000
IK Premium Fonds zwei GmbH & Co. KG, Düsseldorf	100.0000
IKFE Properties I AG, Zurich	63.5708
Imofloresmira – Investimentos Imobiliários S.A., Lisbon	100.0000
Insurance Company “ERGO Life” Ltd., Moscow	100.0000
ITERGO Informationstechnologie GmbH, Düsseldorf	100.0000
JSC “ERV Travel Insurance”, Moscow	100.0000
K & P Pflegezentrum Uelzen IMMAC Renditefonds GmbH & Co. KG, Düsseldorf	84.8445
KA Köln.Assekuranz Agentur GmbH, Cologne	100.0000
Kapdom-Invest GmbH, Moscow	100.0000
KS SPV 23 Limited, London	100.0000
Landelijke Associatie van Gerechtsdeurwaarders B.V., Groningen[4]	89.7640
LEGIAL AG, Munich	100.0000
Lietuva Demetra GmbH, Munich	100.0000
Lloyds Modern Corporation, Dallas, Texas	100.0000
Longial GmbH, Düsseldorf	100.0000
Lynt Farm Solar Limited, London	100.0000
MAGAZ FOTOVOLTAICA S.L.U., Alcobendas	100.0000
Mandaat B.V., Druten	100.0000
Marina Salud S.A., Alicante	65.0000
Marina Sp. z o.o., Sopot	100.0000
MEAG ANGLO CELTIC Fund, Munich[4]	100.0000
MEAG ATLAS, Munich[4]	100.0000
MEAG Benedict, Munich[4]	100.0000
MEAG Cash Management GmbH, Munich	100.0000
MEAG EDK Quantum, Munich[4]	100.0000
MEAG EDL CurryGov, Munich[4]	100.0000
MEAG EDS AGIL, Munich[4]	100.0000
MEAG ERGO Belgium Equities, Munich[4]	100.0000
MEAG ESUS 1, Munich[4]	100.0000
MEAG EUR Global 1, Munich[4]	100.0000
MEAG Euro 1, Munich[4]	100.0000
MEAG Euro 2, Munich[4]	100.0000
MEAG EURO-FONDS, Munich[4]	100.0000
MEAG European Prime Opportunities, Munich[4]	56.5871
MEAG Eurostar, Munich[4]	100.0000
MEAG EURO-Yield, Munich[4]	100.0000
MEAG FlexConcept – Basis, Luxembourg[4]	100.0000
MEAG FlexConcept – Eurobond, Luxembourg[4]	100.0000
MEAG FlexConcept – Wachstum, Luxembourg[4]	100.0000
MEAG GBP Global-STAR, Munich[4]	100.0000
MEAG German Prime Opportunities (GPO), Munich[4]	100.0000
MEAG HBG 1, Munich[4]	100.0000
MEAG HM Sach Rent 1, Munich[4]	100.0000
MEAG HMR 1, Munich[4]	100.0000
MEAG HMR 2, Munich[4]	100.0000
MEAG Hyperion Fund, Munich[4]	100.0000
MEAG IREN, Munich[4]	100.0000
MEAG Janus, Munich[4]	100.0000
MEAG Kapital 2, Munich[4]	100.0000
MEAG Kapital 5, Munich[4]	100.0000
MEAG Kubus 1, Munich[4]	100.0000
MEAG Lambda EUR EM Local, Grünwald[4]	100.0000
MEAG Lambda EUR, Grünwald[4]	100.0000
MEAG Lambda GBP, Grünwald[4]	100.0000
MEAG Lambda USD, Grünwald[4]	100.0000
MEAG Multi Life, Munich[4]	100.0000
MEAG Multi Sach 1, Munich[4]	100.0000
MEAG MUNICH ERGO AssetManagement GmbH, Munich	100.0000
MEAG MUNICH ERGO Kapitalanlagegesellschaft mbH, Munich	100.0000
MEAG Munich Re Placement, Grünwald[4]	100.0000
MEAG New York Corporation, Wilmington, Delaware	100.0000
MEAG PEGASUS, Munich[4]	100.0000
MEAG Pension Invest, Munich[4]	100.0000
MEAG Pensionskasse Nord, Munich[4]	100.0000
MEAG Pensionskasse West, Munich[4]	100.0000
MEAG Premium, Munich[4]	100.0000
MEAG Prof III Beteiligungsgesellschaft mbH, Düsseldorf	100.0000
MEAG Property Fund I, Munich[4]	100.0000
MEAG Property Fund III, Munich[4]	100.0000
MEAG RenditePlus, Munich[4]	100.0000
MEAG REVO, Munich[4]	100.0000
MEAG SAG 1, Munich[4]	100.0000
MEAG Tandem, Munich[4]	100.0000
MEAG US Fonds, Munich[4]	100.0000
MEAG Venus, Munich[4]	100.0000
MEAG Vidas Rent 3, Munich[4]	100.0000
MEAG VLA, Munich[4]	100.0000
MedNet Holding GmbH, Munich	100.0000
MedWell Gesundheits-AG, Cologne	100.0000
Merkur Grundstücks- und Beteiligungs-Gesellschaft mit beschränkter Haftung, Düsseldorf	100.0000
Meshify Inc., Dover, Delaware	100.0000
MFI Munich Finance and Investment Holding Ltd., Ta' Xbiex	100.0000
MFI Munich Finance and Investment Ltd., Ta' Xbiex	100.0000
Midland-Guardian Co., Amelia, Ohio	100.0000
Midwest Enterprises Inc., Miami, Florida	100.0000
MR Beteiligungen 1. GmbH, Munich[3]	100.0000
MR Beteiligungen 16. GmbH, Munich[3]	100.0000
MR Beteiligungen 17. GmbH, Munich	100.0000
MR Beteiligungen 18. GmbH & Co. Immobilien KG, Grünwald[2]	100.0000
MR Beteiligungen 19. GmbH, Munich	100.0000

Company and registered seat	% share of capital
MR Beteiligungen 2. EUR AG & Co. KG, Grünwald[2]	100.0000
MR Beteiligungen 3. EUR AG & Co. KG, Grünwald[2]	100.0000
MR Beteiligungen EUR AG & Co. KG, Grünwald[2]	100.0000
MR Beteiligungen GBP AG & Co. KG, Grünwald[2]	100.0000
MR Beteiligungen USD AG & Co. KG, Grünwald[2]	100.0000
MR Debt Finance GmbH, Munich	100.0000
MR Electra LP, Dover, Delaware	100.0000
MR ERGO Beteiligungen GmbH, Grünwald	100.0000
MR Infrastructure Investment GmbH, Munich	100.0000
MR Investment Inc., Dover, Delaware	100.0000
MR Jordan LP, Dover, Delaware	100.0000
MR RENT UK Investment Limited, London	100.0000
MR RENT-Investment GmbH, Munich[3]	100.0000
MR Solar GmbH & Co. KG, Nuremberg	100.0000
MR SOLAR SAS DER WELIVIT SOLAR ITALIA S.r.l., Bolzano	100.0000
MSP Underwriting Ltd., London	100.0000
MU068 MR Placem (FCP), Paris[4]	100.0000
Munich American Holding Corporation, Wilmington, Delaware	100.0000
Munich American Life Reinsurance Company, Atlanta, Georgia	100.0000
Munich American Reassurance Company, Atlanta, Georgia	100.0000
Munich Atlanta Financial Corporation, Atlanta, Georgia	100.0000
Munich Health Alpha GmbH, Munich[3]	100.0000
Munich Health Daman Holding Ltd., Abu Dhabi	51.0000
Munich Health Holding AG, Munich[3]	100.0000
Munich Health North America Inc., Wilmington, Delaware	100.0000
Munich Holdings Ltd., Toronto, Ontario	100.0000
Munich Holdings of Australasia Pty Ltd, Sydney	100.0000
Munich Life Management Corporation Ltd., Toronto, Ontario	100.0000
Munich Mauritius Reinsurance Co. Ltd., Port Louis	100.0000
Munich Re America Corporation, Wilmington, Delaware	100.0000
Munich Re America Services Inc., Wilmington, Delaware	100.0000
Munich Re Automation Solutions Limited, Dublin	100.0000
Munich Re Capital Limited, London	100.0000
Munich Re Digital Partners US Holding Corporation, Dover, Delaware	100.0000
Munich Re do Brasil Resseguradora SA, São Paulo	100.0000
Munich Re Life Insurance Company of Vermont, Burlington, Vermont	100.0000
Munich Re New Ventures Inc., Toronto, Ontario	100.0000
Munich Re of Malta Holding Limited, Ta' Xbiex	100.0000
Munich Re of Malta p.l.c., Ta' Xbiex	100.0000
Munich Re PCC Limited, Ta' Xbiex	100.0000
Munich Re Reserve Risk Financing Inc., Dover, Delaware	100.0000
Munich Re Specialty Group Ltd., London	100.0000
Munich Re Stop Loss Inc., Wilmington, Delaware	100.0000
Munich Re Syndicate Hong Kong Ltd., Hong Kong	100.0000
Munich Re Syndicate Labuan Limited, Labuan	100.0000
Munich Re Syndicate Limited, London	100.0000
Munich Re Syndicate Middle East Ltd., Dubai	100.0000
Munich Re Syndicate Singapore Ltd., Singapore	100.0000
Munich Re Trading LLC, Wilmington, Delaware	100.0000
Munich Re UK Services Limited, London	100.0000
Munich Re US Life Corporation, Minneapolis, Minnesota	100.0000
Munich Re Weather & Commodity Risk Holding Inc., Wilmington, Delaware	100.0000
Munich Reinsurance America Inc., Wilmington, Delaware	100.0000
Munich Reinsurance Company of Africa Ltd, Johannesburg	100.0000
Munich Reinsurance Company of Australasia Ltd, Sydney	100.0000
Munich Reinsurance Company of Canada, Toronto, Ontario	100.0000
MunichFinancialGroup GmbH, Munich	100.0000
Munichre New Zealand Service Ltd., Auckland	100.0000
N.M.U. (Holdings) Limited, Leeds	100.0000
New Reinsurance Company Ltd., Zurich	100.0000
nexible Versicherung AG, Nuremberg	100.0000
Nightingale Legal Services Ltd., Bristol	100.0000
NMU Group Limited, London	100.0000
Northern Marine Underwriters Limited, Leeds	100.0000
OIK Mediclin, Wiesbaden[4]	70.7073
Pan Estates LLC, Wilmington, Delaware	100.0000
Pegasos Holding GmbH, Munich	100.0000
Picus Silva Inc., Wilmington, Delaware	100.0000
Princeton Eagle West (Holding) Inc., Wilmington, Delaware	100.0000
Princeton Eagle West Insurance Company Ltd., Hamilton, Bermuda	100.0000
Private Aktiengesellschaft "Europäische Reiseversicherung", Kiev	99.9999
Renaissance Hotel Realbesitz GmbH, Vienna	60.0000
Roanoke Group Inc., Schaumburg, Illinois	100.0000
Roanoke Insurance Group Inc., Schaumburg, Illinois	100.0000
Roanoke International Brokers Limited, London	100.0000
Scout Moor Group Limited, London	100.0000
Scout Moor Holdings (No.1) Limited, London	100.0000
Scout Moor Holdings (No.2) Limited, London	100.0000
Scout Moor Wind Farm (No.2) Limited, London	100.0000
Scout Moor Wind Farm Limited, London	100.0000
Silvanus Vermögensverwaltungsges. mbH, Munich[3]	100.0000
Solarpark Fusion 3 GmbH, Düsseldorf	100.0000
Solomon Associates Limited, Farnborough	100.0000
Sopockie Towarzystwo Ubezpieczeń Ergo Hestia Spółka Akcyjna, Sopot	100.0000
Sopockie Towarzystwo Ubezpieczeń na Życie Ergo Hestia Spółka Akcyjna, Sopot	100.0000
Specialty Insurance Services Corp., Amelia, Ohio	100.0000
SunEnergy & Partners S.r.l., Brixen	100.0000
Temple Insurance Company, Toronto, Ontario	100.0000
The Atlas Insurance Agency Inc., Amelia, Ohio	100.0000
The Boiler Inspection and Insurance Company of Canada, Toronto, Ontario	100.0000
The Hartford Steam Boiler Inspection and Insurance Company of Connecticut, Hartford, Connecticut	100.0000
The Hartford Steam Boiler Inspection and Insurance Company, Hartford, Connecticut	100.0000
The Midland Company, Cincinnati, Ohio	100.0000

Company and registered seat	% share of capital
The Polytechnic Club Inc., Hartford, Connecticut	100.0000
The Princeton Excess and Surplus Lines Insurance Company, Wilmington, Delaware	100.0000
Tir Mostyn and Foel Goch Limited, London	100.0000
UAB Agrofondas, Vilnius	100.0000
UAB Agrolaukai, Vilnius	100.0000
UAB Agrovalda, Vilnius	100.0000
UAB Agrovesta, Vilnius	100.0000
UAB G.Q.F., Vilnius	100.0000
UAB Sietuvė, Vilnius	100.0000
UAB Ūkelis, Vilnius	100.0000
UAB Vasaros Brizas, Vilnius	100.0000
UAB VL Investment Vilnius 5, Vilnius	100.0000
UAB VL Investment Vilnius 6, Vilnius	100.0000
UAB VL Investment Vilnius 7, Vilnius	100.0000
UAB VL Investment Vilnius 8, Vilnius	100.0000
UAB VL Investment Vilnius 9, Vilnius	100.0000
UAB VL Investment Vilnius 1, Vilnius	100.0000
UAB VL Investment Vilnius 10, Vilnius	100.0000
UAB VL Investment Vilnius 2, Vilnius	100.0000
UAB VL Investment Vilnius 3, Vilnius	100.0000
UAB VL Investment Vilnius 4, Vilnius	100.0000
UAB VL Investment Vilnius, Vilnius	100.0000
UK Wind Holdings Ltd., London	100.0000
Unión Médica la Fuencisla S.A., Compañía de Seguros, Zaragoza	100.0000
US PROPERTIES VA GmbH & Co. KG, Düsseldorf[4]	46.0939
Van Arkel Gerechtsdeurwaarders B.V., Leiden[4]	100.0000
VHDK Beteiligungsgesellschaft mbH, Düsseldorf	100.0000
VICTORIA Asien Immobilienbeteiligungs GmbH & Co. KG, Munich	100.0000
VICTORIA Italy Property GmbH, Düsseldorf	100.0000
VICTORIA Lebensversicherung Aktiengesellschaft, Düsseldorf	100.0000
VICTORIA US Property Investment GmbH, Düsseldorf	100.0000
VICTORIA Vierte Beteiligungsgesellschaft mbH, Düsseldorf	100.0000
Victoria Vierter Bauabschnitt GmbH & Co. KG, Düsseldorf	100.0000
Vorsorge Service GmbH, Düsseldorf	100.0000
welivit GmbH, Düsseldorf	100.0000
welivit Solarfonds GmbH & Co. KG, Düsseldorf	100.0000
welivit Solarfonds S.a.s. di welivit Solar Italia S.r.l., Bolzano	100.0000
WFB Stockholm Management AB, Stockholm[4]	50.0000
Wind Farm Iglasjön AB, Hässleholm	100.0000
Wind Farms Götaland Svealand AB, Hässleholm	100.0000
Wind Farms Västra Götaland AB, Hässleholm	100.0000
Windpark MR-B GmbH & Co. KG, Bremen[2]	100.0000
Windpark MR-D GmbH & Co. KG, Bremen[2]	100.0000
Windpark MR-N GmbH & Co. KG, Bremen[2]	100.0000
Windpark MR-S GmbH & Co. KG, Bremen[2]	100.0000
Windpark MR-T GmbH & Co. KG, Bremen[2]	100.0000
wse Solarpark Spanien 1 GmbH & Co. KG, Düsseldorf	75.1243
X-Pact B.V., The Hague	62.5000

Company and registered seat	% share of capital
Unconsolidated subsidiaries	
1440 New York Ave. Associates LP, Dover, New York	100.0000
ADVIA N.V., Schoten	80.0000
Aleama 150015 S.L., Valencia	100.0000
ANOVA GmbH, Rostock	100.0000
Arridabra 130013 S.L., Valencia	100.0000
ARTES Assekuranzservice GmbH, Düsseldorf	100.0000
B&D Business Solutions B.V., Utrecht	100.0000
Badozoc 1001 S.L., Valencia	100.0000
Bank Austria Creditanstalt Versicherungsdienst GmbH, Vienna	100.0000
Baqueda 7007 S.L., Valencia	100.0000
Beaufort Dedicated No 3 Ltd., London	100.0000
Beaufort Dedicated No 4 Ltd., London	100.0000
Beaufort Dedicated No 6 Ltd., London	100.0000
Beaufort Underwriting Services Limited, London	100.0000
Bobasbe 6006 S.L., Valencia	100.0000
Botedazo 8008 S.L., Valencia	100.0000
Calliden Insurance Pty Ltd, Sydney	100.0000
Callopio 5005 S.L., Valencia	100.0000
Camcichu 9009 S.L., Valencia	100.0000
Cannock Chase Incasso II B.V., The Hague	100.0000
CAPITAL PLAZA Holding GmbH, Düsseldorf	100.0000
Caracuel Solar Catorce S.L., Valencia	100.0000
Caracuel Solar Cinco S.L., Valencia	100.0000
Caracuel Solar Cuatro S.L., Valencia	100.0000
Caracuel Solar Dieciocho S.L., Valencia	100.0000
Caracuel Solar Dieciseis S.L., Valencia	100.0000
Caracuel Solar Diecisiete S.L., Valencia	100.0000
Caracuel Solar Diez S.L., Valencia	100.0000
Caracuel Solar Doce S.L., Valencia	100.0000
Caracuel Solar Dos S.L., Valencia	100.0000
Caracuel Solar Nueve S.L., Valencia	100.0000
Caracuel Solar Ocho S.L., Valencia	100.0000
Caracuel Solar Once S.L., Valencia	100.0000
Caracuel Solar Quince S.L., Valencia	100.0000
Caracuel Solar Seis S.L., Valencia	100.0000
Caracuel Solar Siete S.L., Valencia	100.0000
Caracuel Solar Trece S.L., Valencia	100.0000
Caracuel Solar Tres S.L., Valencia	100.0000
Caracuel Solar Uno S.L., Valencia	100.0000
Centrum Pomocy Osobom Poszkodowanym Sp. z o.o., Gdańsk	100.0000
Copper Leaf Research, Bingham Farms, Michigan	100.0000
Cotatrillo 100010 S.L., Valencia	100.0000
D.A.S. Prawo i Finanse Sp. z o.o., Warsaw	100.0000
D.A.S. Rechtsschutz Leistungs-GmbH, Munich	100.0000
D.A.S., Tomasz Niedziński Kancelaria Prawna Spółka komandytowa, Warsaw	95.0000
DAS Financial Services B.V., Amsterdam	51.0000
DAS Incasso Arnhem B.V., Elst	100.0000
DAS Incasso Eindhoven B.V., 's-Hertogenbosch	100.0000
DAS Incasso Rotterdam B.V., Rotterdam	100.0000
DAS Legal Services B.V., Amsterdam	100.0000

Company and registered seat	% share of capital
DAS Lex Assistance S.L., L'Hospitalet de Llobregat	100.0000
DEAX Õigusbüroo OÜ, Tallinn	100.0000
DKV Beteiligungs- und Vermögensverwaltungs GmbH & Co. KG, Cologne	100.0000
DKV Erste Beteiligungsgesellschaft mbH, Cologne	100.0000
DKV Servicios S.A., Zaragoza	100.0000
DKV-Residenz am Tibusplatz gGmbH, Münster	100.0000
DKV-Residenz in der Contrescarpe GmbH, Bremen	100.0000
DRA Debt Recovery Agency B.V., The Hague	100.0000
Economic Data Resources B.V., The Hague	100.0000
ERGO (China) Consulting Ltd., Beijing	100.0000
ERGO Alpha GmbH, Düsseldorf	100.0000
ERGO Anlageberatung und Vertrieb GmbH i. Gr., Düsseldorf	100.0000
ERGO Asia Management Pte. Ltd., Singapore	100.0000
ERGO Digital IT GmbH, Berlin	100.0000
ERGO Fund Golden Aging, Brussels[4]	100.0000
ERGO GmbH, Steinhausen	100.0000
ERGO Gourmet GmbH, Düsseldorf	100.0000
ERGO Infrastructure Investment Gesundheit GmbH, Düsseldorf	100.0000
ERGO Infrastructure Investment Komposit GmbH, Düsseldorf	100.0000
ERGO Infrastructure Investment Leben GmbH, Düsseldorf	100.0000
ERGO Infrastructure Investment Pensionskasse GmbH, Düsseldorf	100.0000
ERGO Infrastructure Investment Victoria Leben GmbH, Düsseldorf	100.0000
ERGO LatAm S.A.S., Bogotá	100.0000
ERGO Leben Asien Verwaltungs GmbH, Munich	100.0000
ERGO Mobility Solutions GmbH, Düsseldorf	100.0000
ERGO Private Capital GmbH, Düsseldorf	100.0000
ERGO Pro S.r.l., Verona	100.0000
ERGO Pro Sp. z o.o., Warsaw	100.0000
ERGO Pro, spol. s r.o., Prague	100.0000
ERGO Vermögensmanagement Ausgewogen A, Munich[4]	97.3726
ERGO Vermögensmanagement Flexibel A, Munich[4]	95.4581
ERGO Vermögensmanagement Robust A, Munich[4]	97.0387
ERGO Versicherungs- und Finanzierungs-Vermittlung GmbH, Hamburg	100.0000
ERGO Zehnte Beteiligungsgesellschaft mbH, Düsseldorf	100.0000
ERGO Zwölfte Beteiligungsgesellschaft mbH, München	100.0000
ERV Sigorta Aracılık Hizmetleri Ltd. Şti., Istanbul	99.9980
Etics, s.r.o., Prague	100.0000
Etoblete 160016 S.L., Valencia	100.0000
Euro-Center (Cyprus) Ltd., Larnaca	100.0000
Euro-Center (Thailand) Co., Ltd., Bangkok	100.0000
Euro-Center Cape Town (Pty) Ltd, Cape Town	100.0000
Euro-Center Holding North Asia (HK) Pte. Ltd., Hong Kong	100.0000
Euro-Center Ltda., São Paulo	100.0000
Euro-Center North Asia Consulting Services (Beijing) Co., Ltd., Beijing	100.0000
Euro-Center Prague, s.r.o., Prague	100.0000
EUROCENTER S.A., Palma de Mallorca	100.0000

Company and registered seat	% share of capital
Euro-Center USA Inc., New York, New York	100.0000
Euro-Center Yerel Yardim Hizmetleri Ltd. Şti., Istanbul	100.0000
European Assistance Holding GmbH, Munich	100.0000
Evaluación Médica TUW S.L., Barcelona	100.0000
Exolvo GmbH, Hamburg	100.0000
Gamaponti 140014 S.L., Valencia	100.0000
GBG Vogelsanger Straße GmbH, Cologne	94.7826
Gebäude Service Gesellschaft Überseering 35 mbH, Hamburg	100.0000
goDentis – Gesellschaft für Innovation in der Zahnheilkunde mbH, Cologne	100.0000
GRANCAN Sun-Line S.L., Valencia	100.0000
Great Lakes Re Management Company (Belgium) S.A., Brussels	100.0000
Group Risk Technologies Ltd., London	100.0000
Guanzu 2002 S.L., Valencia	100.0000
Hamburger Hof Management GmbH, Hamburg	100.0000
Hamburg-Mannheimer ForsikringService A/S, Copenhagen	100.0000
Hansekuranz Kontor GmbH, Münster	51.0000
Hartford Steam Boiler Colombia Ltda, Bogotá	100.0000
Hartford Steam Boiler UK Limited, Salford	100.0000
Hestia Loss Control Sp. z o.o., Sopot	100.0000
Horbach GmbH Versicherungsvermittlung und Finanzdienstleistungen, Düsseldorf	70.1000
HSB Associates Inc., New York, New York	100.0000
HSB Ventures Inc., Dover, Delaware	100.0000
IDEENKAPITAL Anlagebetreuungs GmbH, Düsseldorf	100.0000
Ideenkapital Client Service GmbH, Düsseldorf	100.0000
Ideenkapital erste Investoren Service GmbH, Düsseldorf	100.0000
Ideenkapital Fonds Treuhand GmbH, Düsseldorf	100.0000
Ideenkapital Media Treuhand GmbH, Düsseldorf	100.0000
IDEENKAPITAL Metropolen Europa Verwaltungsgesellschaft mbH, Düsseldorf	100.0000
IDEENKAPITAL PRORENDITA EINS Treuhandgesellschaft mbH, Düsseldorf	100.0000
IDEENKAPITAL Schiffsfonds Treuhand GmbH, Düsseldorf	100.0000
Ideenkapital Treuhand US Real Estate eins GmbH, Düsseldorf	100.0000
IK Einkauf Objektverwaltungsgesellschaft mbH, Düsseldorf	100.0000
IK Einkaufsmärkte Deutschland Verwaltungsgesellschaft mbH, Düsseldorf	100.0000
IK FE Fonds Management GmbH, Düsseldorf	100.0000
IK Komp GmbH, Düsseldorf	100.0000
IK MEGA 4 Service GmbH, Düsseldorf	100.0000
IK Objekt Bensheim GmbH, Düsseldorf	100.0000
IK Objekt Frankfurt Theodor-Heuss-Allee GmbH, Düsseldorf	100.0000
IK Pflegezentrum Uelzen Verwaltungs-GmbH, Düsseldorf	100.0000
IK Property Eins Verwaltungsgesellschaft mbH, Hamburg	100.0000
IK Property Treuhand GmbH, Düsseldorf	100.0000
IK US Portfolio Invest DREI Verwaltungs-GmbH, Düsseldorf	100.0000
IK US Portfolio Invest Verwaltungs-GmbH, Düsseldorf	100.0000

Company and registered seat	% share of capital
IK US Portfolio Invest ZWEI Verwaltungs-GmbH, Düsseldorf	100.0000
Jogszerviz Kft, Budapest	100.0000
Junos Verwaltungs GmbH, Munich	100.0000
JUSTIS GmbH, Etoy	100.0000
K & P Objekt Hamburg Hamburger Straße GmbH, Düsseldorf	100.0000
K & P Objekt Hamburg Hamburger Straße Immobilienfonds GmbH & Co. KG, Düsseldorf[4]	36.6889
K & P Objekt München Hufelandstraße GmbH i. L., Düsseldorf	100.0000
KQV Solarpark Franken 1 GmbH & Co. KG, Düsseldorf	100.0000
Kuik & Partners Credit Management BVBA, Brussels	98.9000
Larus Vermögensverwaltungsgesellschaft mbH, Munich	100.0000
Legal Net GmbH, Munich	100.0000
Leggle B.V., Amsterdam	100.0000
m:editerran Power S.a.s. di welivit Solar Italia S.r.l., Bolzano	100.0000
Marbury Agency Inc., Amelia, Ohio	100.0000
MAYFAIR Financing GmbH, Munich	100.0000
MAYFAIR Holding GmbH i. L., Düsseldorf	100.0000
MEAG Center House S.A., Brussels	100.0000
MEAG Dividende (A+I Tranche), Munich[4]	88.9010
MEAG EM Rent Nachhaltigkeit (A+I Tranche), Munich[4]	98.7465
MEAG FlexConcept – EuroGrowth, Luxembourg[4]	100.0000
MEAG GlobalRent (A+I Tranche), Munich[4]	99.6325
MEAG Hong Kong Limited, Hong Kong[4]	100.0000
MEAG Luxembourg S.à r.l., Luxembourg[4]	100.0000
MEAG MultiSmart (A+I), Munich[4]	61.1256
MEAG Osteuropa A, Munich[4]	40.4926
MEAG Pension Rent, Munich[4]	100.0000
MEAG Pension Safe, Munich[4]	100.0000
MEAG Real Estate Erste Beteiligungsgesellschaft mbH i. L., Munich[4]	100.0000
MEAG RealReturn Inhaber-Anteile A, Munich[4]	47.5162
MEAG Short-Term High Yield, Munich[4]	100.0000
MEAG Vermögensanlage Komfort, Munich[4]	49.2109
MEAG Vermögensanlage Return (A+I Tranche), Munich[4]	72.7201
Mediastream Consulting GmbH, Grünwald	100.0000
Mediastream Dritte Film GmbH i. L., Grünwald	100.0000
Mediastream Film GmbH, Grünwald	100.0000
Mediastream Zweite Film GmbH, Grünwald	100.0000
MedNet Bahrain W.L.L., Manama	100.0000
MedNet Egypt LLC, Cairo	100.0000
MedNet Europa GmbH, Munich	100.0000
MedNet Global Healthcare Solutions LLC, Dubai	100.0000
MedNet Greece S.A., Athens	78.1419
MedNet International Ltd., Nicosia	100.0000
Mednet Jordan Co. W.L.L., Amman	100.0000
MedNet Saudi Arabia LLC, Riyadh	100.0000
MedNet UAE FZ LLC, Dubai	100.0000
MEGA 4 Management GmbH i. L., Düsseldorf	100.0000
MEGA 4 Treuhand GmbH, Düsseldorf	100.0000
miCura Pflegedienste Berlin GmbH, Berlin	100.0000
miCura Pflegedienste Bremen GmbH, Bremen	100.0000
miCura Pflegedienste Düsseldorf GmbH, Düsseldorf	100.0000
miCura Pflegedienste GmbH, Cologne	100.0000
miCura Pflegedienste Hamburg GmbH, Hamburg	100.0000
miCura Pflegedienste Krefeld GmbH, Krefeld	100.0000
miCura Pflegedienste München/Dachau GmbH, Dachau	51.0000
miCura Pflegedienste München GmbH i. L., Munich	100.0000
miCura Pflegedienste München Ost GmbH, Munich	65.0000
miCura Pflegedienste Münster GmbH, Münster	100.0000
miCura Pflegedienste Nürnberg GmbH, Nuremberg	51.0000
MR Beteiligungen 15. GmbH, Munich	100.0000
MR Beteiligungen 18. GmbH, Grünwald	100.0000
MR Beteiligungen 2. GmbH, Munich	100.0000
MR Beteiligungen 3. GmbH, Munich	100.0000
MR Beteiligungen AG, Grünwald	100.0000
MR Digital Innovation Partners Insurance Agency LLC, Columbus, Ohio[4]	0.0000
MR Financial Group GmbH, Munich	100.0000
MR Forest GmbH, Munich	100.0000
MR Infrastructure Inc., Dover, Delaware	100.0000
MR RENT-Management GmbH, Munich	100.0000
MR Solar Beneixama GmbH i. L., Nuremberg	100.0000
MRHCUK Dormant No. 1 Limited, London	100.0000
Münchener Consultora Internacional SRL, Santiago de Chile	100.0000
Münchener de Argentina Servicios Técnicos S.R.L., Buenos Aires	100.0000
Münchener de Mxico S.A., Mexico	100.0000
Münchener de Venezuela C.A. Intermediaria de Reaseguros, Caracas	100.0000
Münchener Finanzgruppe AG Beteiligungen, Munich	100.0000
Münchener Vermögensverwaltung GmbH, Munich	100.0000
Münchener, ESCRITÓRIO DE REPRESENTACAO DO BRASIL Ltda, São Paulo	100.0000
Munich American Reassurance Company PAC Inc., Atlanta, Georgia[4]	0.0000
Munich Canada Systems Corporation, Toronto, Ontario	100.0000
Munich Columbia Square Corp., Wilmington, Delaware	100.0000
Munich Management Pte. Ltd., Singapore	100.0000
Munich Re America Brokers Inc., Wilmington, Delaware	100.0000
Munich Re America Management Ltd., London	100.0000
Munich Re Automation Solutions GmbH, Munich	100.0000
Munich Re Automation Solutions Inc., Wilmington, Delaware	100.0000
Munich Re Automation Solutions K.K., Tokyo	100.0000
Munich Re Automation Solutions Pte. Ltd., Singapore	100.0000
Munich Re Automation Solutions Pty Ltd, Sydney	100.0000
Munich Re Capital Markets GmbH, Munich	100.0000
Munich Re Digital Partners Limited, London	100.0000
Munich Re India Services Private Limited, Mumbai	100.0000
Munich Re Innovation Systems Inc., Toronto, Ontario	100.0000
Munich Re Underwriting Agents (DIFC) Ltd., Dubai	100.0000
Munich-American Risk Partners GmbH, Munich	100.0000
Munich-Canada Management Corp. Ltd., Toronto, Ontario	100.0000
MunichFinancialGroup AG Holding, Munich	100.0000
MunichFinancialServices AG Holding, Munich	100.0000

Company and registered seat	% share of capital
Munichre Service Limited, Hong Kong	100.0000
Naretoblera 170017 S.L., Valencia	100.0000
Nerruze 120012 S.L., Valencia	100.0000
nexible GmbH, Düsseldorf	100.0000
Orrazipo 110011 S.L., Valencia	100.0000
P.A.N. Verwaltungs GmbH, Grünwald	100.0000
PLATINIA Verwaltungs-GmbH, Munich	100.0000
PRORENDITA DREI Verwaltungsgesellschaft mbH, Hamburg	100.0000
PRORENDITA EINS Verwaltungsgesellschaft mbH, Hamburg	100.0000
PRORENDITA FÜNF Verwaltungsgesellschaft mbH, Hamburg	100.0000
PRORENDITA VIER Verwaltungsgesellschaft mbH, Hamburg	100.0000
PRORENDITA ZWEI Verwaltungsgesellschaft mbH, Hamburg	100.0000
Reaseguradora de las Américas S.A., Havana	100.0000
Roanoke Trade Insurance Inc., Schaumburg, Illinois	100.0000
SAINT LEON ENERGIE S.A.R.L., Sarreguemines	100.0000
Schloss Hohenkammer GmbH, Hohenkammer	100.0000
Schrömbgens & Stephan GmbH Versicherungsmakler, Düsseldorf	100.0000
Smart Thinking Consulting (Beijing) Co., Ltd., Beijing	100.0000
Sopockie Towarzystwo Doradcze Sp. z o.o., Sopot	100.0000
Stichting Aandelen Beheer D.A.S. Holding, Amsterdam	100.0000
Sustainable Finance Risk Consulting GmbH, Munich	100.0000
Sydney Euro-Center Pty Ltd, Sydney	100.0000
Synkronos Italia S.r.l., Milan	80.3500
TAS Assekuranz Service GmbH, Frankfurt am Main	100.0000
TAS Touristik Assekuranzmakler und Service GmbH, Frankfurt am Main	100.0000
Three Lions Underwriting Ltd., London	100.0000
Tillobesta 180018 S.L., Valencia	100.0000
Triple IP B.V., Culemborg	100.0000
US PROPERTIES VA Verwaltungs-GmbH, Düsseldorf	100.0000
Vectis Claims Services Ltd., Tel Aviv	75.0000
VFG Vorsorge-Finanzierungsconsulting GmbH, Vienna	100.0000
VICTORIA Immobilien Management GmbH, Munich	100.0000
VICTORIA Immobilien-Fonds GmbH, Düsseldorf	100.0000
VICTORIA US Property Zwei GmbH i. L., Munich	100.0000
Victoria Vierter Bauabschnitt Management GmbH, Düsseldorf	100.0000
Viwis GmbH, Munich	100.0000
VV-Consulting Gesellschaft für Risikoanalyse, Vorsorgeberatung und Versicherungsvermittlung GmbH, Vienna	100.0000
VV-Consulting Többesügynöki Kft, Budapest	100.0000
welivit New Energy GmbH, Düsseldorf	100.0000
welivit Solar España GmbH, Düsseldorf	100.0000
Welivit Solar Italia S.r.l., Bolzano	100.0000
Windpark Langengrassau Infrastruktur GbR, Bremen	83.3300
WNE Solarfonds Süddeutschland 2 GmbH & Co. KG, Düsseldorf	100.0000
Wohnungsgesellschaft Brela mbH, Hamburg	100.0000
WP Kladrum/Dargelütz GbR, Bremen	55.6500

Company and registered seat	% share of capital
Zacobu 110011 S.L., Valencia	100.0000
Zacuba 6006 S.L., Valencia	100.0000
Zacubacon 150015 S.L., Valencia	100.0000
Zafacesbe 120012 S.L., Valencia	100.0000
Zapacubi 8008 S.L., Valencia	100.0000
Zarzucolumbu 100010 S.L., Valencia	100.0000
Zetaza 4004 S.L., Valencia	100.0000
Zicobucar 140014 S.L., Valencia	100.0000
Zucaelo 130013 S.L., Valencia	100.0000
Zucampobi 3003 S.L., Valencia	100.0000
Zucarrobiso 2002 S.L., Valencia	100.0000
Zucobaco 7007 S.L., Valencia	100.0000
Zulazor 3003 S.L., Valencia	100.0000
Zumbicobi 5005 S.L., Valencia	100.0000
Zumcasba 1001 S.L., Valencia	100.0000
Zuncabu 4004 S.L., Valencia	100.0000
Zuncolubo 9009 S.L., Valencia	100.0000
Associates and joint ventures accounted for using the equity method	
1818 Acquisition LLC, Dover, Delaware	20.6400
Apollo Munich Health Insurance Co. Ltd., Hyderabad	48.7000
Avantha ERGO Life Insurance Company, Mumbai	25.9998
Consorcio Internacional de Aseguradores de Crédito S.A., Madrid[5]	15.0353
Consortia Versicherungs-Beteiligungsgesellschaft mbH, Nuremberg	33.7027
D.A.S. Difesa Automobilistica Sinistri S.p.A. di Assicurazione, Verona	49.9920
DAMAN – National Health Insurance Company, Abu Dhabi	20.0000
EGM Wind SAS, Paris	40.0000
ERGO China Life Insurance Co., Ltd., Jinan, Shandong Province	50.0000
Európái Utazasi Biztosító Rt, Budapest	26.0000
Europäische Reiseversicherungs-Aktiengesellschaft, Vienna	25.0100
Global Aerospace Underwriting Managers Ltd., London	40.0000
Global Insurance Company, Ho Chi Minh City	43.7500
Group Health Group Holdings Inc., Surrey, British Columbia	40.0000
HDFC ERGO General Insurance Company Ltd., Mumbai	48.2922
Invesco MEAG US Immobilien Fonds IV B, Luxembourg	37.1375
KarstadtQuelle Finanz Service GmbH i. L., Düsseldorf	50.0000
King Price Financial Services (Pty) Ltd, Pretoria[5]	15.0000
Marchwood Power Limited, Southampton	50.0000
MAYFAIR Holding GmbH & Co. Singapur KG i. L., Düsseldorf[9]	71.4285
MCAF Verwaltungs-GmbH & Co. KG i. L., Düsseldorf	50.0000
MEAG Pacific Star Holdings Ltd., Hong Kong	50.0000
MEDICLIN Aktiengesellschaft, Offenburg	35.0042
MEGA 4 GbR, Berlin	34.2912
Rendite Partner Gesellschaft für Vermögensverwaltung mbH i. L., Frankfurt am Main	33.3333
RP Vilbeler Fondsgesellschaft mbH i. L., Frankfurt am Main	40.0000
Sana Kliniken AG, Munich	22.4128
SAS Le Point du Jour, Paris	50.0000

Company and registered seat	% share of capital
SEBA Beteiligungsgesellschaft mbH, Nuremberg	48.9966
SEIF II Texas Wind Holdings 1 LLC, Dover, Delaware	49.0000
SNIC Insurance B.S.C. (c), Manama	22.5000
STEAG Fernwärme GmbH, Essen	49.0000
Storebrand Helseforsikring AS, Oslo	50.0000
Suramericana S.A., Medellin[5]	18.8672
Taunus Holding B.V., Rotterdam	23.1913
Thaisri Insurance Public Co., Ltd., Bangkok	40.2576
T-Solar Global Operating Assets S.L., Madrid	37.0000
Vier Gas Investments S.à r.l., Luxembourg	43.7516
VV Immobilien GmbH & Co. United States KG i. L., Munich	28.9515
VV Immobilien GmbH & Co. US City KG i. L., Munich	23.0999
WISMA ATRIA Holding GmbH & Co. Singapur KG i. L., Düsseldorf[9]	65.0000
Associates and joint ventures accounted for at fair value	
"PORT ELISABETH" GmbH & Co. KG, Bramstedt	31.9660
"PORT LOUIS" GmbH & Co. KG, Bramstedt	26.0495
"REISEGARANT" Gesellschaft für die Vermittlung von Insolvenzversicherungen mbH, Hamburg	24.0000
Agricultural Management Services S.r.l., Verona	33.3333
Allianz Pegasus Fonds, Frankfurt am Main	46.0000
Assistance Partner GmbH & Co. KG, Munich	21.6600
Augury Inc., Wilmington, Delaware[5]	12.7500
carexpert Kfz-Sachverständigen GmbH, Walluf	25.0000
Energie Kapital GmbH & Co. Solarfonds 2 KG, Düsseldorf	34.4234
Fernkälte Geschäftsstadt Nord Gesellschaft bürgerlichen Rechts, Hamburg	37.1275
Finsure Investments (Private) Limited, Harare	24.5000
GIG City Nord GmbH, Hamburg	20.0000
Hartford Research LLC, Lewes, Delaware	41.7500
IK Objektgesellschaft Frankfurt Theodor-Heuss-Allee GmbH & Co. KG, Düsseldorf	47.4000
LCM Logistic Center Management GmbH, Hamburg	50.0000
MCAF Management GmbH i. L., Düsseldorf	50.0000
Neos Ventures Limited, London[5]	9.4700
PERILS AG, Zurich[5]	10.0000
POOL Sp. z o.o., Warsaw	33.7500
Relayr Inc., Wilmington, Delaware[5]	14.7800
Residential Builders Underwriting Agency Pty Ltd, Sydney	20.0000
Rural Affinity Insurance Agency Pty Ltd, Sydney	50.0000
Sekundi CVBA, Brussels	33.3333
SIP Social Impact Partners GmbH, Munich	50.0000
Super Home Inc., Wilmington, Delaware[5]	16.8200
Teko – Technisches Kontor für Versicherungen Gesellschaft mit beschränkter Haftung, Düsseldorf	30.0000
vers.diagnose GmbH, Hanover	49.0000
Verwaltungsgesellschaft "PORT ELISABETH" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT KELANG" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT LOUIS" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT MAUBERT" mbH, Bramstedt	50.0000

Company and registered seat	% share of capital
Verwaltungsgesellschaft "PORT MELBOURNE" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT MENIER" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT MOODY" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT MORESBY" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT MOUTON" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT NELSON" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT RUSSEL" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT SAID" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT STANLEY" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT STEWART" mbH, Bramstedt	50.0000
Verwaltungsgesellschaft "PORT UNION" mbH, Bramstedt	50.0000
VisEq GmbH, Grünwald	34.0000
Volksbanken-Versicherungsdienst GmbH, Vienna	25.2319
VV Immobilien Verwaltungs GmbH, Munich	30.0000
VV Immobilien Verwaltungs und Beteiligungs GmbH, Munich	30.0000
We Predict Limited, Swansea[5]	17.5900
Windpark Osterhausen-Mittelhausen Infrastruktur GbR, Bremen[7]	58.9400
WISMA ATRIA Holding GmbH i. L., Düsseldorf	50.0000
Companies included on a pro-rata basis (joint operation pursuant to IFRS 11)	
"Pensionsfonds" des Versorgungswerks MetallRente bei der Allianz Pensionsfonds AG, Stuttgart	17.5000
Shareholdings exceeding 5% of the voting rights in large companies as defined in Section 271(1) of the German Commercial Code (HGB)	
Admiral Group Plc, Cardiff (equity: €115,924k; result for year: €171,275k)	10.2186
Extremus Versicherungs-Aktiengesellschaft, Cologne (equity: €64,740k; result for year: €300k)	16.0000
Saudi Enaya Cooperative Insurance Company, Jeddah (equity: €38,138k; result for year: –€6,096k)	15.0000
Wataniya Insurance Company, Jeddah (equity: €43,216k; result for year: €9,146k)	10.0000

Company and registered seat	% share of capital
Other shareholdings as defined in Section 271(1) of the German Commercial Code (HGB)	
Asia Property Fund II GmbH & Co. KG, Munich (equity: €104,708k; result for year: €528k)	5.8889
Autobahn Tank & Rast Gruppe GmbH & Co. KG, Bonn (equity: €478,206k; result for year: –€314k)	9.9980
Bought by Many Limited "BBM", London[12] (equity: €---; result for year: €---)	8.7900
CBRE U.S. Core Partners Parallel Limited Partnership, Wilmington, Delaware[8] (equity: €26,081k; result for year: €2,265k)	99.9000
FIA Timber Partners II LP, Wilmington, Delaware[8] (equity: €143,230k; result for year: €3,388k)	39.0800
Green Acre LLC, Wilmington, Delaware[8] (equity: €41,667k; result for year: €4,896k)	31.9361
Hancock Timberland XII LP, Wilmington, Delaware (equity: €214,136k; result for year: €11,540k)	15.1500
Helium Systems Inc., Dover, Delaware[12] (equity: €---; result for year: €---)	5.4000
Hines India Fund LP, Houston, Texas (equity: €63.178k; result for year: €2.248k)	11.8333
IK Australia Property Eins GmbH & Co. KG, Hamburg (equity: €14,005k; result for year: €859k)	10.6438
IK Objekt Bensheim Immobilienfonds GmbH & Co. KG, Düsseldorf (equity: €14,263k; result for year: €1,633k)	16.2445
IK US PORTFOLIO INVEST Drei GmbH & Co. KG, Düsseldorf (equity: €16,709k; result for year: –€328k)	0.0024
IK US Portfolio Invest GmbH & Co. KG, Düsseldorf (equity: €19,941k; result for year: –€3,361k)	0.0026
IK US Portfolio Invest ZWEI GmbH & Co. KG, Düsseldorf (equity: €22,740k; result for year: –€6,427k)	0.0016
K & P Objekt München Hufelandstraße Immobilienfonds GmbH & Co. KG, Düsseldorf (equity: €6,312k; result for year: €44,116k)	0.0489
M 31 Beteiligungsgesellschaft mbH & Co. Energie KG, Düsseldorf (equity: €1,081,264k; result for year: €71,357k)	18.6246
m:solarPOWER GmbH & Co. KG, Düsseldorf (equity: €434k; result for year: €115k)	0.0000
Next Insurance Inc., Wilmington, Delaware (equity: €32,291k; result for year: €---)	6.8716
PRORENDITA DREI GmbH & Co. KG, Hamburg (equity: €5,609k; result for year: –€1,108k)	0.0260
PRORENDITA EINS GmbH & Co. KG, Hamburg (equity: €7.218k; result for year: –€1.183k)	0.0590
PRORENDITA Fünf GmbH & Co. KG, Hamburg (equity: €15,283k; result for year: –€458k)	0.0384
PRORENDITA VIER GmbH & Co. KG, Hamburg (equity: €9,922k; result for year: –€1,920k)	0.0029
PRORENDITA Zwei GmbH & Co. KG, Hamburg (equity: €6,044k; result for year: –€1,097k)	0.0100
RMS Forest Growth International L.P., Grand Cayman, Cayman Islands[8] (equity: €85,933k; result for year: –€3,028k)	43.4700
Slice Labs Inc., Ottawa, Ontario (equity: €5,340k; result for year: €---)	9.4100
Solarpark 1000 Jahre Fürth GmbH & Co. KG, Düsseldorf (equity: €644k; result for year: €90k)	0.9091
T&R GP Management GmbH, Bonn (equity: €25k; result for year: –€2k)	10.0020
T&R MLP GmbH, Bonn (equity: €25k; result for year: –€3k)	10.0020
T&R Real Estate GmbH, Bonn (equity: €140,841k; result for year: –€26k)	10.0020
Trov Inc., Dover, Delaware (equity: €36,548k; result for year: €---)	4.7200
Umspannwerk Hellberge GmbH & Co. KG, Treuenbrietzen (equity: –€2,043k; result for year: –€135k)	6.9000
welivit TOP SOLAR GmbH & Co. KG, Düsseldorf (equity: €75k; result for year: €41k)	0.0000

1 Not currently utilised.
2 This fully consolidated German subsidiary with the legal form of a partnership, as defined in Section 264a of the German Commercial Code (HGB), intends to fulfil the conditions required pursuant to Section 264b of the Commercial Code and, in the 2017 financial year, to avail itself of the relevant provision exempting it from preparing annual financial statements.
3 This fully consolidated German subsidiary intends to fulfil the conditions required in Section 264(3) of the German Commercial Code (HGB) and, in the 2017 financial year, to avail itself of the relevant provision exempting it from preparing annual financial statements.
4 Control pursuant to voting majority or other control pursuant to IFRS 10.
5 Significant influence owing to representation of Munich Re on the board of directors and/or supervisory body or an equivalent governing body of the associate.
6 No significant influence, as there are no close links with Munich Re of the kind defined in IAS 28.6.
7 No control, since the articles of association or another agreement bind the relevant operations to a quorum, which cannot be achieved by Munich Re.
8 No control and/or no significant interest, as it is a purely financial investment under the managerial responsibility of an external asset manager.
9 Significant influence owing to divergent voting power.
10 No significant influence because, under the articles of association, statutes or other agreement, all key decisions regarding the company's financial and operating policy are subject to a quorum which cannot be attained by the majority shareholder without the non-controlling shareholders.
11 Munich Reinsurance Company or one of its consolidated subsidiaries is a fully liable party in this company.
12 This company is not required to prepare or disclose financial statements. Accordingly, we make use of the option to exempt this company in accordance with Section 313(3), sentence 5, of the German Commercial Code, and forgo the disclosures on equity and the result for the year.

Drawn up and released for publication,
Munich, 6 March 2018.

The Board of Management

Independent auditor's report

To Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München, Munich

Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report

Opinions

We have audited the consolidated financial statements of Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München, Munich, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2017, and the consolidated income statement, the statement of recognised income and expense, Group statement of changes in equity and consolidated cash flow statement for the financial year from 1 January to 31 December 2017, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report at Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München, Munich, for the financial year from 1 January to 31 December 2017.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e(1) of the German Commercial Code [Handelsgesetzbuch: HGB] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of 31 December 2017, and of its financial performance for the financial year from 1 January to 31 December 2017, and

- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to Section 322(3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the Group management report in accordance with Section 317 HGB and the EU Audit Regulation No. 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the Group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10(2)(f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5(1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2017. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

Valuation of the provision for outstanding claims in property-casualty business

For information on the accounting and valuation policies used, please see the notes to the consolidated financial statements on page 113, and details about the estimates and assumptions used on page 99. Further information about the line items in the financial statements can be found on pages 145–148. Risk information can be found on pages 161–164 of the notes to the financial statements, and on pages 70–72 of the combined management report.

The financial statement risk

The provision for outstanding claims at the reporting date was €45,004m in the property-casualty reinsurance segment and €4,483m in the property-casualty German primary insurance segment. In the ERGO International segment, a major part of the provision for outstanding claims of €2,849m refers to property-casualty business. Major losses from natural catastrophes had an impact of €3,678m on the year, of which €2,744m resulted from Hurricanes Harvey, Irma and Maria.

The provision for outstanding claims is reported on the basis of an expected value that is calculated on the basis of actuarial procedures and statistical methods. The expected value takes account of assumptions about premium, ultimate loss ratios, run-off periods, factors and speed of settlement that are based on past experience. Management bases the final amount of the provision for outstanding claims on the results of actuarial procedures and other information about calculating associated uncertainties. Major losses are viewed separately when measuring provisions.

Estimation of the provision for outstanding claims is subject to uncertainty and judgement. Uncertainties in estimation arise in particular from the occurrence, amount and speed of settlement of large claims, long-term claims development (especially in third-party liability) and in relation to the estimation of special loss scenarios, such as provisions for asbestos and environmental claims. With major losses in particular – such as for the hurricane events – it can take a long time before all claims notifications are received from cedants. Where no adequate claims notifications are available, provisions for these major losses are estimated on the basis of internal analyses of market loss and the Company's own losses on the basis of cover it has provided.

The notes to the financial statements must include extensive information about the provision for outstanding claims, including run-off triangles in particular.

Our audit approach

In auditing the provision for outstanding claims, we engaged actuaries as part of the audit team. In particular, we carried out the following key audit procedures:

- We assessed the process for setting aside provisions, identified key controls, and tested their design and effectiveness. The controls include the completeness and accuracy of the data used, and the qualitative and quantitative aspects of valuation.

- We asked for explanations on the derivation of key assumptions used – including loss ratios and assumptions about run-off patterns – and assessed those assumptions.

- Substantive audit procedures on major losses were mainly made on the basis of selected specific items, whereby we drew concludsions about the appropriateness of key assumptions used on the basis of available external information.

- With respect to losses from the hurricanes Harvey, Irma and Maria, we audited the assumptions of losses on the basis of inquiries and inspections of documents and – where possible – compared these with available external information. We also inspected selected claims notifications in the affected units and assessed whether these matched up to the Company's estimates.

- For selected Group entities, we carried out our own reserve calculations for certain segments based on our assessment of risk considerations. We determined a best estimate as well as an appropriate range based on statistical probabilities, and compared these with the Company's calculations.

- We assessed the level of reserves at the reporting date with that in previous years. We assessed the appropriateness of any adjustments made to expected values determined using actuarial methods by inspecting and critically assessing the documentation of the underlying calculations or qualitative grounds. We also spoke to the Company's actuaries.

- We assessed the appropriateness of provisions for asbestos and environmental claims on the basis of statistics and key figures.

- We assessed the actual development of the provision for outstanding claims set for the previous year on the basis of run-off results in order to draw a conclusion about the reliability of the estimates.

- We assessed whether the disclosures in the notes, particularly the run-off triangles, were correctly derived from the accounting system and evaluated them for completeness.

Our observations

The valuation process for the provision for outstanding claims in property-casualty business is appropriate, and the valuation assumptions, including those for major losses, are reasonable and balanced. In the segments that we audited, the provisions set aside fall within the range we calculated independently. The explanatory notes and disclosures in the notes to the consolidated financial statements are complete and appropriate.

Valuation of provision for future policy benefits, provision for outstanding claims, and deferred acquisition costs in life and health

With respect to the accounting policies, we refer to explanations in the notes to the consolidated financial statements on pages 112–113, and to the explanations about the use of estimates and assumptions on page 99. Further information about the line items in the financial statements can be found on pages 137 and 145. Risk information can be found on pages 159–161 of the notes to the financial statements, and on page 71–72 of the combined management report.

The financial statement risk

Provisions in life and health mainly comprise the provision for future policy benefits and the provision for outstanding claims. The provision for future policy benefits excluding unit-linked life insurance in the ERGO Life and Health Germany segment is €87,774m, and amounts to €10,825m in the life reinsurance segment. In ERGO International, most of the provision for future policy benefits of €9,897m is for life and health business. The provision for outstanding claims in the life reinsurance segment is €8,694m and amounts to €2,935m in ERGO Life and Health.

The Group's deferred acquisition costs amount to €9,428m (net), and most of this refers to life and health business.

Valuation of the provision for future policy benefits is necessarily dependent on a number of assumptions. These refer in particular to discount rates, mortality and morbidity assumptions, acquisition and administration expenses, and calculated lapse rates. In accordance with applicable accounting regulations, these assumptions are determined at the start of a contract and are only adjusted if there is a significant deterioration. As the assumptions are generally not observable in the market, the determination or adjustment of these assumptions are subject to uncertainty and judgement.

In life and health reinsurance, the provision for outstanding claims is mainly accounted for on the basis of information from the cedant. In primary insurance, the provision for outstanding claims is mainly calculated on the basis of expected claims.

Deferred acquisition costs are amortised over the duration of the contracts. Depending on the type of contract, this is made proportionally to the premium or proportionally to the expected gross profit margins.

An annual liability adequacy test checks at the level of uniformly managed portfolios whether the balance from the aggregate policy reserves and the deferred acquisition costs is appropriate as a whole to satisfy the liabilities incurred. The test is based on expected future gross profit margins, calculated on the basis of current realistic actuarial assumptions, and is dependent on the same assumptions as the provision for future policy benefits. If the liability adequacy test should determine a deficit, acquisition costs will be impaired. If a deficit still remains, the provision for future policy benefits will be increased.

With regard to the technical provisions in life and health business, disclosures in the notes must be taken into account (especially information about uncertainty of estimates and sensitivities).

Our audit approach

In auditing the provisions in life and health business, we engaged actuaries as part of the audit team. In particular, we carried out the following key audit procedures:

- We assessed the process for setting aside provisions and the valuation of deferred acquisition costs, identified key controls, and tested their design and effectiveness. Our particular focus was on controls to ensure that changes to assumptions were correctly implemented in the systems.

- We assessed the appropriateness of key assumptions by analysing the actuarial methods used to derive those assumptions. We placed particular emphasis on the reasonable and standard compliant use of discount rates.

- We assessed the derivation and appropriateness of interest-rate assumptions used in calculating the provision for future policy benefits or in adequacy tests. For this purpose, we took account of relevant data from the capital markets.

- We compared forecast and actual results of individual operating entities with market developments, thus deriving assessments about the reliability of the estimates.

- We analysed development of the provisions for future policy benefits and deferred acquisition costs compared to the previous year, and made an assessment taking into account current business developments and our expectations from market observations.

- We then assessed whether the accounting policies and methods used in the adequacy test were properly applied. Where market interest rates were used for valuation, we checked the adequacy of discount rates used by making a comparison with inputs observable in the market.

- In German life primary insurance, we independently determined the provision for future policy benefits on the basis of a random selection of tariffs, and compared our results with those of the Company.

- We assessed whether impairment of acquisition costs and reserve increases in the ERGO Life and Health segment triggered by the liability adequacy test were correct.

- We valued provisions for outstanding claims that had been valued using statistical processes in various segments using our own methods, and compared our results with those of the Company.

- We checked whether the disclosures in the notes correspond with accounting standards, and paid particular attention to whether uncertainty about estimates and sensitivities had been adequately shown.

Our observations
The valuation method used for the provision for future policy benefits, the provision for outstanding claims, and deferred acquisition costs in life and health is appropriate. Valuation assumptions are adequate and balanced. The explanatory notes and disclosures in the notes to the consolidated financial statements are complete and appropriate.

Valuation of investments

With respect to the accounting policies, we refer to explanations in the notes to the consolidated financial statements on pages 108–110, and to the explanations about the use of estimates and assumptions on page 99. We also refer to the notes on the valuation hierarchy on pages 127–132, and to the individual instruments on pages 133–136. Information about market risk and credit risk can be found in the combined management report on pages 72–74.

The financial statement risk
The carrying amount of total investments was €217,562m, and the fair value was €243,309m.

The valuation of investments whose fair values are determined on the basis of valuation models or values assessed by third parties is subject to uncertainty. Measurement carried out on the basis of valuation methods that use inputs observable in the market particularly affects non-listed securities, infrastructure loans, other loans and derivatives. The greater the number of input factors used that are not observable in the market but are based on internal estimates, the greater the scope for judgement. Judgement is especially necessary in measuring land and buildings, real estate funds, private equity funds, and investments in affiliated companies and associates. The fair value of investments determined on the basis of valuation models or values assessed by third parties is allocated to valuation categories level 2 and level 3 of the fair value hierarchy of IFRS 13.

Comprehensive disclosures regarding valuation methods and scope of judgement are required to be made in the notes in connection with the valuation of investments.

Our audit approach
Our audit of the investments essentially comprised the following procedures:

- We assessed the adequacy of the internal controls set up for the valuation process and are convinced of their effectiveness after carrying out functional tests. Our focus was on controls on use of market inputs and quality assurance.

- For investments measured by means of a valuation model, we assessed the adequacy of the respective model and of the methods used to determine the assumptions and inputs underlying the valuation for a risk-based sample.

- For parts of direct and indirect real estate investments, private equity funds, and risk-based samples of unlisted loans, structured products and derivatives, we checked the fair values determined by Munich Re based on our own valuations or by making comparisons with external information.

- Revaluations for unlisted securities and derivatives were carried out using our own valuation software and inputs derived from market data to compute our own fair values. The comparison with Munich Re's fair values took account of an expected range that was determined depending on the type of financial instrument involved.

- On the basis of the fair values determined by the Company, we have ascertained that the subsequent accounting measurement and the impact on profit or loss are correct. In this context, we have assessed whether write-ups and write-downs were appropriate and whether the result from the fair value measurement and disposals of derivatives was appropriately determined.

- We have reviewed the disclosures in the notes to the financial statements to determine whether they comply with accounting standards and, in particular, whether the accounting policies are presented appropriately.

Our observations
The fair values of the investments have been determined correctly. The valuation assumptions are reasonable. Subsequent accounting measurements and determination of the impact on profit or loss are appropriate. The explanatory notes and disclosures in the notes to the consolidated financial statements are complete and appropriate.

Other information

Management is responsible for the other information. The other information comprises the remaining parts of the annual report, with the exception of the audited consolidated financial statements and combined management report and our auditor's report.

Our opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

– is materially inconsistent with the consolidated financial statements, with the combined management report or our knowledge obtained in the audit, or

– otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

Management is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e(1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

– Identify and assess the risks of material misstatement of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e(1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our opinions.

- Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with (German) law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by management in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Further Information pursuant to Article 10 of the EU Audit Regulation

We were selected as Group auditor by the Supervisory Board on 14 March 2017. We were engaged by the Chairman of the Audit Committee of the Supervisory Board on 10 November 2017. We have been the Group auditor of the Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München, Munich, without interruption for more than 25 years.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the Audit Committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Dr. Frank Ellenbürger.

Munich, 7 March 2018

KPMG Bayerische Treuhandgesellschaft
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft

Dr. Ellenbürger	**Voß**
Wirtschaftsprüfer	Wirtschaftsprüferin
(German Public Auditor)	(German Public Auditor)

Responsibility statement

"To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the combined management report for the Company and the Group includes a fair review of the development and performance of the business and the position of the Group, together with a description of the material opportunities and risks associated with the expected development of the Group."

Munich, 14 March 2018

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Responsible for content
Financial and Regulatory Reporting
Group Communications

Editorial deadline:
1 March 2018
Online publication date:
15 March 2018
Print publication date:
3 April 2018

Picture credits
Andreas Pohlmann

Printed by
Gotteswinter und Aumaier GmbH
Joseph-Dollinger-Bogen 22
80807 München
Germany

The official German original of this report is also available from the Company. In addition, you can find our Annual Report and interim reports, along with further information about Munich Re, on the internet at www.munichre.com.

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Quarterly figures

		31.12.2017	30.9.2017	30.6.2017	31.3.2017
Balance sheet					
Investments (incl. insurance-related investments)	€m	227,226	227,118	227,402	232,340
Equity	€m	28,198	27,770	30,139	32,160
Net technical provisions	€m	205,754	205,363	202,889	204,173
Balance sheet total	€m	265,722	266,192	265,940	271,153
Shares					
Share price	€	180.75	180.90	176.55	183.40
Munich Reinsurance Company's market capitalisation	€bn	28.0	28.0	27.4	29.5
Other					
Combined ratio					
Reinsurance property-casualty	%	114.1	117.3	95.5	97.1
ERGO Property-casualty Germany	%	97.5	96.6	95.8	99.1
ERGO International	%	95.3	95.5	97.5	96.3
Number of staff		**42,410**	**42,654**	**43,157**	**43,198**

€m	Total	Q4 2017	Q3 2017	Q2 2017	Q1 2017
Gross premiums written	**49,115**	**12,112**	**12,279**	**11,800**	**12,925**
1. Earned premiums					
Gross	48,691	12,229	12,115	12,145	12,202
Ceded	–1,528	–377	–417	–374	–360
Net	47,164	11,852	11,698	11,771	11,842
2. Income from technical interest	6,376	1,634	1,331	1,442	1,969
3. Expenses for claims and benefits					
Gross	–43,194	–9,989	–13,112	–9,796	–10,298
Ceded share	1,549	242	899	288	120
Net	–41,645	–9,746	–12,213	–9,509	–10,178
4. Operating expenses					
Gross	–12,498	–3,445	–2,956	–3,056	–3,041
Ceded share	313	70	82	91	70
Net	–12,186	–3,375	–2,874	–2,965	–2,971
5. Technical result (1–4)	**–292**	**364**	**–2,057**	**740**	**662**
6. Investment result	**7,611**	**1,982**	**1,589**	**1,889**	**2,151**
Thereof:					
Income from associates accounted for using the equity method	145	55	29	24	37
7. Insurance-related investment result	443	146	129	12	156
8. Other operating income	778	264	157	171	186
9. Other operating expenses	–924	–258	–218	–213	–234
10. Deduction of income from technical interest	–6,376	–1,634	–1,331	–1,442	–1,969
11. Non-technical result (6–10)	**1,533**	**500**	**326**	**417**	**290**
12. Operating result	**1,241**	**864**	**–1,732**	**1,156**	**952**
13. Other non-operating result	–926	–266	–243	–264	–153
14. Impairment losses on goodwill	–9	–4	–6	0	0
15. Net finance costs	–211	–52	–53	–52	–54
16. Taxes on income	298	–4	597	–108	–188
17. Consolidated result	**392**	**538**	**–1,436**	**733**	**557**
Thereof:					
Attributable to Munich Reinsurance Company equity holders	375	530	–1,438	729	554
Attributable to non-controlling interests	17	8	2	3	4

€	Total	Q4 2017	Q3 2017	Q2 2017	Q1 2017
Earnings per share	**2.44**	**3.49**	**–9.37**	**4.71**	**3.55**

Important dates 2018

15 March 2018
Balance sheet press conference
for 2017 financial statements

25 April 2018
Annual General Meeting

8 May 2018
Quarterly Statement as at 31 March 2018

8 August 2018
Half-Year Financial Report as at 30 June 2018

7 November 2018
Quarterly Statement as at 30 September 2018

Important dates 2019

20 March 2019
Balance sheet press conference
for 2018 financial statements

30 April 2019
Annual General Meeting

8 May 2019
Quarterly Statement as at 31 March 2019

7 August 2019
Half-Year Financial Report as at 30 June 2019

7 November 2019
Quarterly Statement as at 30 September 2019

Order number 302-09072