Zurich Insurance Group
Annual Report 2018

ZURICH®

A customer-led transformation

Contents

About us

Zurich Insurance Group (Zurich) is a leading multi-line insurer that serves its customers in global and local markets. With about 54,000 employees, it provides a wide range of property and casualty, and life insurance products and services in more than 210 countries and territories. Zurich's customers include individuals, small businesses, and mid-sized and large companies, as well as multinational corporations. The Group is headquartered in Zurich, Switzerland, where it was founded in 1872.

Highlights

USD 4.6bn
Business operating profit[1]

USD 3.7bn
Net income attributable to shareholders

12.1%
Business operating profit after tax return on equity[2]

USD 3.8bn
Cash remittances[4]

USD 51.6bn
Total revenues[3]

USD 195bn
Investment portfolio[5]

CHF 44.4bn
Market valuation as of December 31, 2018

Z-ECM 125%
Zurich Economic Capital Model (Z-ECM) ratio estimated as of December 31, 2018[6]

AA-/stable
Standard & Poor's financial strength rating of Zurich Insurance Company Ltd as of December 31, 2018

Read more on our financial performance from our Group Chief Financial Officer on pages 152–153.

Read more on our non-financial performance on pages 22–27.

1 Business operating profit (BOP) indicates the underlying performance of the Group's business units by eliminating the impact of financial market volatility and other non-operational variables.
2 Shareholders' equity used to determine ROE and BOPAT ROE is adjusted for net unrealized gains or losses on available-for-sale investments and cash flow hedges.
3 Total revenues excluding net investment result on unit-linked investments.
4 Cash remittances for full year 2018.
5 See page 164 for more information.
6 The Z-ECM is an internal measure of capital adequacy and reflects midpoint estimates with an error margin of +/– 5 pts.
7 Impact investments in 2018 consisted of: green bonds (USD 2.68 billion), social and sustainability bonds (USD 425 million), and investments committed to private equity funds (USD 145 million, thereof 45 percent drawn down) and impact infrastructure private debt (USD 540 million).
8 Number shown as of 2017; 2018 data will be available in Q2 2019.
9 In 2018, Zurich interviewed over 760,000 customers (including Zurich Santander) in over 20 countries through its NPS (Net Promoter Score) program.

> Our industry is in the midst of a profound transformation. Led by what customers need and expect, enabled by digital technologies, we are well positioned to adapt to these changes that will define our business not only today, but also tomorrow."

Mario Greco
Group Chief Executive Officer

USD 3.8 bn

Total amount of impact investments
(USD billions)[7]

2.1 tons

CO_2e emissions per employee
(tons per FTE)[8]

22%

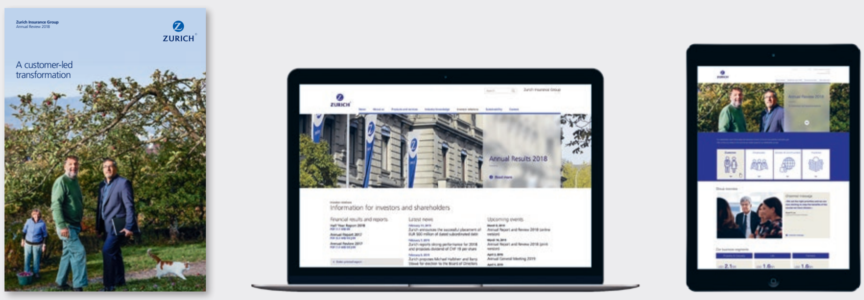
Female participation in Leadership Team

>760,000

Number of customers interviewed through Zurich's NPS program[9]

Our 2018 reporting suite

The Annual Report provides comprehensive information on our business activities in 2018. The Annual Review offers similar information in a shorter, more visual format. Both are available online and in print.



Our cover:
National Trust senior building surveyor Phyllis Bayley and Zurich risk engineer Gary Howe on site at an historic mill at Quarry Bank in Styal, Cheshire near Manchester in the UK.

Message from our Chairman

On the path to success

"We set the right priorities and we are now starting to reap the benefits of the course we have chosen."

Michel M. Liès
Chairman of the Board of Directors

We are on a challenging but rewarding journey to become a truly customer-led insurer. Our aim to also be a leader in sustainability reinforces and builds on our strengths and expertise, and complements our strategy.

First impressions

The past year has been one of transformation – both for Zurich and for me personally. In these first months as Chairman, I have taken time to deepen my insight into this great company. Having been able to immerse, reflect and understand, I am pleased to report my confidence that Zurich's transformation is putting us on a good path to success. Zurich has the knowledge and expertise to achieve our aims. What truly sets us apart is our people, and the commitment they are demonstrating each day to driving the transformation. Our people will drive our success: from our diverse and experienced management team, a passionate and skilled workforce, to people just starting on their career paths. I have been privileged to witness this process in action – including through our Make the Difference program and country visits – and look forward to seeing many more examples in future.

Our strategy builds confidence

Our strategy to become one of the first customer-led insurers puts us on the right path. It reflects a clear understanding of today's fast-changing world, and identifies the right actions for us to take.

Technological empowerment has raised our customers' expectations. But if Zurich can help them enhance their lives and activities through our products and services, there is great potential to increase our value and relevance to all stakeholders. As our strategy takes hold, we are providing robust returns and strong investor confidence, meeting investors' expectations and delivering on our financial targets. We will propose to shareholders an increase in the dividend to CHF 19 per share, further demonstrating our strength following a set of strong and sustainable results in 2018.

Living up to our brand

For nearly 150 years, Zurich's brand has stood for technical excellence, an open and collaborative approach and both global and local expertise. Today, we are strengthening this identity by embracing the wider role that insurance and risk management can play in people's lives, in protecting companies and strengthening communities, and in addressing society's most pressing challenges. Risk, after all, is our expertise, and that understanding has never been in greater demand.

From transitioning to a new carbon-sensitive economy to adapting to a new digital workforce, the impact of macro-level forces on people, communities and the world will be immense, and Zurich understands that its core capabilities can have a positive impact in securing an inclusive and resilient future. We are proud of the efforts we have made to date, but even more excited about the possibilities we can envision.

Looking to the future

Going forward, our focus will be on implementing and executing our transformation. The Board has an important oversight role, ensuring that long-term thinking is embedded into the process. To facilitate this, I am ensuring that management benefits from the rich and diverse array of perspectives represented among my fellow Directors, and that we collectively understand both the challenges and opportunities that lie before us. Zurich's ambition is a bold one, but we have all the ingredients in place to succeed. I look forward to continuing to play my part and updating you again in due course.

M. M. Liès

Michel M. Liès
Chairman of the Board of Directors

Our business segments

Property & Casualty

Property and casualty insurance and services, risk insights.

USD 2.1 bn
Business operating profit

USD 33.5 bn
Gross written premiums and policy fees

Read more about Property & Casualty on pages 156–157.

Life

Protection, savings and investment solutions.

USD 1.6 bn
Business operating profit

USD 33.4 bn
Gross written premiums, policy fees and insurance deposits

Read more about Life on pages 158–159.

Farmers

Management services related to property and casualty insurance.

USD 1.6 bn
Business operating profit

USD 3.2 bn
Management fees and other related revenues

Read more about Farmers on page 160.

Message from our Group CEO

Delivering on our commitments

"After reshaping our business, Zurich is well-positioned to face this transformation from a position of strength."

Mario Greco
Group Chief Executive Officer

A changing world demands focus and a clear understanding of how to create value. Zurich is delivering on both while transforming itself for a digital age.

Embracing a customer-led transformation

In a world undergoing such fundamental change, it is critical that organizations consciously choose their path, make clear commitments to how they will travel along that path, and then regularly examine their surroundings to ensure progress is being made. At Zurich, the path we have chosen is not to resist the digital revolution or to cling to old models. Instead, we are embracing a customer-led technology-enabled transformation that will redefine how we create value for our customers, shareholders, employees and society more broadly.

Positioned to succeed

After two years of reshaping our business, Zurich is well-positioned to face this transformation from a position of strength. Our business portfolio reflects a better mix of risks, while reducing volatility and expanding our customer base.

We exhibit more underwriting discipline and manage our cost base more efficiently. We are meeting or even exceeding our 2017 to 2019 financial targets, including profitability, capital strength and cash remittances. And we are delivering one of the top total shareholder returns in the insurance sector.

Together with these accomplishments we are also achieving profitable growth through targeted acquisitions that build on our geographic footprint and differentiate ourselves from peers. In Latin America these actions position us as the top composite insurer in Argentina, the biggest life insurer in Chile and the fourth-largest insurer in the region. In the Asia Pacific region, we are acquiring 80 percent of Adira, making us the largest foreign P&C insurer in Indonesia. And we essentially globalized the Cover-More travel assistance business – after acquiring it only two years ago – through a series of bolt-on acquisitions in Latin America and Europe that now make Zurich the second-largest player globally in this fast-growing market.

But our growth has not been limited to acquisitions. We also established a series of collaborations that expand our service offerings and gain us new ways to access customers, ranging from new mobility solutions through Bright Box to smart home services with Vodafone to cyber prevention capabilities with Cyence. In addition, we developed new offerings internally, including an insurance-on-demand device coverage for millennials in Spain and an innovative software-as-a-service tool for automobile dealers in the U.S. All of these represent ground-breaking new approaches to managing customers' risks, challenging traditional product concepts and distribution models.

Customers will define the path ahead

As the balance shifts in customers' favor, a critical part of the journey involves constantly measuring and improving customer satisfaction, with the aim being that our customers become our greatest promoters.

Timeline of 2018 events

January 2018
Zurich launches Make the Difference, inviting all employees to propose ways to improve how we work.

February 2018
Zurich reports strong performance for 2017.

February 2018
Zurich to acquire Latin American operations of QBE to become leading insurer in Argentina.

March 2018
Zurich accelerates growth of its Cover-More business with an acquisition in Latin America.

Cover-More

April 2018
Zurich names Amanda Blanc new CEO of Europe, Middle East & Africa business, effective October 1, 2018.

April 2018
Shareholders elect Michel M. Liès as new Chairman and approve dividend of CHF 18 per share.

April 2018
Zurich to acquire EuroAmerica's life businesses in Chile.

July 2018
Zurich extends its award-winning Flood Resilience Alliance program for another five years.

August 2018
Zurich launches a global competition for startups, seeking best-in-class customer solutions.

September 2018
Zurich to acquire 80 percent of Adira Insurance in Indonesia.

November 2018
Zurich strengthens its efforts on cyber security by becoming a partner of the World Economic Forum's Global Centre for Cybersecurity.

Message from our Group CEO (continued)

We have started introducing customer satisfaction measures across the organization, as we are committed to learn from every interaction that our millions of customers have with us. Satisfied customers, after all, tend to be more loyal, and tend to have a longer and broader relationship with Zurich. Through our efforts, and by truly listening to customers, we are making changes and seeing net promoter scores improve. And to underscore how serious we are, we have also included 'NPS' metrics as a measure to determine leaders' incentive plans.

To accelerate this customer journey we are also creating global capabilities to support our local businesses. For example, Zurich Insurance Mobile Services is creating digital platforms that can be used in any market, while Zurich Customer Active Management provides analytical support to better interpret customer needs, preferences and expectations. Both represent areas where skills and scale can create impact, and both are already creating value across the Group.

Engaging employees

In the end, though, our transformation will be led by our people, who are increasingly demonstrating a renewed sense of purpose that is more agile, collaborative and entrepreneurial. You can read one way we are doing this through our Make the Difference campaign described here.

We are also listening more to our employees, using the 'employee' NPS, or 'ENPS' measure, to better understand employees' needs. And we are increasingly being recognized for our efforts to promote diversity across our organization, while providing opportunities for all our people to work to the best of their ability and develop their careers.

Having an impact on the world around us

The impact we are making goes beyond customers, shareholders and employees, though. We are also redoubling our efforts to share our expertise, spirit and energy with communities across the world. This commitment starts in Switzerland, where we provide about 4,600 people with fulfilling and rewarding careers, sponsor life-enriching programs like Vita Parcours, the music festival Lucerne Summer Festival and the Europa Institut, and educate children on computer coding and financial literacy.

We also support a range of charities that aim to improve the lives of many people and groups. Outside of Switzerland we extended the award-winning global Flood Resilience Alliance that has already enhanced resilience in 110 mostly low-income communities, expanded the Z Zurich Foundation local grants program to over 20 countries, and contributed extensively to the debates around the future of work, climate change, cyber security and other critical risk topics. We are proud of these and countless other efforts our people make to improve the lives of our neighbors, and are committed to doing even more in the years to come to promote an inclusive and resilient future.

Conclusion

Zurich embraces this customer-driven world. We have demonstrated our ability to improve our core business while creating new opportunities. We have positioned customer feedback as a key source of learning. We have energized our people around a clear purpose. And we have recognized the greater societal impact we can and must have to truly deliver sustainable value to all stakeholders. This is the path we have chosen, and it is one we believe will serve as our strength not just in today's insurance environment, but also in tomorrow's.

Mario Greco

Mario Greco
Group Chief Executive Officer

For employees, by employees

"Customer expectations are changing quickly. As part of Make the Difference, we want to radically simplify the customer experience."

Marina Cardoso
Customer Proposition and Services Manager at Zurich Insurance Mobile Solutions

Breaking down bureaucracy

Simplifying our business is one of our strategy goals. To help us achieve it, in 2018 Zurich introduced 'Make the Difference,' a Group-wide initiative that challenges employees to come up with ways to make us more efficient, simpler and faster at driving necessary change.

By encouraging an entrepreneurial mindset, it lets those who know our business best – our people – work without barriers to challenge bureaucracy and break down silos.

Our diverse workforce has provided multiple perspectives, which helps us to reach workable solutions: no fewer than 16 nationalities were represented among the 22 employees leading just one cohort of Make the Difference.

Acting on ideas

Through Make the Difference, we have already introduced real changes to make Zurich more flexible, agile and faster. Acting on some of the over 400 recommendations employees submitted in 2018, we have significantly simplified internal processes, and are also making changes that include working to make the language we use in policies more customer-friendly.

Another example of a tangible success introduced through Make the Difference is a global platform to share ideas and solutions through the 'Zurich Store.'

We are also addressing rapid changes in customers' expectations. "As part of Make the Difference, we want to radically simplify the customer experience, making it quicker, easier and more intuitive," says Marina Cardoso, Customer Proposition and Services Manager at Zurich Insurance Mobile Solutions.

Top:
Through Make the Difference, employees like Marina Cardoso are leading our transformation to become a simpler, more agile company.

Our business model

Creating sustainable value

The resources we use

Financial
Our investors provide the financial capital that sustains our business.

Intellectual
Our expertise, including in risk management and investment, contributes to our success.

Human
Our approximately 54,000 employees include some of the most talented people in the insurance industry.

Social and relationship
We maintain strong social ties and relationships with customers, intermediaries, regulators, policymakers and others, locally and globally.

Natural
In our daily business we use natural resources as part of doing business. We conserve them and use them wisely.

What we do

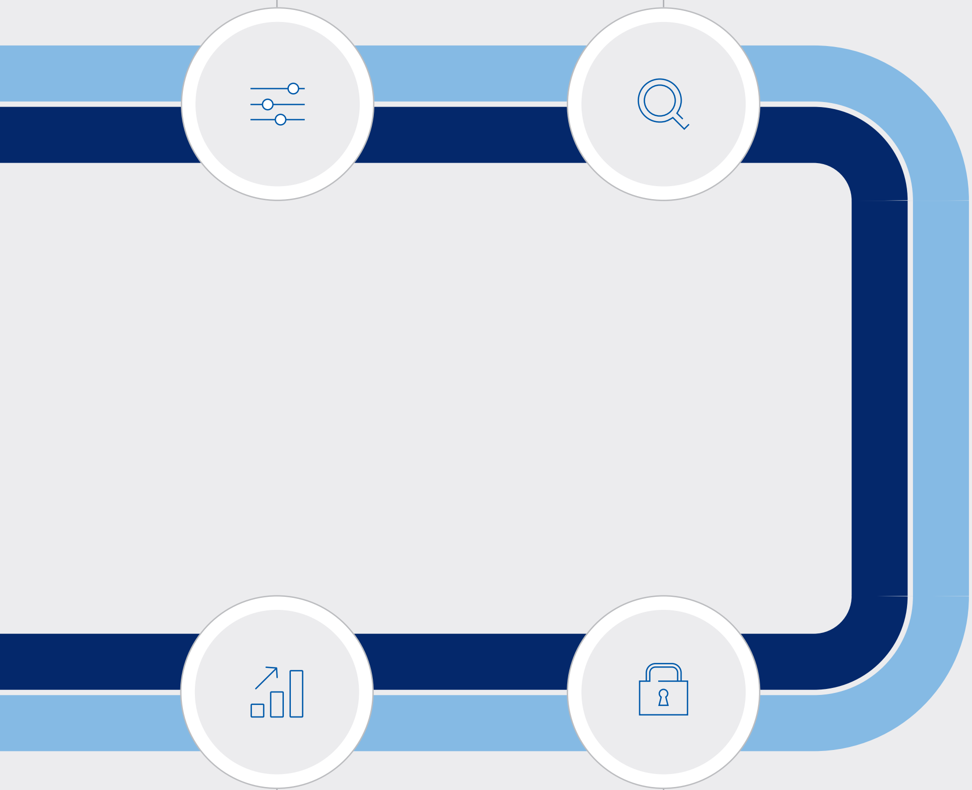
Manage claims
In 2018, we paid out more than USD 22 billion in claims. To ensure that we provide a positive experience to customers who do business with us, we are systematically listening to customers through our Net Promoter Score (NPS) system, not only as part of our claims process but throughout all customer touchpoints.

Serve customers and distribute through multiple channels

Our products and solutions are available to customers with a focus on great customer service, through many channels: directly, or indirectly via brokers, through employee benefits consultants, and in cooperation with third parties including banks, travel providers, retailers, rental agreements and car dealerships.

Underwrite and manage risk

Insuring and managing risk is central to what we do. Understanding, measuring and modeling risks helps us to price risk fairly and offer competitive premiums to customers, who also look to us to provide expertise aimed at mitigating risks.



Invest and deliver returns

Our income includes returns from invested premiums, policy fees and deposits. Our success as a business is important to those who depend on us to reliably pay claims, as well as investors who look to us to deliver savings returns and operate our business responsibly.

Manage reserves

Our Group-wide policy, the 'Zurich Way of Reserving,' with well-defined and prudent standards, is the basis for how we calculate insurance liabilities. Our reserving process is supported by strong governance, including extensive internal and external reviews.

How our stakeholders benefit

We create value for our customers

by helping them understand and protect themselves from risk.

Read more about how we create value for our customers on pages 14–15.

We create value for our employees

by aiming to give each the opportunity to work to their full potential.

Read more about how we create value for our employees on pages 16–17.

We create value for communities and society

including by mitigating risk and sharing knowledge and expertise.

Read more about how we create value for communities and society on pages 18–19.

We create value for our investors

by paying an attractive and sustainable dividend and maintaining a strong balance sheet.

Read more about how we create value for our investors on pages 20–21.

Our business environment

Adapting to a changing world

Zurich was founded in 1872 in response to the forces of industrialization that revolutionized the global economy. We are well positioned to help our customers face the risks of today's transformative forces.

"Our business faces nothing less than a revolution. Digital advances are changing what customers need and expect, while new entrants into our industry vie with established providers to introduce new and innovative products and services. Along with enabling new ideas, technology like artificial intelligence allows a more personalized service, increases accuracy and reduces the time needed for often mundane, repetitive tasks. Interconnectivity offers potential for making people safer, but also exposes them to new risks.

Today our customer base includes digital nomads, gig workers, companies that depend on shared services, and customers willing to chat online with strangers but mistrustful of large corporations. At the same time, multinational enterprises demand real-time information on policies, claims and risks. We welcome these changes taking place that ultimately benefit our customers, and recognize that today's technologies are empowering customers in ways never experienced in insurance before. To embrace these changes, we are adapting our culture, how we work and the solutions we provide to allow us to fully participate in this new world of opportunity."

Giovanni Giuliani
Group Chief Strategy,
Innovation & Business Development Officer

Changing market dynamics

Growing premiums in established markets is challenging. New entrants into traditional insurance markets are putting conventional market approaches and traditional insurance models to the test.

Zurich's approach

We have expanded our businesses in potential growth markets by acquiring businesses in Latin America, Australia and Indonesia, expanding our Cover-More travel assistance platform globally and entering new bank distribution agreements. And we have launched a number of innovative solutions for retail and commercial customers.

Insurance in the digital age

Enhanced interconnectivity, ubiquitous mobile devices and new data capabilities are increasing customers' expectations for convenience, flexibility and tailored solutions.

Zurich's approach

We have set up a separate company, Zurich Insurance Mobile Solutions to quickly develop and deploy new digital platforms on a commercial scale. We also established Zurich Customer Active Management to mine data and gather insights. Alongside in-house expertise we work with external tech companies and gain knowledge through targeted acquisitions.

Evolving customer expectations

Digital customer experience in other consumer-driven industries raises the bar on what customers expect from insurers.

Zurich's approach

We have broadened our systematic approach to measure customer satisfaction and act on feedback through the 'net promoter score' (NPS) system, now used in over 20 countries representing over 90 percent of our business. Based on feedback we get across the entire 'customer journey,' we identify and implement initiatives and assess their impact. We have also included NPS metrics as measure to determine leaders' incentive plans.

Renewed regulatory focus

New rules to protect customers reinforce the need for compliance. Insurers are also preparing to adopt the first major revision to global insurance reporting standards in almost 20 years, IFRS 17, which will change how insurers measure and communicate profitability.

Zurich's approach

We have sound corporate governance throughout our company aimed at making sure we are compliant with regulations. In terms of IFRS 17, we have made progress on plans for adoption of this new standard, and are preparing for a dry run simulation in 2019 to be ready for full implementation.

Emerging risks

Interconnectivity has ushered in a new era of risk, with cyber attacks seen as the top risk in the world's largest economies.

Zurich's approach

We have launched an updated global cyber insurance policy and introduced services to help customers mitigate cyber risk. We opened a new Cyber Fusion Center in the U.S. and increased support for public and private efforts, including through the World Economic Forum, to combat cyber crime.

Competition for talent

Demand for talent is increasing as insurers compete for today's and tomorrow's skills. A diverse workforce is also needed to ensure a range of perspectives and approaches reflecting the diversity of customers.

Zurich's approach

As a global company, we benefit from our diversity, with over 100 nationalities in our workforce. We can attract talent through our flexible work approach. Our culture of inclusion is recognized by leading pro-diversity organizations. We have increased our listening capability via the 'employee net promoter score' (ENPS), and actively engage with employees to implement improvements through 'Make the Difference.'

Challenging financial markets

Sovereign and corporate bonds are a major element of insurers' investment portfolios. Interest rates, at or near historic lows in major markets continue to pose a challenge to returns.

Zurich's approach

We aim to achieve superior returns relative to Zurich's insurance obligations. A systematic and disciplined investment approach is key. In 2018, our disciplined approach to risk-taking and managing assets relative to liabilities remained unchanged. We continued to employ a stable risk allocation well within the limits set for investment risk. Our sources of investment risk and return remained well-balanced. We also further increased allocations to less-liquid assets to capture liquidity premium.

Climate change

The threat of severe weather is increased by climate change. Changes in weather patterns can worsen the risk of floods.

Zurich's approach

We work with customers and others to enhance resilience and to reduce CO2 emissions, including those related to thermal coal. We have set clear targets on impact investing and reducing CO2 emissions. In 2018 Zurich extended its award-winning flood resilience alliance for another five years.

Our strategy

Strategic overview

Our strategy positions Zurich for success over the long term. It builds on our unique footprint, solid financial position, balanced portfolio, trusted brand and the skills, strengths and expertise of our people.

"We are well on track to fully achieve our 2017 to 2019 targets. We look ahead with great confidence to the next phase of our development."

Mario Greco
Group Chief Executive Officer

Our purpose, values and strategy

Our purpose Why	**To protect you**	**To inspire confidence**	**To help you reach your full potential**
Our values How	We are one team and value the diversity and potential of every individual.	We embrace new ideas to exceed our customers' expectations.	We deliver on our promises and stand up for what is right.
Our strategy What	**Focus on customers** Improve service quality and customer experience.	**Simplify** More agile and responsive organization.	**Innovate** Better products, services and customer care.

Find out more about our strategy
www.zurich.com/strategy

Financial targets

Long term targets

Our strategy to deliver long-term competitive advantage focuses on continuing to increase profitability and consolidating the Group's position as a leading global underwriter for property and casualty (P&C) and life insurance. The Group will expand customer relationships, simplify the business and significantly reduce costs.

At the operating level, Zurich will continue to reduce complexity and improve accountability. Zurich will enhance technical excellence and strengthen its go-to-market-approach for commercial customers. It will also seek to enhance its offerings to individuals by monitoring and aiming to increase customer satisfaction and retention.

The Farmers Exchanges[1] will continue to focus on improving customer satisfaction and retention rates.

2017–2019 targets

BOPAT ROE[2]	>12% and increasing
Z-ECM[3]	100–120%
Net cash remittances[4]	>USD 9.5bn (cumulative)
Net savings	USD 1.5bn by 2019 compared with 2015 baseline

[1] The Farmers Exchanges are owned by their policyholders. Farmers Group, Inc., a wholly owned subsidiary of Zurich Insurance Group, provides certain non-claims administrative, management, and ancillary services to the Farmers Exchanges as attorney-in-fact and receives fees for its services.

[2] Business operating profit (after-tax) return on shareholders' equity. Excludes unrealized gains and losses.

[3] The Zurich Economic Capital Model (Z-ECM) is an internal measure of capital adequacy.

[4] Cumulative net cash remittances to Zurich Insurance Company Ltd, after deducting central costs, over the 2017 to 2019 period.

Our strengths

A solid financial position

We have a solid financial position. That can reassure our customers that we will be there when they need us to handle their claims, our shareholders that we are financially stable, and our colleagues that we have a well-earned positive reputation as a business and an employer.

A balanced business

Our business is balanced between Europe and North America. The Latin American contribution is growing and the business in Asia Pacific is expanding. Our portfolio is healthy and balanced between Property & Casualty, and Life. Both are sustainable and profitable businesses. Farmers provides stable income. This diversification positions us well to weather economic and market volatility, and gives us a strong presence across customer segments and product lines.

A trusted brand, talented people

Our brand is strong and reinforces our reputation for being able to understand the risks our customers face and to structure offerings that meet their unique needs. Our global brand and reputation help us to continue to attract the most talented people in the industry.

Delivering on our strategy in 2018

Focus on customers

- We increased use of customer feedback through the 'transactional' net promoter score (TNPS) and achieved improvements in TNPS across all four business regions.
- We gained access to new customers through acquisitions in Latin America, Australia and Indonesia and expanded our Cover-More travel assistance platform globally.
- We added distribution agreements giving us access to nearly 30 million new potential customers.

Simplify

- We continued to streamline our business by consolidating data centers and decommissioning hundreds of IT and business applications.
- We launched a global program open to all employees, 'Make the Difference,' to simplify and improve how we work, receiving over 400 suggestions in the first year.
- We introduced our first Group-wide internal social media platform which gives employees across our businesses an easy way to share ideas and collaborate.

Innovate

- We set up a separate company, Zurich Insurance Mobile Solutions, to quickly develop and deploy digital platforms on a commercial scale.
- We established a new unit, Zurich Customer Active Management, to generate insights from the data we gather to allow us to better provide solutions to customers.
- We entered agreements with established and startup technology companies to develop new customer solutions.

Stakeholder report 2018

Creating value for our customers

Our business is undergoing a revolution. Customers' expectations are changing. Their opinions matter more than ever. They expect more from us, too. We are keen to ensure we meet the demands of all our customers. This is our most urgent priority.

- We are listening to customers through our NPS program and acting on their suggestions.
- We are developing innovative risk solutions for retail and commercial customers.
- We are expanding in promising markets through targeted acquisitions.

We serve individuals, small and medium-sized enterprises, large companies and multinational corporations across our four regions – Europe, Middle East & Africa, North America, Latin America and Asia Pacific.

Listening to our customers

To best serve all our customers we need to get better at listening to them. To do this we are using the net promoter score (NPS) and have introduced many improvements based on feedback we received through NPS. In 2018 we expanded this program to over 20 countries comprising 90 percent of our business. To underscore the importance of customer satisfaction, in 2018 we also included NPS in performance incentives of senior leaders. We've already addressed pain points based on such customer feedback: in Spain we improved our roadside service for motorists, for example, and in Hong Kong, we introduced a new way to streamline home insurance claims. While this approach is used mainly for retail customers, we also are starting to develop it for commercial customers.

Helping to protect businesses

We insure businesses across a variety of industries, supported by about 1,350 risk engineers who offer their expertise to help better understand risks, and over 9,600 claims professionals. We are constantly developing new ways to better serve business customers. For example, in 2018, we began a pilot to test application programming interface (API) technology that will allow multinationals to access their data in our systems in real time.

In 2018 we also introduced a Zurich International Programs proposition specifically for medium-sized companies in the UK. Zurich International Programs is a tailored, full-service offering that allows multinational companies to manage property and casualty risks, making it easier to enter and thrive in new markets around the world.

Improving our service for retail customers

We serve individuals and small businesses on a local basis, developing solutions around customers' needs. For example, in Italy, we are developing 'smart home' solutions to allow people to monitor their homes via mobile devices, adding convenience and aiming to make homes safer. In Latin America, where we have an agreement with Via Varejo, the country's largest retailer, we are offering new products and extended warranties. We have introduced an insurance 'on demand' product targeting younger customers in Spain, and in Indonesia, a travel insurance offering embedded with flight ticket booking with that country's largest e-retailer.

Acquisitions to strengthen our customer proposition

Supporting our strategy, we continued to grow our business in promising markets. In Latin America we completed the acquisition of QBE's businesses, making us the fourth-largest insurer in that region and largest insurer in Argentina, as well as increasing our scale in Brazil, Colombia, Mexico and Ecuador. We also acquired the individual, group life, and long-term savings operations of EuroAmerica in Chile. In Australia, we acquired ANZ's life and consumer credit business, OnePath Life, making us Australia's largest retail life insurer. In Indonesia we acquired 80 percent of Adira Insurance to become the largest foreign property and casualty insurer in that market.

The transactions in Latin America, Australia and Indonesia also augment the over 70 agreements we already have in place around the world that allow us to distribute our products through banks and other distribution channels. The largest such agreements are separate joint ventures with Banco Santander S.A. in Latin America and with Banco Sabadell S.A. in Spain.

"We believe that fire safety, and preserving the integrity of historical buildings, can go hand-in-hand if done in a sensitive and smart way."

Gary Howe
Zurich risk engineer

Making history

We are fortunate to have been helping customers adapt to, and thrive in a changing environment for nearly 150 years. In 2018 we were proud to have installed the first modern fire safety sprinklers at a National Trust site. Our goal is to help every customer protect against risk. We share solutions, too, to help customers reduce risk, including through hazard analysis workshops and on-site training and make it possible for customers to do own risk assessments via the Zurich Risk Advisor app.

Read more in the Annual Review
https://annualreports.zurich.com/en/risk-protection

A global leader in travel

We want to be there for customers wherever they journey. In 2018 we successfully expanded the Cover-More business to become the second largest travel assistance provider in the world. Through targeted acquisitions in Latin America, the UK and Ireland, as well as a five-year exclusive distribution agreement with Commonwealth Bank in Australia, we significantly increased the potential customer base for Cover-More's innovative offerings, and have begun to create scale and efficiencies across this global platform.

Farmers[1] Insurance launches millennial-centric brand for renters

In 2018, Farmers launched Toggle, an innovative brand aimed at digitally-active consumers in Illinois and Wisconsin, which includes elements of game design to deliver customizable coverages and offerings. Through the new renters insurance offering, subscribers can chose options that cover damage to their residence caused by their pet, or covers the things members use to make extra money on the side, like the camera for a food blogger, or the laptop and sound equipment for a DJ.

"The most important thing you can do is listen to your customers."

Felix Pfister
Owner of a gardening business in Zurich

A long-term approach

For over 30 years, Felix Pfister has been a Zurich customer. He owns a gardening business, where he takes special pride in being close to his customers. Relationships need to grow. At Zurich, we are helping businesses large and small to protect against risk. So businesses can best serve their customers today and in the future.

Read more in the Annual Review
https://annualreports.zurich.com/en/gardening-business

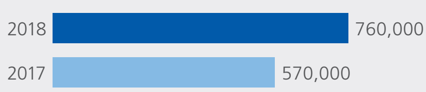
View the film online
Visit www.zurich.com/en/knowledge/articles/2018/12/real-customers-real-lives-swiss-gardeners-who-grow-happiness

Our customers

In 2018, our Property & Casualty and Life businesses handled 6.6 million claims on behalf of our customers and paid out more than USD 22 billion to our customers or on their behalf. Each claim represents an opportunity to interact with customers and learn from them, as just one among many touchpoints where we can collect valuable feedback. We are using the net promoter score (NPS) to systematically understand where we can improve across the customer journey.

Net promoter score
(comments generated)

>760,000
Individual comments generated through NPS



For more stakeholder metrics see pages 23–24.

[1] Farmers Group, Inc. provides certain non-claims administrative, management, and ancillary services to the Farmers Exchanges as its attorney-in-fact. The Farmers Exchanges are owned by their policyholders. Farmers Group, Inc. is a wholly owned subsidiary of the Zurich Insurance Group. Exchanges offer home and car insurance, commercial insurance and financial services throughout the U.S.

Stakeholder report 2018 (continued)

Creating value for our employees

This is an exciting time for Zurich. We are transforming our culture, guided by our purpose and values, with a focus on being a truly customer-led organization. Recognized as a leading global employer, we can attract, keep and motivate talent, helping us to remain successful even in a time of radical change in our industry.

- We are deepening our talent management discipline and introducing an integrated performance and development-cycle approach.
- To ensure a customer focus, we have incorporated customer satisfaction measures into our senior leaders' incentives.
- We are using employee NPS, or ENPS, to systematically measure employee satisfaction, gather feedback and take action.
- We are recognized by independent organizations as a leading place to work and as a leader in promoting diversity and inclusion.

Our industry is in the midst of a revolution. Advances in digital technology are changing what our customers need and expect from us. Customers' expectations of what insurers should provide, how they provide it and even what an insurer is, are changing as well. In this challenging environment, each and every one of our people must understand our deeper purpose and their importance in helping us to address our customers' evolving needs.

To achieve this, we are implementing a simplified, more customer-focused organization and operating model empowering our regional and local businesses. We are introducing more talent management discipline, and an integrated performance and development-cycle approach. That includes equipping new employees to more quickly make an impact, while allowing managers to spend more time on coaching and less time on administrative tasks.

Strengthening customer focus, listening to our people

We understand that we need to keep our customers in the center of all we do, 24/7. To achieve this, we are putting greater focus on how we interact with customers, including by increasing our emphasis on using the 'net promoter score' (NPS) to measure customer satisfaction, gain customer feedback and 'close-the-loop' through follow-up conversations with customers. In 2018, we collected over 760,000 such responses from customers, including through many calls to customers by senior management. And, we now include NPS metrics as part of the performance incentives for our senior leaders.

One way we can attract and keep the best talent is by listening to our people. We measure employee satisfaction through the 'employee net promoter score' (ENPS). Similar to how we listen to our customers with NPS, ENPS helps us build happier, more capable teams, which are equipped to enhance our customers' experience. We are listening and acting on what we learn from ENPS feedback. And while the quest for full employee engagement is never complete, our ENPS results in 2018 reassure us that we are on the right track.

The advantages of diversity

Our geographic footprint creates four major bases – in North America, Europe, the Middle East and Africa (EMEA), Latin America and Asia Pacific. With a great many different nationalities represented in our workforce, we reflect the diversity of our customers, benefit from local expertise, cultural awareness and different perspectives. As a further element of diversity, an increasing number of our employees are 'millennials' in their 20s to mid-30s. Our efforts to allow everyone in our workforce to work to his or her full capability is reflected in our certification by EDGE, the leading global assessment methodology and business certification standard for gender equality. Our efforts to promote workplace diversity were also recognized by Stonewall, Europe's largest lesbian, gay, bi and trans (LGBT) charity, which included us as the first insurer in its Top Global Employers list in 2018.

Finding the right skills

As we move into the digital era, we must develop our workforce to succeed in a world demanding more from an insurer, whether that means 'reskilling' existing talent or targeting new skills, so that they are empowered rather than estranged by technology.

Making a real difference to drive change

To encourage a more flexible and agile mindset, in 2018 Zurich launched the 'Make the Difference' initiative to give employees a chance to challenge orthodoxy and propose changes to processes, policies or procedures, no matter how entrenched these might be. In 2018, employees across the Group submitted over 400 ideas to make us a better company. This approach is a good example of how we aim to cut through red tape to put our people above processes.

Read more in the Annual Review
https://annualreports.zurich.com/en/employees

"Zurich's Make the Difference marks a turning point in our culture."

Cecilia Parnell
Strategic Specialist, Zurich North America

We also enrich our own knowledge and capabilities through acquisitions, including the innovative travel assistance provider, Cover-More, from which we are learning new ways to develop customer-focused services that we can apply to a range of customer needs in future.

Supporting knowledge gaps in our industry

We believe we have a responsibility to educate tomorrow's insurers. This will bring fresh thinking and new ideas to our workforce. Our Swiss-style apprenticeship program, offered through William Rainey Harper College in Illinois, is the first such apprenticeship program for insurance professionals in the U.S. In 2018, the program added cyber security to its offerings. We also actively support 'hackathons' where the world's best young programmers meet to compete in delivering solutions to specific problems. And we work to educate industry professionals. These efforts were recognized in 2018, when our Zurich Broker Academy won top prize for innovation at the European Risk Management Awards 2018, underscoring Zurich's outstanding work in educating brokers about international programs.

Our industry is at a key inflection point. Our employees are one of our greatest strengths and we aim to make sure we continue to have the right people with the right skills and mindset for this changing environment. By being agile, faster and making every employee responsible for their success, we can promote a culture that will support our aim to be a truly customer-led insurer. Guided by our purpose and values, we believe we are on the right path to make sure our workforce is capable of meeting the challenges of the future.

Our people

Our industry is at an inflection point. Our employees are one of our greatest strengths. They are driving a transformation aimed at making us a truly customer-led insurer. We want to make sure we have the right people in place to meet the challenges of the future.

Total number of employees
Headcount

2018 53,535
2017 53,146

Total number of employees
Full-time equivalents (FTE)

2018 52,267
2017 51,633

Talent retention
Employee turnover rate[1]

2018 14%
2017 15%

Talent retention
Technical functions voluntary turnover[1,2]

2018 7%
2017 7%

Organizational health and diversity
Females in Leadership Team

2018 22%
2017 21%

Organizational health and diversity[3]
Employee participation in Group-wide feedback channels

2018 70%

For more stakeholder metrics see pages 23–24.

[1] Turnover figures only consider regular and inpatriate employees.
[2] Technical functions include claims, underwriting and risk engineering.
[3] New KPI in 2018. Group-wide feedback channels include organizational health surveys, employee net promoter scores and any other group-wide feedback channels. Specifically in 2018 this KPI refers to the average participation rate in two employee net promoter score surveys.

Hiring talent for today and tomorrow

We aim to recruit talent and raise awareness of opportunities in insurance. That includes meeting prospective employees at events like 'hackathons'. We recognize that skills and talent including in new areas of expertise will shape our business not only today, but also tomorrow.

Read more in the Annual Review
https://annualreports.zurich.com/en/employees

Find out more about careers
https://careers.zurich.com

"Our future employees might be at these events."

Mélina Carnal
Zurich recruiting consultant who attends 'hackathons' as one way to meet prospective new employees

Stakeholder report 2018 (continued)

Creating value for communities and society

Our work over many years to benefit our customers, communities and society has generated positive results. With our expertise, capabilities and passion we can contribute even more.

- We work globally including through our award-winning multi-organizational flood resilience alliance. In 2018 we extended the program for another five years.
- Our many local community programs include those to promote mental well-being in Ireland and Australia, improve children's nutrition and fight childhood obesity in Malaysia, and work to empower young people, especially in places with high youth unemployment.
- We continued to make progress on our goals to reduce CO2 emissions, further build our impact investment portfolio, and benefit 5 million people annually.

"With our flood resilience work, we are helping to prevent disasters, and protect and keep communities together."

Gary Shaughnessy
Chair of the Board of Trustees,
Z Zurich Foundation

Our flood resilience alliance has directly benefited over

225,000

people across our

13

programs in

9

countries

Flood Resilience Alliance

Helping communities survive and thrive despite repeated floods

Floods affect more people globally than any other type of natural hazard and cause some of the largest economic, social and humanitarian losses. To help communities cope with repeated flooding, we created the Zurich Flood Resilience Alliance. This award-winning multi-organizational alliance brings together research organizations, humanitarian sector organizations. Zurich, as the founder of the alliance, provides expertise, funding and serves to coordinate our approach.

Read more in the Annual Review
https://annualreports.zurich.com/en/flood-resilience

Find out more about flood resilience
www.zurich.com/en/sustainability/flood-resilience

Given the complexity and scale of challenges facing our world, simply being a 'responsible' company is no longer enough. Toward that end, working together with the Z Zurich Foundation, funded by Zurich, we have announced our ambition to become one of the most sustainable businesses in the world.

A global flood alliance

We are already making a significant impact by helping customers and communities reduce the devastating impacts of floods. Through our risk expertise as a global insurer, we can make a positive difference even before a flood occurs – we call this flood resilience. An ability to adapt and address risks prior to an event can make a big difference, especially when it comes to addressing the impacts of flooding.

Over 225,000 people have already directly benefited from the work done by the Flood Resilience Alliance, which has established 13 programs in nine countries since it started in 2013. In the second five-year phase of the program, launched in July 2018, we will work with the Alliance members to raise USD 1 billion for investing into building resilience to floods globally – and saving lives. Prevention is by far more cost-effective than clean-up post-event.

We already know that every USD 1 invested in prevention saves on average USD 5 in future losses. We want to provide further proof that our approach aimed at resilience works. By documenting the success we achieve, we will support our case for investing in resilience, encouraging investment from public authorities, and public and private donors.

Learn more about Zurich's sustainability initiatives in the Sustainability Highlights 2018
www.zurich.com/en/sustainability

Focusing on mental health in communities

Depression is the leading cause of ill health and disability worldwide, according to the World Health Organisation. That is why we focus on physical and mental health and support many local programs around the world, including in Ireland and Australia, where we have worked on programs to promote mental health. Another project we support is an initiative we launched with One Goal/World Vision Malaysia to fight child obesity and malnutrition, while raising awareness among children and parents on the importance of a healthy diet. In addition to offering football demonstrations and providing free healthy drinks and nutritional information, Zurich Malaysia has recruited 67 new community coaches for the program and 312 support volunteers.

Investing responsibly

We continued to progress on our impact investment goals: to build a portfolio of impact investments of up to USD 5 billion, while avoiding 5 million tons of CO_2 equivalent emissions, aiming to benefit 5 million people annually. By investing in additional green, social and sustainability bonds and committing to two additional impact private equity funds, our impact investment portfolio grew from USD 2.8 billion in 2017 to USD 3.8 billion in 2018. To broaden the scope of our impact investment portfolio, in 2018 for the first time we included investments in private debt to fund impact infrastructure projects, such as hospitals, schools or wind/solar energy farms in the portfolio. In 2018 we also developed a way to systematically aggregate and report the CO_2 emissions we avoided and the number of people who benefited.

Find out more on the website
www.zurich.com/en/sustainability/responsible-investment

"If I can help people express their feelings without fear of judgment, then I've done the job."

Hannah Tyrrell
Member of Ireland's Rugby World Cup Sevens squad 2018, and ambassador for Tackle Your Feelings

Enriching lives and breaking taboos

In Ireland, Zurich works closely with Rugby Players Ireland, the professional sports organization, to support Tackle Your Feelings. The campaign promotes open discussion about mental health. With almost one-third of professional rugby players in Ireland supporting it, the campaign can help others to understand and deal with what is often a taboo subject.

In Australia, Zurich is working with indigenous Australian artists through the Beyond Empathy organization. Through different art forms, Beyond Empathy aims to enrich the lives of disadvantaged individuals and their communities.

Read more in the Annual Review
https://annualreports.zurich.com/en/tackle-your-feelings

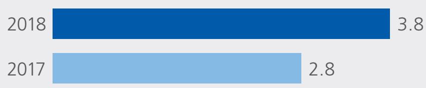
Find out more about Z Zurich Foundation
www.zurich.com/zfoundation

Our communities and society

We want to be a leader in sustainability. We subscribe to that through our targeted impact investments, which include green, social and sustainability bonds, commitments to private equity funds, and impact infrastructure private debt.

Total impact investments[1]
(USD billions)

USD 3.8bn



For all our sustainability metrics please turn to pages 23–24.

[1] Impact investments in 2018 consisted of: green bonds (USD 2.68 billion), social and sustainability bonds (USD 425 million), and investments committed to private equity funds (USD 145 million, thereof 45 percent drawn down) and impact infrastructure private debt (USD 540 million).

Stakeholder report 2018 (continued)

Creating sustainable value for shareholders

Zurich has a highly cash-generative business model and is focused on paying an attractive and growing dividend, while managing the group balance sheet in a consistent and conservative manner.

Our proposition to investors

- A balanced and diverse global business
- Industry-leading capital levels
- Consistent and conservatively managed balance sheet
- Consistent growth with scope to enhance returns through capital re-deployment

Zurich is a leading global insurer, serving individuals, small businesses, and mid-sized and large companies, as well as multinational corporations. Zurich has significant market share in North America and Europe, a leading position in Latin America and a growing presence in Asia Pacific. With about 54,000 employees, Zurich provides a wide range of property and casualty, and life insurance products and services in more than 210 countries and territories. It also provides administration, management, and ancillary services to the Farmers Exchanges,[1] a leading personal lines insurer in the U.S.

Zurich is rated in the 'AA' range by three internationally recognized rating agencies. The estimated Zurich Economic Capital Model (Z-ECM) ratio stands at a very strong 125 percent[2] (calibrated to AA). Zurich's financial flexibility is strong, with a conservative 'Aa'-level leverage as defined by Moody's.

The Group's consistent and conservatively managed balance sheet is based on disciplined risk management and producing stable cash flows. A key element of the capital management strategy is to maximize capital fungibility by pooling risk, capital and liquidity centrally as much as possible. Zurich's investment portfolio is generally conservative with an asset allocation comprising mainly publicly traded fixed income securities, with moderate investments in other asset classes.

The Group is committed to a dividend payout of around 75 percent of net earnings, subject to a floor of the prior year dividend level, with dividend increases subject to sustainable earnings growth.

On track to achieve financial targets

During the Investor Day in November 2018 the Group provided a number of examples of how the Group is delivering against the Group's stated financial targets.

For details, please refer to the financial review section of the Annual Report, and the Investor Day 2018 presentation.

Further details are available online
www.zurich.com/en/investor-relations/presentations

Corporate governance and sustainability

The balanced business profile of Zurich is also supported by best practice corporate governance. Its Board is independent and remarkably diverse in terms of gender and skills. Its remuneration principles align pay to performance and are an important element of the Group's risk management framework.

Zurich pro-actively addresses environmental, social and governance (ESG) factors as part of day-to-day business activity. This includes responsible investment, corporate responsibility in business transactions, minimizing its carbon footprint and helping the communities in which it operates. Zurich's strong ESG track record is illustrated by a 'AA' rating from MSCI and our Bronze Class distinction in the Dow Jones Sustainability Indices (DJSI).

Further details are available online
www.zurich.com/en/sustainability

Provision of financial information

Zurich's annual financial results are published in printed and electronic form. Detailed information for the Group and the key segments are published for the half and full year. For first and third quarters, the Group provides highlights for the quarter and qualitative comments on trading and market trends. Zurich's management hosts an investors' and analysts' call each quarter.

Quarterly updates and current publication dates can be found online
www.zurich.com/en/investor-relations/results-and-reports

Dialogue with investors

Zurich engages regularly with its shareholders and proxy advisers to understand investors' perspectives, exchange views about the Group's strategy, financial performance, corporate governance and compensation and other matters of importance to the Group or its shareholders. Investor Relations is responsible for overseeing this communication.

[1] The Farmers Exchanges are owned by their policyholders. Farmers Group, Inc., a wholly owned subsidiary of Zurich Insurance Group, provides certain non-claims administrative, management, and ancillary services to the Farmers Exchanges as attorney-in-fact and receives fees for its services.

[2] Reflects midpoint estimates as of December 31, 2018 with an error margin of +/– 5 pts.

Zurich's shares

The shares are listed on the SIX Swiss Exchange and traded on the SIX Swiss Exchange Blue Chip Segment; ticker symbol: ZURN; the Swiss security number (Valorennummer) is 1107539. Trading in Zurich Insurance Group Ltd shares on the blue chip segment is conducted in Swiss francs.

Zurich has a level 1 American Depositary Receipt (ZURVY) program, which is traded over-the-counter on OTCQX. For further information on shareholders or capital structure, see the corporate governance report.

Further details are available online
www.zurich.com/en/investor-relations/our-shares/registered-share-data

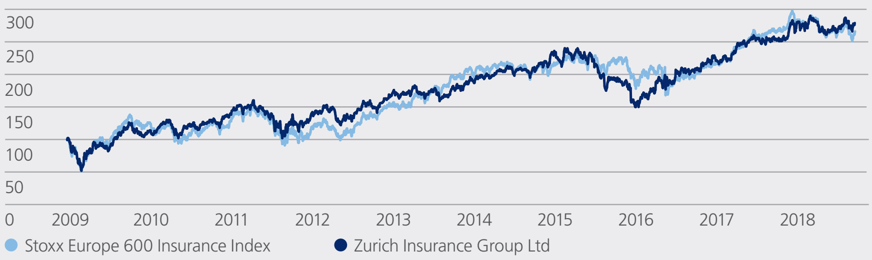
Proposed total dividend per share for 2018

CHF 19.00[1]
(CHF 18.00 for 2017)

Find out more about dividends
www.zurich.com/en/investor-relations/our-shares/dividends

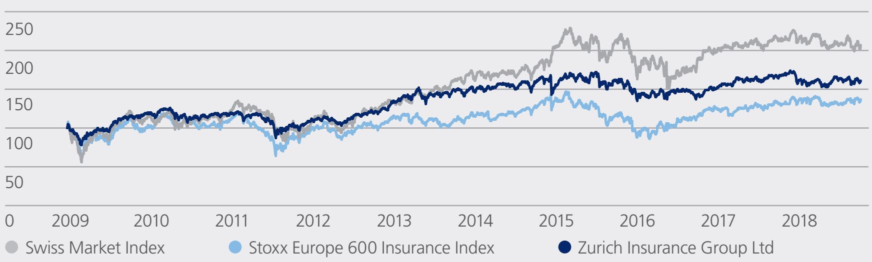
Dividend a key part of total shareholder return (TSR)

Total shareholder return in U.S. dollars



Source: Thomson Reuters Datastream

Zurich share performance (indexed) over the last 10 years



Source: Thomson Reuters Datastream

Share data (CHF)

As of December 31

	2018	2017
Dividend per share	**19.00**[1]	18.00
Share price at end of period	**293.10**	296.60
Price period high	**320.00**	306.00
Price period low	**284.10**	262.20
Market capitalization (CHF millions)	**44,360**	44,670

[1] Proposed total dividend, subject to approval by shareholders at the Annual General Meeting; expected payment date as from April 9, 2019. Gross dividend, subject to 35 percent Swiss withholding tax.

Financial calendar

Annual General Meeting 2019
April 3, 2019

Ex-dividend date
April 5, 2019

Dividend payable from
April 9, 2019

Update for the three months ended March 31, 2019
May 9, 2019

Half year results 2019
August 8, 2019

Update for the nine months ended September 30, 2019
November 7, 2019

Investor Day
November 14, 2019

Note: all dates subject to change

Further details are available online
www.zurich.com/en/investor-relations/calendar

Consolidated non-financial statements

For the first time in 2018, we are including in our Annual Report information on a comprehensive set of 'non-financial' measures that we use to monitor and report information related to our four key stakeholder groups. The information is based on the requirements some of our subsidiaries and branches are required to follow since 2017, as stipulated by the Directive on the disclosure of non-financial and diversity information by certain large undertakings and groups (Directive 2014/95/EU). We believe that providing these metrics gives a more complete overview of our business, and shows how we monitor our effectiveness in these areas pertaining to social information and employees, customers, responsible investment, the environment, and our tax contributions. We have also used references to the Global Reporting Initiative (GRI) as an index to help our stakeholders find the information relevant to them throughout the Annual Report and on our Group website without adhering to the standards listed in the index in its entirety. PricewaterhouseCoopers AG performed limited assurance procedures on the indicators for social and environmental matters as well as those related to responsible investment as outlined in their independent assurance report at the end of this section.

The information contained within the consolidated non-financial statements is based on the consolidated results of the Group for the years ended December 31, 2018 and 2017. Amounts are rounded to the nearest million unless otherwise stated, with the consequence that the rounded amounts may not always add up to the rounded total. All ratios and variances are calculated using the underlying amounts rather than the rounded amounts. This document should be read in conjunction with the stakeholders reports from the Group overview section of this Annual Report, and with the Sustainability Highlights 2018 report of the Group which is available on www.zurich.com.

Contents

Voice of the customer

	2018	2017	Change
Number of customers interviewed through Zurich's NPS program[1]	**763,000**	573,000	33%
Number of close the loop feedback calls	**52,000**	26,000	100%

[1] In 2018, Zurich interviewed over 760,000 customers (including Zurich Santander) in over 20 countries through its NPS (Net Promoter System) program.

We are well underway to turn Zurich into a truly customer-led insurer. Our global net promoter system (NPS) program provides us with insights on how to retain and attract new customers. Ultimately the aim is to increase the share of promoters we have among our customers. NPS is serving us not only as a source of additional customer data and insights but also as a 'leading KPI' to better understand our customers' needs and to form the basis for measuring how well we are delivering superior customer experiences throughout our customer journeys.

Significantly expanding the use of the net promoter system methodology, we are covering 90 percent of our business (in revenue terms) for a holistic reflection of how customers experience working together with us. We obtain responses across the whole customer journey from the quote, purchasing and onboarding process, to claims and renewals including multiple interactions for servicing reasons. We always close the loop with our detractors, a process in which all of our executives are involved as well. Most importantly, we identify customer-driven initiatives that we rigorously implement and measure the impact on customer advocacy altogether.

Social indicators

	2018	2017	Change
Total number of employees – headcount	**53,535**	53,146	1%
Total number of employees – FTE (full time equivalents)	**52,267**	51,633	1%
Employee turnover rate (%)[1]	**14%**	15%	(1 pts)
Average tenure (years)	**10**	10	(1%)
Group voluntary turnover (%)[1]	**7%**	7%	0 pts
Technical functions voluntary turnover (%)[1, 2]	**7%**	7%	(0 pts)
Female workforce participation (%)	**51%**	51%	0 pts
Female participation in Leadership Team (%)	**22%**	21%	1 pts
Employee participation in Group-wide feedback channels (%)[3]	**70%**	–	–
Employee net promoter score (ENPS)[4]	**+7**	–	–
Active learners (%)[5]	**94%**	95%	(1 pts)

Notes: Bolivia, and the Farmers Exchanges, which are owned by their policyholders, are not in scope of any above key performance indicators (KPIs).

[1] Turnover figures only consider regular and inpatriate employees.

[2] Technical functions include Claims, Underwriting and Risk Engineering.

[3] New KPI in 2018 with a larger scope than prior years: Group-wide feedback channels include organization health surveys, employee net promoter scores (ENPS) and any other Group-wide feedback channels. Specifically in 2018 this KPI refers to the average participation rate in the two occurrences of the employee net promoter score survey.

[4] ENPS is a new KPI introduced in 2018. It is calculated as the average of the two surveys carried out during the year, measuring employee loyalty through the likelihood to recommend the company as a place to work. ENPS is based on the methodology of measuring and improving customer satisfaction and loyalty (transaction NPS and relationship NPS) which Zurich uses as a successful method to retain customers.

[5] Employees who have taken at least one course during the year reported. Farmers Management Services is not included in the KPI scope.

Consolidated non-financial statements (continued)

Responsible investment

	2018	2017	Change
External asset managers who are signatories to PRI (%)[1]	**74%**	71%	3 pts
Group assets managed by PRI signatories (%)[2]	**97%**	97%	(0 pts)
Total amount of impact investments (USD millions)[3]	**3,790**	2,830	34%
Investment portfolio (USD millions)[4]	**195,472**	207,261	(6%)

[1] The United-Nations supported Principles for Responsible Investment (PRI).
[2] including assets managed by Zurich.
[3] Impact investments in 2018 consisted of: green bonds (USD 2.68 billion), social and sustainability bonds (USD 425 million), investments committed to private equity funds (USD 145 million, thereof 45 percent drawn down) and impact infrastructure private debt (USD 540 million).
[4] The investment portfolio is calculated on a market basis, and is different from the total Group investments reported in the consolidated financial statements, which is calculated on an accounting basis and doesn't include cash and cash equivalents.

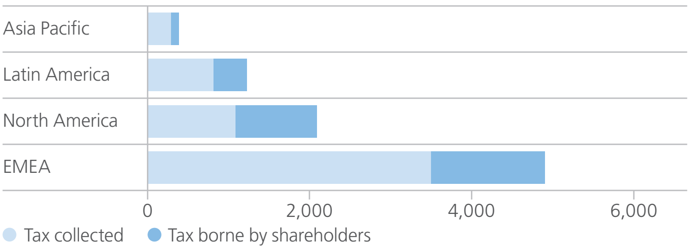
Environmental performance

	2017	2016	Change
Impact of real estate investment: Energy consumption (kWh per sqm)[1, 2]	**114**	117	(2%)
Impact of real estate investment: CO2e emissions (kg per sqm)[1, 2]	**28**	29	(3%)
CO2e emissions per employee (tons per FTE)[2]	**2.1**	2.1	(1%)

[1] Scope includes real estate investments in Switzerland (44% of global direct real estate investment value). Buildings in the real estate investment portfolio are largely not used by Zurich. The data are based on meter readings and energy supplier information and are heating degree adjusted.
[2] CO2e emissions per employee data 2018 will be available in Q2 2019, and Impact of real estate investment data 2018 will be available in Q1 2020.

Total tax contributions[1] 2017[2]

2017 total tax contributions by region
in USD millions



Top 10 countries with the highest total tax contribution in 2017

Country (in USD millions)	Total tax contribution	Tax collected	Tax borne by shareholders
U.S.	2,054	1,050	1,004
Switzerland	1,195	806	388
Germany	1,004	704	300
UK	938	799	140
Brazil	528	326	202
Spain	519	197	322
Italy	475	372	103
Mexico	348	250	98
Austria	311	279	33
Australia	263	213	49

[1] Numbers based on IFRS excluding deferred income tax.
[2] Tax contributions for 2018 will be available in Q2 2019.

The balance between 'total tax collected' and 'tax borne by shareholders' varies between regions and countries due to Zurich's local footprint but also due to different characteristics of the various tax jurisdictions where Zurich operates.

GRI index

GRI is an international independent organization that helps businesses, governments and other organizations understand and communicate the impact of business on critical sustainability issues such as climate change, human rights, corruption and many others. We have used references to the Global Reporting Initiative (GRI) as an index below to help our stakeholders find the information relevant to them throughout the Annual Report and on our Group website without adhering to the standards listed in the index in its entirety. This index lists the organization's reports and web pages and their reference to the following GRI Standards.

General disclosures

Number	Disclosure name	Reference and page number
102-1	Name of the organization	**AR inside front cover (ifc)**
102-2	Activities, brands, products, and services	**AR ifc and 8 to 15; SR 10 to 12**
102-3	Location of headquarters	**AR ifc**
102-4	Location of operations	**AR 13, 256 and 269 to 273**
102-5	Ownership and legal form	**AR 176 and 285**
102-6	Markets served	
102-7	Scale of the organization	**AR ifc**
102-8	Information on employees and other workers	**AR 16 to 17 and 23**
102-9	Supply chain	**SR 13; CDP**
102-10	Significant changes to the organization and its supply chain	**AR 5 to 6, 10 to 11 and 163**
102-11	Precautionary principle or approach	**AR inside back cover**
102-12	External initiatives	**AR 14 to 21; SR 9, 29 and 30**
102-13	Membership of associations	**CDP**
102-14	Statement from senior decision-maker	**AR 2 to 6, 30 to 31, 78 to 79, 118 to 119, 152 to 153 and 164 to 165; SR 5**
102-15	Key impacts, risks, and opportunities	**AR 10 to 11 and 118 to 119; CDP; SR 6 to 8**
102-16	Values, principles, standards, and norms of behavior	**AR 6 to 7 and 12 to 13**
102-17	Mechanisms for advice and concerns about ethics	**AR 76**
102-18	Governance structure	**AR 33 to 35; SR 9; CDP**
102-19	Delegating authority	**SR 9; CDP**
102-20	Executive-level responsibility for economic, environmental, and social topics	**AR 53; SR 9**
102-21	Consulting stakeholders on economic, environmental, and social topics	**SR 6 and 7**
102-22	Composition of the highest governance body and its committees	**AR 42 to 58**
102-23	Chair of the highest governance body	**AR 30 to 31 and 44; SR 9**
102-24	Nominating and selecting the highest governance body	**AR 44**
102-25	Conflicts of interest	**AR 49 and 72 to 76**
102-26	Role of highest governance body in setting purpose, values, and strategy	**AR 57**
102-27	Collective knowledge of highest governance body	**AR 57**
102-28	Evaluating the highest governance body's performance	**AR 51 to 52**
102-29	Identifying and managing economic, environmental, and social impacts	**AR 56**
102-30	Effectiveness of risk management processes	**AR 147**
102-31	Review of economic, environmental, and social topics	
102-32	Highest governance body's role in sustainability reporting	**CDP**
102-33	Communicating critical concerns	**AR 65; CDP**
102-35	Remuneration policies	**AR 85 to 86**
102-36	Process for determining remuneration	**AR 90 to 98**
102-37	Stakeholders' involvement in remuneration	**AR 85 and 89**
102-40	List of stakeholder groups	**AR 9; SR 6; CDP**
102-41	Collective bargaining agreements	
102-42	Identifying and selecting stakeholders	**SR 6**
102-43	Approach to stakeholder engagement	**AR 8 to 9; SR 6**
102-44	Key topics and concerns raised	**SR 6 and 7**
102-45	Entities included in the consolidated financial statements	**AR 269 to 273**
102-46	Defining report content and topic boundaries	**AR 176 to 180 and 285**
102-47	List of material topics	**SR 6 to 8**
102-48	Restatements of information	**AR 177**
102-49	Changes in reporting	**AR 178 to 180**
102-50	Reporting period	**AR 176 to 177 and 285**
102-51	Date of most recent report	**SR 1; CDP**
102-52	Reporting cycle	**AR 167; SR 4; CDP**
102-53	Contact point for questions regarding the report	**AR 300**
102-55	GRI content index	**AR 25 to 26; SR 35**
102-56	External assurance	**AR 27, 73 to 74, 114, 276 to 281 and 292 to 296; SR 33**

Key: **AR:** Annual Report 2018 **SR:** Sustainability highlights 2018* **CDP:** CDP submission 2018 : Link to Zurich Insurance Group website

*The Sustainability Highlights 2018 report includes the United Nations Global Compact communication on progress and our progress in implementing the UN Environment Programme Finance Initiative Principles for Sustainable Insurance. For more information see www.zurich.com/en/sustainability

GRI index (continued)

Number	Disclosure name	Reference and page number
Management approach		
103-1	Explanation of the material topic and its boundary	SR 6 to 8
103-3	Evaluation of the management approach	AR 57; SR 6 to 8
Economic performance		
201-1	Direct economic value generated and distributed	AR 167 to 175
201-2	Financial implications and other risks and opportunities due to climate change	AR 149; CDP
201-3	Defined benefit plan obligations and other retirement plans	AR 228 to 235
201-4	Financial assistance received from government	AR 220
Indirect economic impacts		
203-1	Infrastructure investments and services supported	SR 15 and 21 to 23; CDP
203-2	Significant indirect economic impacts	SR 12, 21, 22 and 25; CDP
Materials		
301-2	Recycled input materials used	
Energy		
302-1	Energy consumption within the organization	CDP
302-3	Energy intensity	CDP
302-4	Reduction of energy consumption	SR 26 to 27; CDP
Emissions		
305-1	Direct (Scope 1) GHG emissions	AR 1 and 24; SR 26; CDP
305-2	Energy indirect (Scope 2) GHG emissions	CDP
305-3	Other indirect (Scope 3) GHG emissions	CDP
305-4	GHG emissions intensity	CDP
305-5	Reduction of GHG emissions	SR 26; CDP

Number	Disclosure name	Reference and page number
Supplier environmental assessment		
308-1	New suppliers that were screened using environmental criteria	CDP
Employment		
401-1	New employee hires and employee turnover	AR 23; SR 18
Occupational health and safety		
403-1	Occupational health and safety management system	SR 20
403-6	Promotion of worker health	SR 19 to 20
Diversity and equal opportunity		
405-1	Diversity of governance bodies and employees	AR 45
Public policy		
415-1	Political contributions	

Key: **AR:** Annual Report 2018 **SR:** Sustainability highlights 2018* **CDP:** CDP submission 2018 : Link to Zurich Insurance Group website

*The Sustainability highlights 2018 report includes the United Nations Global Compact communication on progress and our progress in implementing the UN Environment Programme Finance Initiative Principles for Sustainable Insurance.

Independent assurance report

To the Executive Committee of Zurich Insurance Group AG, Zurich

We have been engaged to perform assurance procedures to provide limited assurance on the non-financial reporting of Zurich Insurance Group and its consolidated subsidiaries ('ZIG') for the year ended 31 December 2018.

Scope and Subject matter

Our limited assurance engagement focused on selected non-financial indicators published in the Annual Report 2018 of ZIG:

a) The 2018 "Social indicators" on page 23, the 2018 "Responsible investment" indicators on page 24 and the 2017 "Environmental performance" indicators on page 24 ("the non-financial indicators"); and

b) The management and reporting processes with respect to the selected non-financial indicators as well as the control environment in relation to the aggregation of these non-financial indicators.

Criteria

The reporting criteria used by ZIG are described in the internal reporting guidelines and define those procedures, by which the non-financial indicators are internally gathered, collated and aggregated.

Inherent limitations

The accuracy and completeness of non-financial indicators are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. Our assurance report should therefore be read in connection with ZIG's internal guidelines, definitions and procedures on non-financial reporting. Further, the greenhouse gas quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

ZIG Responsibilities

The Executive Committee of ZIG is responsible for both the subject matter and the criteria as well as for selection, preparation and presentation of the information in accordance with the criteria. This responsibility includes the design, implementation and maintenance of related internal control relevant to this reporting process that is free from material misstatement, whether due to fraud or error.

Our Responsibilities

Our responsibility is to form an independent conclusion based on our limited assurance procedures on whether anything has come to our attention to indicate that the non-financial indicators are not stated, in all material respects, in accordance with the reporting criteria.

We planned and performed our procedures in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (revised) 'Assurance engagements other than audits or reviews of historical financial information' and with ISAE 3410 'Assurance Engagements on Greenhouse Gas Statements'. These standards require that we plan and perform the assurance engagement to obtain limited assurance on the identified non-financial indicators.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. Consequently, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement and therefore less assurance is obtained with a limited assurance engagement than for a reasonable assurance engagement.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Summary of work performed

Our limited assurance procedures included, but were not limited to the following work:

– Reviewing the application of ZIG's internal guidelines using a sample of affiliates in Switzerland, UK, USA, Germany, Chile, Australia and Malaysia

– Interviewing ZIG representatives at Group level responsible for the data collection and reporting

– Performing tests on a sample basis of evidence supporting the non-financial indicators as outlined in the scope and subject matter section concerning completeness, accuracy, adequacy and consistency

– Inspecting the relevant documentation on a sample basis

– Reviewing and assessing the management reporting processes for non-financial reporting and consolidation and their related controls

We have not carried out any work on data other than outlined in the scope and subject matter section as defined above. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusions.

Limited assurance conclusion

Based on the procedures we performed, nothing has come to our attention that causes us to believe that

a) The non-financial indicators as described in the scope and subject matter section are not prepared and disclosed in all material respects in accordance with ZIG's internal reporting guidelines; and

b) The management and reporting processes to collect and aggregate the non-financial indicators as well as the control environment in relation to the data aggregation are not functioning as designed.

PricewaterhouseCoopers AG

Peter Eberli Raphael Rutishauser

Zurich, February 13, 2019

Governance

Message from our Chairman on corporate governance

Creating sustainable value through our business

"In a world facing massive changes, insurers have never had a more important role in addressing society's challenges. Zurich is demonstrating this powerfully and consistently."

Michel M. Liès
Chairman of the Board of Directors

Playing our part in creating a sustainable future is more than an opportunity for insurers – it is our responsibility. We must demonstrate this through actions, and Zurich is doing just that. Good corporate governance enables Zurich to create this sustainable value for our stakeholders.

Dear Shareholder

Good corporate decision-making is key to our organization. We continued to strengthen our governance structure in 2018 with a strong focus on sustainable value creation.

Diversity that favors sustainability

To succeed as a sustainable global insurer, Zurich needs to attract, develop and retain talented people who reflect the diversity of our global customers. A workplace that brings out the best in everybody, where people feel welcome, valued and included, allows employees to achieve their full potential and perform at their best.

I am proud of the diverse composition of our Board and executive team. The Board and ExCo members are men and women with a variety of experience and professional backgrounds, and from many different countries – reflecting our customer base.

This gives our Board and executive management the necessary insights to address a full range of business needs and contribute the necessary expertise.

When we welcome difference, we promote innovation, boost productivity and deliver the better results.

Changes to our Board and Executive Committee

At the Annual General Meeting (AGM) on April 4, 2018, I was elected to join the Board of Directors as Chairman. Susan Bies, Tom de Swaan and Fred Kindle did not stand for re-election.

As announced on December 14, 2018, and on February 6, 2019, the Board will propose that shareholders elect Jasmin Staiblin, Michael Halbherr and Barry Stowe as new members of the Board at the next AGM on April 3, 2019. David Nish will not stand for re-election.

The Board proposes to shareholders that they re-elect all other current members of the Board.

On October 5, 2018, Amanda Blanc took up the role of CEO EMEA (Europe, Middle East & Africa) and became a member of the Executive Committee ('ExCo'). Gary Shaughnessy, former CEO EMEA, decided to step down from his role as of the same date. To ensure a smooth transition, Gary Shaughnessy retired from the ExCo as of December 31, 2018.

Zurich stakeholders

It is important for Zurich to engage in dialogue with all our stakeholders. Thank you for your continued trust, support and commitment.

Michel M. Liès
Chairman of the Board of Directors

Our sustainability approach

Sustainability means doing business in a way that safeguards the future of our company and society. It is about the solutions we provide to customers, the way in which we invest our assets, and how we address environmental, social and governance issues in our-day-to-day activities. Insurance has an important role, and Zurich is demonstrating this powerfully and consistently.

We are acting on **climate change and** we are assisting in the **transition to a low-carbon world**:

- Zurich helps customers to better understand their exposure to climate risks.
- We help communities worldwide through our award-winning Zurich Flood Resilience Alliance.
- We have announced our intention to stop providing services to new thermal coal mines, potential clients earning more than half their revenue from mining thermal coal, and utility companies generating more than half their energy from coal.
- We strive for greater sustainability in our investments – aiming to double our impact investment portfolio to USD 5 billion, avoiding 5 million tons of CO_2-equivalent emissions and improving 5 million people's lives annually.

Find out more about our progress
www.zurich.com/en/sustainability/responsible-investment/impact-investment

We are supporting a **workforce in transition**:

- Zurich helps workers protect incomes and fund longer retirements through our life, savings and income protection products.
- We improve career skills and digital skills in our workforce and communities, helping people to face transition.
- We invest in thought leadership, including on Agile Protection systems for evolving workforce needs and vulnerabilities.
- We continue working to ensure Zurich is a diverse, fair and inclusive place to work.

Finally, we are committed to being **stewards of data** – building trust **in the digital age**.

This means being responsible in the way we work with and handle data. It also means increasing cyber resilience through risk awareness, mitigation and insurance programs.

Changing climate

Providing insight, protection and transparency to support the transition to a low carbon economy

Workforce in transition

Preparing for new ways of working and the skills, solutions and initiatives

Confidence in a digital society

Making people and organizations more resilient by enabling and inspiring confidence in a digital society

Corporate governance report

Contents

Introduction

The Zurich Insurance Group, consisting of Zurich Insurance Group Ltd and its subsidiaries (the 'Group' or 'Zurich'), is committed to effective corporate governance for the benefit of its shareholders, customers, employees and other stakeholders based on the principles of fairness, transparency and accountability. Structures, rules and processes are designed to enable proper conduct of business by defining the powers and responsibilities of its corporate bodies and employees.

This report describes the Group's approach to the key elements of corporate governance within the Group. It includes the information required under the following rules, with which Zurich complies:

- Directive on Information Relating to Corporate Governance of the SIX Exchange Regulation (as of March 20, 2018).
- Swiss Code of Best Practice for Corporate Governance (Swiss Code of Best Practice), issued in 2002 by economiesuisse, as amended in October 2007 and in August 2014.

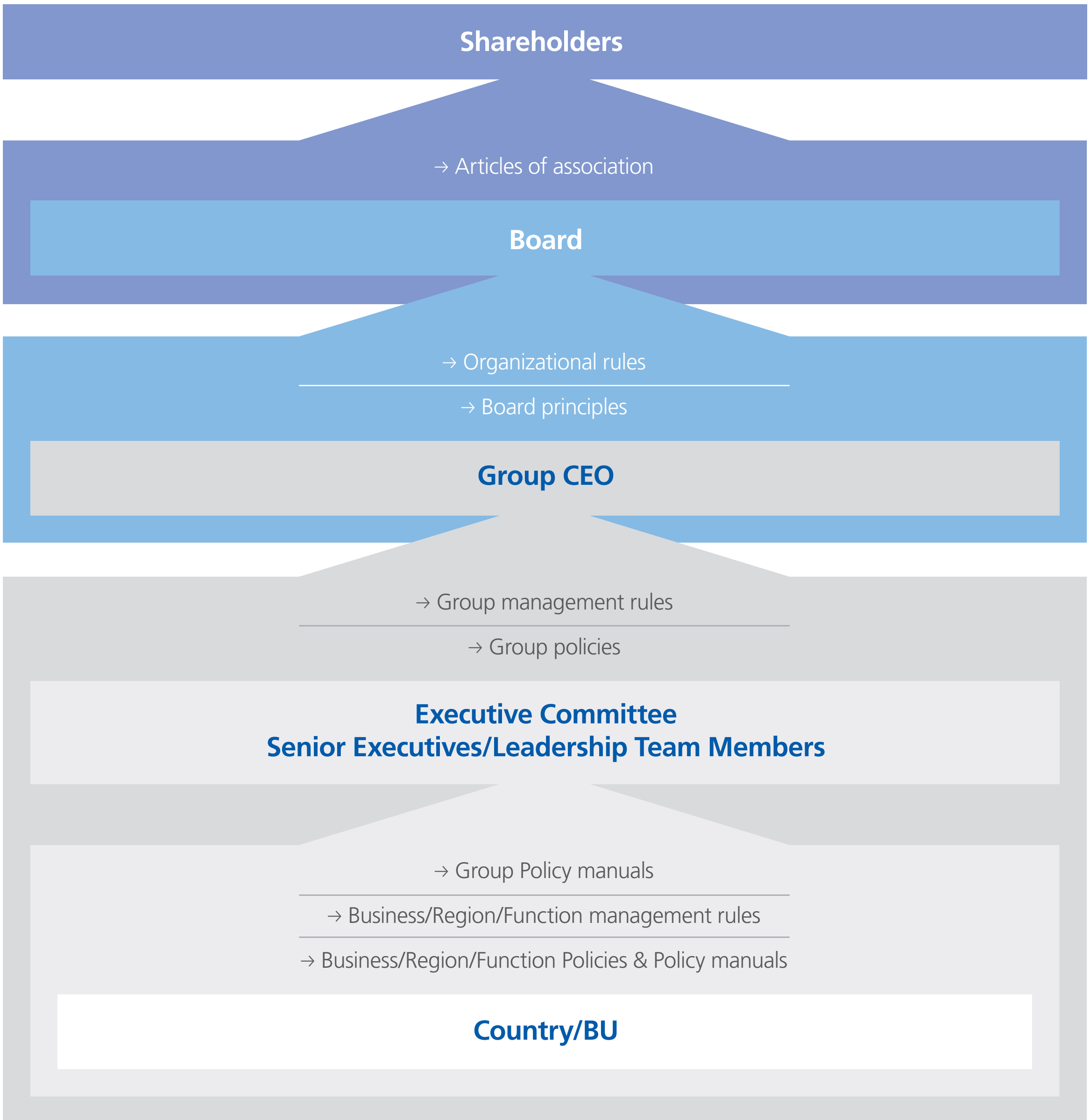
The shares of Zurich Insurance Group Ltd are listed on the SIX Swiss Exchange. Certain Group companies have listed debt issued under its Euro Medium Term Note Programme and other financial instruments.

Zurich is subject to insurance group supervision by the Swiss Financial Market Supervisory Authority FINMA ('FINMA'). The Joint Committee of the European Supervisory Authorities has also designated the Group as an insurance group and not as an insurance conglomerate because of the small size of its non-insurance activities. The Swiss Insurance Supervision Act (ISA) requires Swiss insurance companies and groups to establish and maintain strong governance and risk management systems as well as effective internal control systems that are appropriate to their business activities. It prescribes the calculation of a risk-based solvency margin on a Group-wide basis and at legal entity level pursuant to the Swiss Solvency Test (SST). All material intra-group transactions must be reported to FINMA. In addition to the group supervision exercised by FINMA and its insurance supervision of the legal entities Zurich Insurance Company Ltd, Zurich Life Insurance Company Ltd, Zurich Reinsurance Company Ltd and Orion Legal Expenses Insurance Ltd., the insurance subsidiaries and remaining financial services entities of the Group are supervised by the respective local supervisory authorities.

The principles of corporate governance and the standards described above are incorporated and reflected in a number of corporate documents, in particular the Articles of Association, the Organizational Rules and the Charter of the Committees of the Board of Directors of Zurich Insurance Group Ltd (www.zurich.com/en/about-us/corporate-governance/corporate-documents). The Governance, Nominations and Sustainability Committee of the Board of Directors of Zurich Insurance Group Ltd regularly reviews the Group's corporate governance against best practice standards and ensures compliance with corporate governance requirements.

Corporate governance report (continued)

Governance document structure



An effective structure is in place providing for cooperation between the Board of Directors of Zurich Insurance Group Ltd, management and internal control functions. This structure establishes checks and balances and is designed to provide for institutional independence of the Board from the Group Chief Executive Officer (Group CEO) and the Executive Committee ('ExCo') which together are responsible for managing the Group on a day-to-day basis.
The Board is composed entirely of non-executive members, independent from the management.

This report essentially follows the recommended structure outlined in the Directive on Information Relating to Corporate Governance of the SIX Exchange Regulation. The information on compensation, shareholdings and loans to Board members and members of the ExCo is contained in a separate report, the remuneration report (see pages 81 to 113), which supplements this corporate governance report and also includes the information as required by the Circular 2010/1 on remuneration schemes (minimum standards for remuneration schemes of financial institutions) issued by FINMA on October 21, 2009 as amended on June 1, 2012, December 3, 2015 and September 22, 2016, as well as the Ordinance Against Excessive Compensation (Ordinance AEC) of November 20, 2013.

Key governance developments in 2018 – at a glance

as of December 31, 2018

Board of Directors

Election

→ Michel M. Liès, elected as Chairman (as of April 4, 2018)

Executive Committee

New appointments

→ Amanda Blanc, CEO EMEA (Europe, Middle East & Africa) (as of October 5, 2018)

Resignations

→ Gary Shaughnessy, former CEO EMEA (as of December 31, 2018)

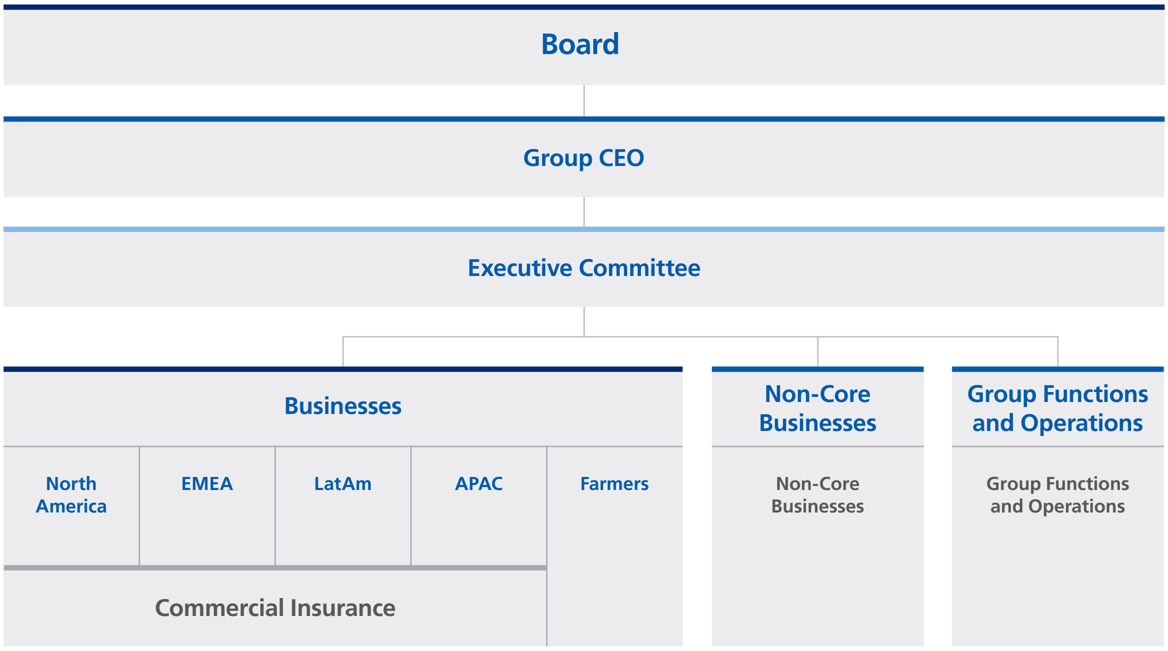
Group structure and shareholders

Operational Group structure

Zurich Insurance Group Ltd, the Group's holding company, is a Swiss corporation organized in accordance with the laws of Switzerland. Zurich's business is focused on providing best-in-class property and casualty and life insurance products and services to individuals, small businesses, mid-sized and large companies.

The following chart shows the operational group structure on December 31, 2018.

Operational Group structure
as of December 31, 2018



The Group pursues a customer-centric strategy and is managed by regions, and in addition, Farmers in the U.S. and Commercial Insurance globally. The ExCo is headed by the Group CEO. Six members of the ExCo represent the Group's businesses: the CEOs of the regions (CEO North America, CEO Europe, Middle East & Africa (EMEA), CEO Latin America, CEO Asia Pacific), the CEO of Farmers and the CEO of Commercial Insurance. Four members of the ExCo represent Group functions: the Group Chief Financial Officer (Group CFO), the Group Chief Investment Officer (Group CIO), the Group Chief Risk Officer (Group CRO) and the Group Chief Operating Officer (Group COO). The Group COO has responsibility for operations and technology as well as underwriting, claims, and pricing, creating a unified sense of purpose and responsibility for technical excellence, efficiency and business transformation across all parts of the business. The Group CFO is responsible for Group Reinsurance. For further information on the ExCo see pages 60 to 70.

The Group's operating structure reflects the businesses operated by the Group and how these are strategically managed to offer different products and services to specific customer groups. The Group's reportable segments for 2018 comprised:

- **Regions (EMEA, North America, LatAm and APAC):** segments through which the Group provides a variety of property and casualty and life products to retail and commercial customers as well as reinsurance propositions. **Commercial Insurance** brings together corporate and commercial insurance expertise worldwide under a single umbrella.
  - **Property & Casualty** is the business through which the Group provides a variety of motor, home and commercial products and services for individuals, as well as small, mid-sized and large businesses.
  - The **Life business** pursues a strategy with market-leading propositions in unit-linked and protection products as well as fee-based solutions managed through three global pillars (Bank Distribution, Corporate Life & Pensions and Other Retail) to develop leading positions in its target markets.
- **Farmers** provides, through Farmers Group, Inc. (FGI) and its subsidiaries, non-claims related, administrative, management, and ancillary services to the Farmers Exchanges as attorney-in-fact. FGI receives fee income for the provision of services to the Farmers Exchanges, which are owned by their policyholders and managed by Farmers Group, Inc. a wholly owned subsidiary of the Group. Farmers also includes all reinsurance assumed from the Farmers Exchanges by the Group. Farmers Exchanges are prominent writers of personal and small commercial lines of business in the U.S.
- **Group Functions and Operations** comprise the Group's Holding and Financing and Headquarters activities. Certain alternative investment positions not allocated to business operating segments are included within Holding and Financing. In addition, Group Functions and Operations includes operational technical governance activities relating to technology, underwriting, claims, actuarial and pricing.
- **Non-Core Businesses** include insurance and reinsurance businesses that the Group does not consider core to its operations and that are therefore mostly managed to achieve a beneficial run-off. Non-Core Businesses are mainly situated in the U.S., Bermuda and the UK.

A detailed review of the results of the businesses as reported for 2018 can be found in the financial review starting on page 155. Furthermore, an overview of the Group's business activities is contained in the Annual Review, available on Zurich's website (www.zurich.com/en/investor-relations/results-and-reports).

A list of the Group's significant subsidiaries can be found on pages 271 to 273. For further information on the share listing of Zurich Insurance Group Ltd, see the investor section on pages 20 to 21.

Significant shareholders

According to the rules regarding the disclosure of significant shareholdings of Swiss companies listed in Switzerland, disclosure has to be made if certain thresholds starting at 3 percent are reached or if the shareholding subsequently falls below those thresholds. Disclosure must be made separately for purchase positions (including shares, long call options and short put options) and sale positions (including long put options and short call options). The percentage thresholds are calculated on the basis of the total amount of voting rights according to the number of shares issued as disclosed in the commercial register.

Zurich Insurance Group Ltd is obliged to announce shareholdings by third parties in its shares when notification is received from a third party that a threshold has been reached. During 2018, the Group received two notifications by third parties that they had either exceeded or fallen below a relevant threshold.

As of December 31, 2018, Zurich Insurance Group Ltd was not aware of any person or institution, other than BlackRock, Inc., New York (> 5 percent) and The Capital Group Companies, Inc., Los Angeles (> 3 percent), which, directly or indirectly, had an interest as a beneficial owner in shares, option rights and/or conversion rights relating to shares of Zurich Insurance Group Ltd exceeding the relevant thresholds prescribed by law.

The announcements related to these notifications can be found via the search facility on the SIX Disclosure Office's platform: www.six-exchange-regulation.com/de/home/publications/significant-shareholders.html.

Zurich Insurance Group Ltd is not aware of any person or institution which, as of December 31, 2018, directly or indirectly, alone or with others, exercised or was a party to any arrangements to exercise control over Zurich Insurance Group Ltd.

Overview on shareholder structure

Number of shares held

as of December 31, 2018	Number of registered shareholders	% of registered share capital
1–500	119,408	13.5
501–1,000	5,354	4.1
1,001–10,000	4,168	10.6
10,001–100,000	410	11.6
100,001+	69	60.2
Total[1]	**129,409**	**100.0**

[1] of registered shareholders.

Registered shareholders by type

as of December 31, 2018	Registered shareholders in %	Registered shares in %[1]
Individual shareholders	95.9	26.1
Legal entities	3.9	30.3
Nominees, fiduciaries	0.2	43.6
Total	**100.0**	**100.0**

[1] of registered shareholders.

Registered shareholders by geography

as of December 31, 2018	Registered shareholders in %	Registered shares in %[1]
Switzerland	93.9	51.5
UK	0.5	28.9
North America	0.7	11.4
Asia	0.2	0.8
Latin America	0.1	0.0
Rest of the world	4.6	7.4

[1] of registered shareholders.

Cross-shareholdings

Zurich Insurance Group Ltd has no interest in any other company exceeding 5 percent of the voting rights of that other company, where such other company has an interest in Zurich Insurance Group Ltd exceeding 5 percent of the voting rights in Zurich Insurance Group Ltd.

Capital structure

Share capital

As of December 31, 2018, the ordinary share capital of Zurich Insurance Group Ltd amounted to CHF 15,134,802.70 divided into 151,348,027 fully paid registered shares with a nominal value of CHF 0.10 each. The Board will propose to the shareholders at the Annual General Meeting on April 3, 2019 a dividend of CHF 19 per share. It is planned that the dividend will be paid out of the available earnings with a deduction of 35 percent Swiss withholding tax.

Authorized and contingent share capital as of December 31, 2018

At the Annual General Meeting of April 4, 2018, shareholders approved to extend the validity period of the authorized share capital and the combined dilution limitations for authorized and contingent share capital as specified in Article 5^{bis} and 5^{ter} of the Articles of Association.

Up to and including April 4, 2020, the Board of Zurich Insurance Group Ltd is authorized to increase the authorized share capital (Art. 5^{bis}) by an amount not exceeding CHF 4,500,000 by issuing up to 45,000,000 fully paid registered shares with a nominal value of CHF 0.10 each. This authorized share capital corresponds to about 30 percent of the total registered shares issued as of December 31, 2018. Share issuances out of authorized share capital where the shareholders' subscription rights are restricted or excluded are limited to 15,000,000 shares (i.e., less than 10 percent of the total registered shares issued as of December 31, 2018).

The contingent share capital of Zurich Insurance Group Ltd (Art. 5^{ter} 1a) may be increased by an amount not exceeding CHF 3,000,000 by issuing of up to 30,000,000 fully paid registered shares with a nominal value of CHF 0.10 each by the voluntary or mandatory exercise of conversion and/or option rights, which are granted in connection with the issuance of loans, bonds, similar debt instruments, equity-linked instruments or other financial market instruments (collectively, the 'financial instruments') by Zurich Insurance Group Ltd or one of its Group companies, or by mandatory conversion of financial instruments issued by Zurich Insurance Group Ltd or one of its Group companies, that allow for contingent mandatory conversion into shares of Zurich Insurance Group Ltd, or by exercising option rights which are granted to the shareholders. This contingent share capital corresponds to about 20 percent of the total registered shares issued as of December 31, 2018.

Up to and including April 4, 2020, the total number of new shares which could be issued from (i) authorized share capital under Art. 5^{bis} where the subscription rights are restricted or excluded and (ii) contingent share capital in connection with financial instruments under Art. 5^{ter} 1a where the advance subscription rights are restricted or excluded is limited to 30,000,000 shares (i.e., less than 20 percent of the total registered shares issued as of December 31, 2018).

Moreover, there is an additional contingent share capital (Art. 5ter 2a) of CHF 494,723.20, representing 4,947,232 fully paid registered shares with a nominal value of CHF 0.10 each, which may be issued to employees of Zurich Insurance Group Ltd or one of its Group companies. For further information on the capital structure and the authorized and contingent share capital, see the audited consolidated financial statements, note 19 on pages 225 to 227. This contingent share capital compares to about 3.3 percent of the current total registered shares issued as of December 31, 2018.

For further information please see Article 5^{bis} and 5^{ter} of the Articles of Association, as published under the following link: www.zurich.com/IR-articles-of-association.

Changes to share capital during 2018

During 2018, a total of 8,176 shares were issued to employees out of contingent share capital. As a result, on December 31, 2018, the share capital amounted to CHF 15,134,802.70 (151,348,027 shares). The authorized share capital (Art. 5^{bis} 1) amounted to CHF 4,500,000 (45,000,000 shares). The contingent share capital for financial instruments (Art. 5^{ter} 1a) amounted to CHF 3,000,000 (30,000,000 shares) and the contingent share capital for employees (Art. 5^{ter} 2a) amounted to CHF 494,723.20 (4,947,232 shares).

On April 11, 2018, the Board of Directors launched a public share buy-back program of 1,740,000 of Zurich Insurance Group Ltd's own shares for cancellation purposes, which was completed on May 18, 2018. The purchase value of the repurchased own shares corresponded to CHF 548,167,352. For further information, see the audited consolidated financial statements note 19 on pages 225 to 227.

Changes to share capital during 2017

During 2017, a total of 732,445 shares were issued to employees out of contingent share capital. As a result, on December 31, 2017, the share capital amounted to CHF 15,133,985.10 (151,339,851 shares) and the authorized share capital (Art. 5bis 1) amounted to CHF 4,500,000 (45,000,000 shares). The contingent share capital for financial instruments (Art. 5ter 1a) amounted to CHF 3,000,000 (30,000,000 shares) and the other contingent share capital for employees (Art. 5ter 2a) amounted to CHF 495,540.80 (4,955,408 shares).

Summary of changes in the ordinary share capital over the last two years

	Share capital in CHF	Number of shares	Nominal value in CHF
As of December 31, 2016	15,060,740.60	150,607,406	0.10
Newly issued shares from contingent capital	73,244.50	732,445	0.10
As of December 31, 2017	15,133,985.10	151,339,851	0.10
Newly issued shares from contingent capital	817.60	8,176	0.10
As of December 31, 2018	15,134,802.70	151,348,027	0.10

For information on changes of share capital during 2016, see the Annual Report 2016 of Zurich Insurance Group, page 35, pages 174 to 175 and pages 224 to 225 (www.zurich.com/en/investor-relations/results-and-reports).

Shares and participation certificates

Zurich Insurance Group Ltd's shares are registered shares with a nominal value of CHF 0.10 each. The shares are fully paid in. Pursuant to article 14 of the Articles of Association, each share carries one vote at shareholders' meetings, entitles all shareholders to dividend payments (excluding treasury shares) and the registered holder to exercise all other membership rights in respect of that share.

Some interests in shares are held by investors in the form of American Depositary Receipts (ADRs)[1]. As of December 31, 2018, investors held 23'893'050 ADRs (representing 2'389'305 Zurich Insurance Group Ltd shares).

Profit-sharing certificates

Zurich Insurance Group Ltd has not issued any profit-sharing certificates.

Limitations on transferability and nominee registrations

The Articles of Association do not provide for any limitations on transferability except for the following:

Registration as a shareholder requires a declaration that the shareholder has acquired the shares in his or her own name and for his or her own account. Nominees holding Zurich Insurance Group Ltd shares may for the benefit of, or as nominee for another person, be registered for up to 200,000 shares with voting rights, notwithstanding that the nominee does not disclose the identity of the beneficial owner. A nominee, however, is entitled to be registered as a shareholder with voting rights of more than 200,000 shares if the nominee discloses the identity of each beneficial owner and informs the beneficial owners about corporate actions, consults as to the exercise of voting rights and pre-emptive rights, transfers dividends and acts in the interests of and in accordance with the instructions of the beneficial owner.

There are special provisions relating to the registration and exercise of rights attached to shares by The Bank of New York Mellon Corporation in connection with the Zurich Insurance Group Ltd ADR program.

Convertible bonds and options

Zurich Insurance Group Ltd had no public convertibles or options outstanding as of December 31, 2018. For information on employee share plans, see the audited consolidated financial statements, note 21 on pages 236 to 237.

[1] Zurich Insurance Group Ltd has established an American Depositary Share, or ADS, level 1 program in the U.S. Under this program, The Bank of New York Mellon Corporation issues the ADSs. Each ADS represents the right to receive one-tenth of one share of Zurich Insurance Group Ltd. Each ADS also represents securities, cash or other property deposited with The Bank of New York Mellon Corporation but not distributed to ADS holders. Zurich's ADSs are traded over the counter (OTC) and are evidenced by American Depositary Receipts, or ADRs. Since July 1, 2010, Zurich's ADRs have been traded on "OTCQX", an electronic platform operated by OTC Markets Group Inc. under the symbol ZURVY. ADS holders are not treated as shareholders of Zurich Insurance Group Ltd and are not able to directly enforce or exercise shareholder rights. Only The Bank of New York Mellon Corporation as Depositary of the level 1 program may exercise voting rights with respect to instructions received from beneficial owners of ADRs.

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Board of Directors

A diverse and sustainable value-creating Board

The governance structure that controls relations between our Board and our management and the truly diverse composition of our Board, enable Zurich to create sustainable value for our shareholders, customers, employees and other stakeholders.

Michel M. Liès
Chairman

Nationality: Luxembourg

Born: 1954

46

Committee membership:
Governance, Nominations and Sustainability Committee (Chairman), Remuneration Committee

Other directorships within the Group:
Zurich Insurance Company Ltd

Christoph Franz
Vice-Chairman

Nationality: Swiss and German

Born: 1960

46

Committee membership:
Remuneration Committee (Chairman), Governance, Nominations and Sustainability Committee

Other directorships within the Group:
Zurich Insurance Company Ltd

Joan Amble
Member of the Board of Directors

Nationality: U.S.

Born: 1953

46

Committee membership:
Risk and Investment Committee

Other directorships within the Group:
Zurich Insurance Company Ltd

Catherine Bessant
Member of the Board of Directors

Nationality: U.S.

Born: 1960

47

Committee membership:
Remuneration Committee,
Audit Committee

Other directorships within the Group:
Zurich Insurance Company Ltd

Monica Mächler
Member of the Board of Directors

Nationality: Swiss

Born: 1956

48

Committee membership:
Governance, Nominations and Sustainability Committee,
Audit Committee

Other directorships within the Group:
Zurich Insurance Company Ltd

Dame Alison Carnwath
Member of the Board of Directors

Nationality: British

Born: 1953

47

Committee membership:
Audit Committee (Chairman), Governance, Nominations and Sustainability Committee, Risk and Investment Committee

Other directorships within the Group:
Zurich Insurance Company Ltd

Kishore Mahbubani
Member of the Board of Directors

Nationality: Singapore

Born: 1948

48

Committee membership:
Remuneration Committee,
Risk and Investment Committee

Other directorships within the Group:
Zurich Insurance Company Ltd

Jeffrey Hayman
Member of the Board of Directors

Nationality: U.S.

Born: 1960

47

Committee membership:
Risk and Investment Committee (Chairman), Governance, Nominations and Sustainability Committee

Other directorships within the Group:
Zurich Insurance Company Ltd

David Nish
Member of the Board of Directors

Nationality: British

Born: 1960

48

Committee membership:
Audit Committee, Risk and Investment Committee

Other directorships within the Group:
Zurich Insurance Company Ltd

Board of Directors

The Board, under the leadership of the Chairman, is responsible for determining the overall strategy of the Group and supervising senior management. It holds the ultimate decision-making authority for Zurich Insurance Group Ltd, except for decisions on matters reserved for the shareholders.

Board of Directors and its Committees
as of December 31, 2018

Board of Directors

Michel M. Liès*	Catherine Bessant	Monica Mächler
Christoph Franz	Dame Alison Carnwath	Kishore Mahbubani
Joan Amble	Jeffrey Hayman	David Nish

Governance, Nominations & Sustainability Committee	Remuneration Committee	Audit Committee	Risk and Investment Committee
Michel M. Liès*	Christoph Franz*	Dame Alison Carnwath*	Jeffrey Hayman*
Dame Alison Carnwath	Catherine Bessant	Catherine Bessant	Joan Amble
Christoph Franz	Michel M. Liès	Monica Mächler	Dame Alison Carnwath
Jeffrey Hayman	Kishore Mahbubani	David Nish	Kishore Mahbubani
Monica Mächler			David Nish

* Chairman of Board or Board Committee, respectively.

The members of the Board are elected by the shareholders at the AGM. The Board constitutes itself in its first meeting after the AGM, except for the Chairman and the members of the Remuneration Committee who, as required by the Ordinance AEC, in force since January 1, 2014, are elected by the shareholders.

The term of office of a Board member ends after completion of the next AGM. As a consequence, each member of the Board must be re-elected at the AGM each year.

All Directors of Zurich Insurance Group Ltd are also members of the Board of Directors of Zurich Insurance Company Ltd. Mr. Liès also serves as Chairman of that board. None of the Directors have further board memberships within the Group.

Fritz Gerber is the Honorary Chairman of Zurich Insurance Group Ltd and of Zurich Insurance Company Ltd. He was Chairman of Zurich Insurance Company Ltd from 1977 to 1995 and its Chief Executive Officer from 1977 to 1991. In recognition of his leadership and services to these companies, he was appointed Honorary Chairman. Such designation does not confer Board membership or any Director's duties or rights, nor does it entitle him to any Directors' fees.

Board Composition

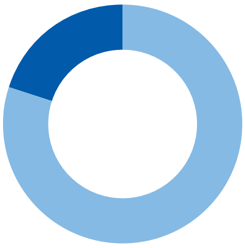
Diversity is a key factor for success in today's fast-changing global environment. Zurich's Board consists of individuals with different backgrounds and experience, and a diverse set of knowledge and skills. The Board can draw on this diverse group of individuals to carry out its responsibilities and tasks, while taking into account a full range of current business needs.

As of December 31, 2018, the Board included members of six different nationalities. Board members' business experience covers a broad range of jurisdictions, giving the Board profound collective knowledge of international business practices. The Board also benefits from the broad cultural, educational and professional backgrounds of its members, which include financial services, manufacturing, engineering, and legal and regulatory experience.

The composition as of December 31, 2018 in terms of length of tenure, gender, background, experience, knowledge and skills, as well as nationality, was as follows and average length of tenure was 3.5 years:

Board by length of tenure

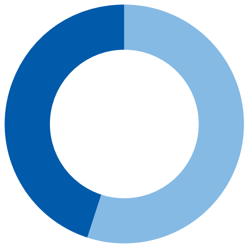
%, as of December 31, 2018



Less than 5 years	80
Between 5 and 10 years	20

Board by gender

%, as of December 31, 2018



Male	55
Female	45

Board by background, experience, skills and knowledge

%, as of December 31, 2018

Insurance	33
Banking	22
Non-financials	22
IT and technology	11
Macro-economics	11
Regulatory and governance	11
Audit and accounting	22
CEO	44
CFO	22
COO	11

Sector Specialization Role

Board by nationality

%, as of December 31, 2018

Switzerland	11
Luxembourg	11
U.S.	33
UK	22
Germany	11
Singapore	11

Corporate governance report (continued)

Biographies

Michel M. Liès
Chairman

Skills and experience
Michel Liès has 40 years' experience in global insurance and reinsurance, life insurance, and property and casualty insurance. He has held a number of positions in the industry, including Group CEO of Swiss Re. He began his career at the reinsurer in 1978, working first in the life market in Latin America before moving to Europe in 1983, where he held a number of senior positions within Swiss Re's life businesses. In 1994 he moved into Swiss Re's non-life sector, with responsibility for southern Europe and Latin America. From 1998 he served as Swiss Re's Head of Latin America Division until 2000, when he was appointed Head of the Europe Division of its Property & Casualty Business Group. In 2005 he became Swiss Re's Head Client Markets with responsibility for client relationships worldwide, and was also appointed as a member of the reinsurer's Group Executive Committee. From 2011 to 2012 Mr. Liès served as Swiss Re's Chairman of Global Partnerships, which works with governments, international development bodies and non-governmental organizations (NGOs) to mitigate and address global risks and increase resilience. He was appointed Swiss Re's Group CEO in February 2012 and served in that role until his retirement from Swiss Re in 2016. He became Chairman of the Board of Zurich Insurance Group Ltd and Zurich Insurance Company Ltd in April 2018.

Committee membership
Governance, Nominations and Sustainability Committee (Chairman),
Remuneration Committee

Other directorships within the Group
Zurich Insurance Company Ltd

External appointments
Mr. Liès is a member of the board of the Institute of International Finance (IIF), advisory board member of the Beirat Zukunft Finanzplatz, trustees board member of Avenir Suisse and of The Swiss Institute of International Studies. He is also a member of the European Financial Services Round Table.

Educational background
Mr. Liès holds a master's degree in mathematics from the Swiss Federal Institute of Technology in Zurich (ETH).

Christoph Franz
Vice-Chairman

Skills and experience
Christoph Franz started his professional career in 1990 at Deutsche Lufthansa AG. From 1994 until 2003 he held different executive functions at Deutsche Bahn AG, including as member of the executive board and CEO of the passenger transport division. In 2004 he became CEO of Swiss International Air Lines Ltd, and in 2009 was promoted to the role of deputy Chairman of the executive board of Deutsche Lufthansa AG and CEO Passenger Airlines. From 2011 to 2014, Mr. Franz was Chairman of the executive board and CEO of Deutsche Lufthansa AG. He became a member of the boards of Zurich Insurance Group Ltd and Zurich Insurance Company Ltd in April 2014. He was elected Vice-Chairman in April 2018.

Committee membership
Remuneration Committee (Chairman),
Governance, Nominations and Sustainability Committee

Other directorships within the Group
Zurich Insurance Company Ltd

External appointments
Mr. Franz was elected Chairman of the board of Roche Holding Ltd in March 2014. He is also a member of the board of directors of Chugai Pharmaceuticals Ltd, and of Stadler Rail. Mr. Franz serves as a member of the board of trustees of the Ernst-Goehner-Foundation, of Avenir Suisse, of the Swiss Study Foundation and of the Lucerne Festival and is a member of the advisory board of the University of St. Gallen (HSG). He was named as an honorary professor of business administration at the University of St. Gallen in May 2017. In September 2017, the International Committee of the Red Cross (ICRC) appointed Mr. Franz as a member of its Assembly, the organization's top governing body, in May 2018 he was elected to the Assembly Council.

Educational background
Mr. Franz studied industrial engineering at the Technical University Darmstadt (Germany) and completed his studies with a Ph.D. in economic sciences (Dr. rer. pol.) at the same university. He also studied at the Ecole Centrale de Lyon (France) and conducted post-doctorate research at the University of California, Berkeley.

Joan Amble
Member of the Board of Directors

Skills and experience
Joan Amble has substantial financial industry experience. She started her professional career as an accountant with Ernst & Ernst (currently Ernst & Young) in 1977. From 1984 to 1989 she served at the Financial Accounting Standards Board (FASB), specializing in pensions, derivatives and other financial instruments. She then spent 14 years with the General Electric Company (GE) in various leadership roles, including CFO GE Real Estate, COO and CFO GE Capital Markets, and as vice president and chief accounting officer GE Financial Services. From 2004 to May 2011, Ms. Amble served as executive vice president and principle accounting officer, and until the end of 2011 as executive vice president, Finance, of the American Express Company. In December 2011, Ms. Amble completed a four-year term as a member of the Financial Accounting Standards Advisory Council (FASAC). She has been a member of the Boards of Zurich Insurance Group Ltd and of Zurich Insurance Company Ltd since April 2015.

Committee membership
Risk and Investment Committee

Other directorships within the Group
Zurich Insurance Company Ltd

External appointments
Ms. Amble is a member of the board of Sirius XM Satellite Radio, where she chairs the audit committee. In addition, she is a member of the board and the audit committee at Booz Allen Hamilton. In January 2015, Ms. Amble was appointed to the Public Company Accounting Oversight Board's Standing Advisory Group, which advises on the development of auditing and professional practice standards. Since October 2016, Ms. Amble has been an independent adviser to the Control and Risk Committee of the Executive Committee of the U.S. affiliate of Société Générale S.A., a French multinational banking and financial services company. She is also involved in developing women in business, including as chair emeritus and co-founder of W.O.M.E.N in America, LLC and through her various speaking engagements. Ms. Amble also participates in forums and speaks on corporate governance.

Educational background
Ms. Amble received a Bachelor of Science in accounting from The Pennsylvania State University, and later became a certified public accountant (currently inactive).

Catherine Bessant

Member of the Board of Directors

Skills and experience

Catherine Bessant is chief operations and technology officer at Bank of America and a member of the Bank of America's executive management team. Since joining Bank of America in 1982 as a corporate banker, she has held numerous senior leadership positions within that company: president of Global Product Solutions and Global Treasury Services; chief marketing officer; president of Consumer Real Estate and Community Development Banking; national Small Business Segment executive; and market president of Bank of America, Florida. Prior to being appointed to her current position, Ms. Bessant served as president of Global Corporate Banking. Ms. Bessant has led Bank of America's Global Technology and Operations since 2010. In that role she is responsible for end-to-end technology and operating services across the company, overseeing nearly 95,000 employees and contractors in more than 35 countries. She became a member of the Board of Zurich Insurance Group Ltd and Zurich Insurance Company Ltd in March 2017.

Committee membership

Remuneration Committee, Audit Committee

Other directorships within the Group

Zurich Insurance Company Ltd

External appointments

Ms. Bessant is on the advisory board of the Ross School of Business at the University of Michigan. She previously served 16 years on the board of directors of Florida Blue, formerly Blue Cross Blue Shield of Florida, including serving as lead independent director.

Educational background

Ms. Bessant holds a Bachelor of Business Administration from the University of Michigan Ross School of Business.

Dame Alison Carnwath

Member of the Board of Directors

Skills and experience

Dame Alison Carnwath has substantial financial industry experience. She began her career with Peat Marwick Mitchell, now KPMG, where she practiced as a chartered accountant from 1975 to 1980. From 1980 to 1982, she worked as a corporate financier for Lloyds Bank International. From 1982 to 1993, she was assistant director, then director, at J. Henry Schroder Wagg & Co in London and New York. From 1993 to 1997, Ms. Carnwath was a senior partner at the financial advisory firm Phoenix Partnership. The firm was taken over by Donaldson, Lufkin & Jenrette (DLJ) in late 1997; she continued working for DLJ until 2000. Ms. Carnwath has held several board offices. From 2000 to 2005, she was the Chairman of the board of Vitec Group plc, from 2001 to 2006 a director of Welsh Water, from 2004 to 2007 of Friends Provident plc, from 2004 to 2007 of Gallaher Group and from 2007 to 2010, she was the independent Chairman of MF Global Inc. She also served on the boards of directors of Barclays from 2010 to 2012, and of Man Group plc from 2001 to 2013. From 2008 to July 2018 she was Chairman of the board of Land Securities Group plc. She has been a member of the boards of Zurich Insurance Group Ltd and of Zurich Insurance Company Ltd since March 2012.

Committee membership

Audit Committee (Chairman), Governance, Nominations and Sustainability Committee, Risk and Investment Committee

Other directorships within the Group

Zurich Insurance Company Ltd

External appointments

Ms. Carnwath has been a senior advisor of Evercore Partners since 2011. She has been a member of the board of PACCAR Inc. since 2005 and since September 2013 a member of the advisory council of the St. George's Society of New York. Since May 2014 she has been a member of the supervisory board of BASF SE and Chairman of the Audit Committee of BASF SE. In May 2018 she was appointed as independent non-executive director and member of the Audit Committee of BP plc.

Educational background

Ms. Carnwath graduated in economics and German from the University of Reading. She was awarded honorary doctorates (LLB) from the University of Reading and the University of Exeter.

Jeffrey Hayman

Member of the Board of Directors

Skills and experience

Mr. Hayman began his career as a claims representative in the property and casualty department of Travelers Companies in the U.S. in 1983, where he later held several positions. In 1998 he joined AIG as regional vice president, personal lines at AIU Far East in Japan. Beginning in 2003, he held various leadership positions within AIG, including as Chairman of AIU Insurance Company in Japan and president and CEO of AIU Far East Holdings, Japan and Korea. From 2009 to 2011, Mr. Hayman served as senior vice president and chief administrative officer, and from 2011 to 2013 as executive vice president and CEO, Global Consumer Insurance, at AIG. In 2013 he served as president of international insurance operations at Starr Companies. He then became an independent consultant and advisor. He has been a member of the boards of Zurich Insurance Group Ltd and of Zurich Insurance Company Ltd since March 2016.

Committee membership

Risk and Investment Committee (Chairman), Governance, Nominations and Sustainability Committee

Other directorships within the Group

Zurich Insurance Company Ltd

External appointments

None

Educational background

Mr. Hayman holds an MBA in finance from the University of Hartford, Barney School of Business and Public Administration, West Hartford, and a bachelor's degree in arts, economics and political science from Saint Olaf College, Northfield. He is a chartered life underwriter and a chartered financial consultant.

Corporate governance report (continued)

Biographies (continued)

Monica Mächler

Member of the Board of Directors

Skills and experience

Monica Mächler has substantial legal, regulatory and governance expertise in a national and international context. She served as vice-chair of the board of directors of the integrated Swiss Financial Market Supervisory Authority (FINMA) from 2009 to 2012, after having been the director of the Swiss Federal Office of Private Insurance from 2007 to 2008. From 2010 to 2012, Ms. Mächler chaired the Technical Committee of the International Association of Insurance Supervisors (IAIS). She assumed the roles of Group General Counsel and Head of the Board Secretariat of Zurich Insurance Group from 1999 to 2006 and was appointed a member of the Group Management Board in 2001 after joining in 1990. During the years 1985 to 1990 she was in private practice specializing in banking and business law. Ms. Mächler has been a member of several Swiss federal expert commissions on regulatory projects and regularly speaks, lectures and publishes on matters related to international business law and regulation, and their impact. From May 2012 until May 2018 she was a member of the supervisory board of directors of Deutsche Börse AG. She has been a member of the boards of Zurich Insurance Group Ltd and of Zurich Insurance Company Ltd since April 2013.

Committee membership

Governance, Nominations and Sustainability Committee, Audit Committee

Other directorships within the Group

Zurich Insurance Company Ltd

External appointments

Ms. Mächler has been a member of the board of directors of Cembra Money Bank AG since April 2015. In April 2018, she was elected to the board of directors of GAM Holding Ltd. She also chairs the advisory board of the International Center for Insurance Regulation at the Goethe University Frankfurt am Main and serves on the boards of the Stiftung für schweizerische Rechtspflege and of the Europa Institut at the University of Zurich.

Educational background

Ms. Mächler earned her J.D. at the University of Zurich's Law School and complemented her studies by attending programs on UK, U.S. and private international law. She is admitted to the bar of the Canton of Zurich.

Kishore Mahbubani

Member of the Board of Directors

Skills and experience

Kishore Mahbubani began his career in 1971 as a diplomat with the Singapore Foreign Service, in which he served until 2004, with postings in Cambodia, Malaysia, Washington D.C. and New York. He served two postings as Singapore's ambassador to the UN and as President of the UN Security Council in January 2001 and May 2002. Mr. Mahbubani was permanent secretary of the Singapore Foreign Ministry from 1993 to 1998. He served as dean at the Lee Kuan Yew School of Public Policy of the National University of Singapore (NUS) from its founding in 2004 until the end of 2017. He continues to be a professor in the practice of public policy at the NUS. He has spoken and has published extensively on geopolitical and economic issues. In 2013 the Financial Times chose one of his books, 'The Great Convergence: Asia, the West and the Logic of One World,' as one of the best books about economics in that year. His latest book, 'Has the West Lost It?,' published in London in April 2018, was described by Martin Wolf as "a compelling warning." He has been a member of the Boards of Zurich Insurance Group Ltd and of Zurich Insurance Company Ltd since April 2015.

Committee membership

Remuneration Committee, Risk and Investment Committee

Other directorships within the Group

Zurich Insurance Company Ltd

External appointments

In September 2017 he was appointed non-executive Chairman of the board of Aggregate Asset Management. Since January 2016 he has also been an independent director of the board of Wilmar International Limited, Singapore. In addition, he has served on boards and councils of several institutions in Singapore, Europe and North America, and is currently a member of Yale's President's Council on International Activities (PCIA), the World Economic Forum's Global Agenda Council on Geo-economics and the Singapore Social Science Research Council.

Educational background

Mr. Mahbubani graduated with a first-class honors degree in philosophy from the University of Singapore and an M.A. in philosophy from Dalhousie University, Canada, where he was also awarded an honorary doctorate.

David Nish

Member of the Board of Directors

Skills and experience

David Nish started his professional career in 1981 at Price Waterhouse (now PWC) in the UK, where he served as an audit and transaction partner from 1993 to 1997. In 1997, he joined ScottishPower plc as deputy finance director, and in 1999 he was promoted to group finance director, a role he held until 2005 when he became executive director responsible for the division operating ScottishPower's regulated transmission and distribution business. In 2006, Mr. Nish became group finance director at global investment management and life insurance group Standard Life plc, and was promoted to group CEO of Standard Life plc in 2010, a position he held until 2015. He has also served as deputy Chairman of the Association of British Insurers, as a member of TheCityUK board advisory committee, as a member of the financial services advisory board of the Scottish government and as a council member of the Scottish Institute of Chartered Accountants. He has been a member of the boards of Zurich Insurance Group Ltd and of Zurich Insurance Company Ltd since March 2016.

Committee membership

Audit Committee, Risk and Investment Committee

Other directorships within the Group

Zurich Insurance Company Ltd

External appointments

Mr. Nish is a non-executive director of HSBC Holdings plc and of Vodafone Group plc. His former appointments include non-executive directorships at UK Green Investment Bank plc, HDFC Life (India), Northern Foods plc, Thus plc, the Royal Scottish National Orchestra and London Stock Exchange Group plc.

Educational background

Mr. Nish holds a bachelor's degree in accountancy from the University of Glasgow and is a chartered accountant with the Institute of Chartered Accountants of Scotland.

The business address for each Board member is Mythenquai 2, 8002 Zurich, Switzerland.

Independence of the members of the Board of Directors

Zurich considers the independence of its Board members to be an essential feature of good corporate governance. Zurich's independence criteria comply with applicable laws and reflect best-practice standards such as the SIX Exchange Regulation Directive on Information relating to Corporate Governance and the Swiss Code of Best Practice. As of December 31, 2018, the Board consisted entirely of Directors who were non-executive, independent from the management and who – except for Ms. Mächler – had never held an executive position in the Group. Ms. Mächler held an executive position until 2006 and was elected in 2013 as a non-executive Board member. According to the guidelines of the Swiss Code of Best Practice, she is considered independent. For further information on the Group's independence policy, please see art. 16.6 of the Annex to the Organizational Rules (www.zurich.com/en/about-us/corporate-governance/corporate-documents).

The Governance, Nominations and Sustainability Committee reviews the Board members' independent status annually and reports its findings to the Board for final determination. Board members are also subject to rules and regulations to avoid conflicts of interest and prevent any misuse of insider information.

External mandates

In line with the Ordinance AEC, art. 33 of Zurich's Articles of Association, has rules on the number of mandates members of the Board and of the ExCo are permitted to hold, as shown in the table below.

Art. 33, para. 1, of the Articles of Association sets forth the following, generally applicable, maximum limits:

	Board of Directors	Executive Committee
Additional mandates for listed companies	3 maximum	1 maximum
Mandates for non-listed companies	5 maximum	3 maximum

Exempted from this general limit are the following categories of mandates (art. 33, para. 2, of the Articles of Association):

	Board of Directors	Executive Committee
Mandates for Group subsidiaries	No limit	
Mandates on behalf of the Group	5 maximum	5 maximum
Mandates for associations, charitable organizations, foundations or pension funds	5 maximum	5 maximum

Multiple mandates for different companies under unified control are counted as a single mandate. The maximum limits set forth in the Articles of Association do not discharge the members of the Board or ExCo from their duties to act with due care and protect Group interests. As in the past, additional mandates may be assumed only where, upon assuming such mandates, time and resources remain available to perform the office held in the Group.

Size of Board and tenure

The Articles of Association require in art. 21 that the Board shall consist of not less than seven and not more than thirteen members. According to the Group's Organizational Rules (art. 4.4), in general, the maximum tenure of Board members may not exceed 12 years and no individual of 72 years of age or older shall be nominated or stay in office as a Director, although exceptions may be made under special circumstances (https://www.zurich.com/en/about-us/corporate-governance/corporate-documents).

Elections

As required by Swiss law, directors and the members of the Remuneration Committee are elected annually. Directors are elected by an absolute majority of the votes represented (art. 17 and 21 of the Articles of Association).

Tom de Swaan, Fred Kindle and Susan Bies did not stand for re-election at the AGM on April 4, 2018. All other Board members were re-elected for another one-year term. Michel M. Liès was newly elected as Chairman. As members of the Remuneration Committee, the AGM elected Catherine Bessant, Christoph Franz, Michel M. Liès and Kishore Mahbubani. As independent voting rights representative, the shareholders elected Mr. lic. iur. Andreas G. Keller, attorney at law.

As announced December 14, 2018, and on February 6, 2019, the Board will propose that shareholders elect Jasmin Staiblin, Michael Halbherr and Barry Stowe as new members of the Board at the next AGM on April 3, 2019. David Nish will not stand for re-election.

The Board proposes to shareholders that they re-elect all other current members of the Board at the AGM on April 3, 2019, and that they elect Jasmin Staiblin, Michael Halbherr and Barry Stowe as new members of the Board.

The Board proposes to shareholders that they elect or re-elect as follows:

- as members: Michel M. Liès, Joan Amble, Catherine Bessant, Alison Carnwath, Christoph Franz, Jeffrey Hayman, Monica Mächler, Kishore Mahbubani, Jasmin Staiblin, Michael Halbherr and Barry Stowe
- as Chairman: Michel M. Liès
- as members of the Remuneration Committee: Catherine Bessant, Christoph Franz, Michel M. Liès, Kishore Mahbubani and Jasmin Staiblin
- as independent voting rights representative: Mr. lic. iur. Andreas G. Keller, attorney at law

Internal organizational structure

The Board is chaired by the Chairman, or in his absence, by the Vice-Chairman. The Vice-Chairman is appointed by the Board. The Board also appoints its secretary. The Board has a standard set of topics that is presented at its meetings throughout the year. It is regularly informed of developments relevant to the Group and is provided with timely information in a form and of a quality appropriate to the discharge of its duties in accordance with the standards of care set out in Article 717 of the Swiss Code of Obligations.

The Group CEO attends Board meetings ex officio. Members of the ExCo are regularly invited by the Board to attend meetings. Other executives also attend meetings from time to time at the invitation of the Board. Most Board meetings include private sessions of the Board without the participation of management members.

The Board is required to meet at least six times each year. During 2018 it held 12 meetings (of which seven were partly attended by tele-/videoconference and five were held over two days). One meeting was fully dedicated to the discussion of strategy. Five meetings lasted four or more hours during the course of a day and seven meetings lasted less than three hours on average. In addition, the Board approved one circular resolution.

In 2018, average attendance at Board meetings was 94 percent. In fulfillment of their duties, the members of the Board spent additional time participating in Board committee meetings and preparing for meetings.

Overview of meeting attendance

Overview of meeting attendance

as of December 31, 2018	Board of Directors	Governance, Nominations and Sustainability Committee	Remuneration Committee	Risk and Investment Committee	Audit Committee
No. of meetings held	12	5	5	8	8
No. of members[1]	9	5	4	5	4
Meeting attendance, in %	94	84	100	93	97

Meeting attendance individualized

Joan Amble	12/12	–	–	7/7[4]	1/1[5]
Catherine Bessant	12/12	–	4/4[4]		8/8
Susan Bies[2]	2/4	–	–	1/1[5]	1/1[5]
Alison Carnwath	11/12	2/5	–	6/8	8/8
Tom de Swaan[2]	4/4	2/2[5]	1/1[5]	–	–
Christoph Franz	11/12	4/5	5/5	–	–
Jeffrey Hayman	12/12	5/5	–	8/8	–
Fred Kindle[2]	4/4	2/2[5]	1/1[5]	–	–
Michel M. Liès[3]	9/9	3/3[4]	4/4[4]	–	–
Monica Mächler	12/12	3/3[4]	–	1/1[5]	8/8
Kishore Mahbubani	12/12	–	5/5	8/8	–
David Nish	9/12	–	–	6/7[4]	7/8

[1] Until April 4, 2018, the Board had 11, the Governance, Nominations & Sustainability Committee 5, the Audit Committee 6, the Remuneration Committee 4 and the Risk & Investment Committee 5 members.
[2] Retired at AGM April 4, 2018.
[3] Elected at AGM April 4, 2018.
[4] Joined Committee on April 4, 2018.
[5] Left Committee as of April 4, 2018.

Board responsibilities

The Board is responsible for the ultimate management of Zurich Insurance Group Ltd and of the Group as a whole, as well as for the supervision of management. In particular, it is responsible for taking actions in the following areas:

- **Group strategy:** The Board regularly reviews and discusses, in particular, the Group's business portfolio including its target market, acquisitions, divestitures, customer and intermediaries strategy and its human resources strategy.
- **Finance:** The Board approves the financial and operating plan annually, establishes guidelines for capital allocation and financial planning. Further, the Board reviews and approves the Annual Report and the half year financial reporting of the Group, as well as the Group's updates for the first three months and first nine months of the year. Above certain thresholds, the Board approves major lending and borrowing transactions.
- **Structure and organization of the Group:** The Board determines and regularly reviews the basic principles of the Group's structure and major changes in the Group's management organization, including major changes to Group functions. In this respect, the Board discusses the Group's corporate governance framework and its remuneration system. The Board also adopts and regularly reviews the Group's basic principles of conduct, compliance and risk management. Further, as part of its duty to convene the shareholders' meeting and submit proposals to the shareholders' meeting, it discusses the dividend policy and the Board's proposal for dividend. Within its authority the Board also makes resolutions on capital increases and the certification of capital increases and respective amendments to the Articles of Association.
- **Business Development:** Above certain thresholds, the Board regularly discusses and approves acquisitions and disposals of businesses and assets, investments, new businesses, mergers, joint ventures, co-operations and restructuring of business units or books of businesses.

Activities 2018: In 2018, the Board specifically focused on the following:

- succession of Board members
- ExCo succession
- strategy implementation
- customer trends, structural industry changes and new technologies
- merger and acquisition transactions
- Board self-assessment and resulting recommendations

The Board may establish committees for specific topics, terms of reference and rules with respect to delegated tasks, responsibilities and reporting to the Board. Except for the Remuneration Committee, the Board constitutes such committees from among its members at its own discretion. The members of the Remuneration Committee are elected at the shareholders' meeting. The committees assist the Board in performing its duties. They discuss and propose matters to the Board in order that it may take appropriate actions and pass resolutions unless they are authorized to take resolutions in specific areas on their own. In 2018, committee meetings lasted over an hour and a half on average.

Self-assessment

The full Board and its committees conduct a self-assessment once a year. In 2018 the Board considered the following key aspects that have an influence on its and its committees' effectiveness: a) the Board and committee environment (size, culture and composition, skill set and qualification); b) the work of the Board and its committees (strategy, governance, competition and peer comparison and performance management); and c) the use of time and process (planning quality and allocation). A report identifying key strengths and challenges was produced for, and considered by the Board. The Board is putting into practice steps taking into account the findings of its assessment.

Committees of the Board of Directors

The Board has the following standing committees, which regularly report to the Board and submit proposals for resolution by the Board:

Governance, Nominations & Sustainability Committee

Composition and membership: The Governance, Nominations & Sustainability Committee consists of at least four Board members. Currently, the committee comprises Michel M. Liès (Chairman), Alison Carnwath, Christoph Franz, Jeffrey Hayman and Monica Mächler.

Key tasks and responsibilities: In general, the Governance, Nominations & Sustainability Committee:

- supports the Board, in line with the Group's commitment to good corporate governance, sustainable business conduct and value creation, by establishing best practices in corporate governance across the Group with a view to ensuring that the shareholders' and other important stakeholders' rights are fully protected
- assists the Board in setting an appropriate tone at the top to promote key values and behaviors, and to ensure a sound and open culture throughout the organization
- develops and proposes guidelines to the Board for corporate governance and reviews them
- ensures compliance with corporate governance disclosure requirements and legal and regulatory requirements
- is entrusted with succession planning for the Board, the Group CEO and members of the ExCo. It proposes the principles for the nomination and ongoing qualification of members of the Board and makes proposals to the Board on the composition of the Board, the appointment of the Chairman, the Vice-Chairman, the Group CEO and members of the ExCo. Final decisions for nominations and appointments are made by the Board, subject to shareholder approval, where required. When identifying and proposing candidates as new Board members, preserving and increasing of the Board's diversity is a key consideration. This includes diversity in many respects, and goes beyond gender, to include culture, technical and interpersonal skills, education and viewpoints, experience, nationality and a variety of backgrounds, which should enable the Board to meet the Group's current and future challenges. Apart from specific qualifications, every candidate should possess integrity, be of good standing, and be capable and available to fulfill his or her duty of care by serving, in close collaboration with the other Board members, the best interests of the Group's stakeholders
- reviews the system for management development and supervises progress made in succession planning
- reviews and approves the Group's sustainability strategy and objectives
- reviews and proposes to the Board for approval targets on matters related to environmental, social and governance (ESG) that have a material impact on business strategy, underwriting or business performance

Activities 2018: During 2018, the following topics were discussed in particular:

- succession of Board members
- Board committee composition and succession
- ExCo succession
- developments affecting corporate governance, including changes to Swiss and international laws and regulations
- sustainability strategy and related initiatives
- biannual updates on Zurich's sustainability efforts and, at its most recent meeting, discussed Zurich's new sustainable business approach, including climate change as a focus area thereof

The Governance, Nominations & Sustainability Committee meets at least twice per year. In 2018 it met five times.

Remuneration Committee

Composition and membership: Zurich Insurance Group Ltd's Organizational Rules require the Remuneration Committee to consist of at least three independent non-executive Board members. Currently, the committee comprises Christoph Franz (Chairman), Catherine Bessant, Michel M. Liès and Kishore Mahbubani.

Key tasks and responsibilities: In general, the Remuneration Committee:

- regularly evaluates the Group's remuneration architecture and Zurich's remuneration rules and proposes amendments to the Board, which is responsible for the design, implementation and monitoring of the Group's remuneration framework (further details of the Group's remuneration framework, including the remuneration philosophy and the remuneration governance are set out in the remuneration report on pages 81 to 113)
- reviews and proposes to the Board annually the terms of remuneration of the members of the Board
- based on Zurich's remuneration rules, reviews and proposes to the Board the terms and conditions of employment of the Group CEO and reviews those of other members of the ExCo, as proposed by the Group CEO, including the annual review of performance objectives and performance against these objectives, before submitting them to the Board for approval
- liaises with the Group CEO on other important matters related to employment, salary and benefits
- reviews and proposes to the Board the total variable remuneration pool, reviews the performance related to short-term and long-term incentive plans (STIP and LTIP), and also makes a qualitative assessment of the performance
- reviews and makes proposals to the Board for submission to the AGM on the approval of the Board's and ExCo's remuneration
- discusses the regulatory environment and risk management aspects regarding remuneration, and prepares the remuneration report annually in accordance with applicable laws and regulations

Activities 2018: During 2018, the following topics were discussed in particular:

- performance of the Group, the countries and the ExCo, as well as the approval of the STIP award level and the LTIP vesting level for the period ending December 31, 2017
- approval of the total variable remuneration pool for 2017
- the regulatory environment regarding remuneration, as well as external developments and the implications for Zurich
- the Ordinance AEC, including the maximum amounts of total remuneration for the Board and the ExCo for the shareholder votes at the AGM on April 4, 2018, and subsequently the results of the votes
- in the annual joint meeting with the Risk and Investment Committee, risk management aspects of the Group's remuneration architecture, as well as key activities with respect to identified key risk taker (KRT) positions, e.g., risk-based assessment of KRTs
- the remuneration report and the Board of Directors report on the approval of the remuneration for the Board of Directors and the ExCo
- Zurich's remuneration rules and the Committee Charter were reviewed and approved by the Board of Directors
- the annual Corporate Governance Roadshow
- compensation of the Board and the ExCo, including share ownership in line with guidelines
- activities of the Group Pensions Committee
- review of the performance and incentive architecture for 2019

The Remuneration Committee has retained its own independent advisors, Meridian Compensation Partners, LLC and New Bridge Street, to assist in its review of the remuneration structures and practices.

The Remuneration Committee meets at least twice per year. In 2018 it met five times.

Audit Committee

Composition and membership: Zurich Insurance Group Ltd's Organizational Rules require the Audit Committee to consist of at least four non-executive Board members, independent from management. Currently, the committee comprises Alison Carnwath (Chairman), Catherine Bessant, Monica Mächler and David Nish, all of whom meet the relevant requirements for independence and qualification.

The Charter for the Committees of the Board of Directors of Zurich Insurance Group Ltd (Committees Charter) requires that the Audit Committee, as a whole, should have (i) an understanding of IFRS and financial statements, (ii) the ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves, (iii) experience in preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to those of Zurich Insurance Group Ltd and the Group, or experience in actively supervising one or more persons engaged in these activities, (iv) an understanding of internal controls and procedures for financial reporting, and (v) an understanding of audit committee functions.

To facilitate an ongoing exchange of information between the Risk and Investment Committee and the Audit Committee, the Chairman of the Audit Committee is a member of the Risk and Investment Committee and at least one member of the Risk and Investment Committee is a member of the Audit Committee. The Chairman of the Board regularly participates in both the Audit and Risk and Investment Committee meetings as a guest.

The external auditors, the internal auditors, members of the ExCo and other executives attend Audit Committee meetings to, among other things, discuss auditors' reports, review and assess the auditing concept and the examination process and to assess the activities of both external and internal auditors. Private sessions with external and internal auditors are scheduled at the majority of Audit Committee meetings, to enable discussion without Management members being present.

For more information on the supervision and control of the external audit process, see page 74.

Key tasks and responsibilities: In general, the Audit Committee:

- serves as a focal point for communication and oversight regarding financial accounting and reporting, internal control, actuarial practice, and financial and regulatory compliance
- reviews the Group's auditing process (including establishing the basic principles relating to and making proposals for the audit of Zurich Insurance Group Ltd and the Group)
- at least annually, reviews the standards of internal control, including activities, plans, organization and quality of Group Audit and Group Compliance
- reviews annual and half year consolidated financial statements of the Group, the Group's updates for the first three months and first nine months of the year and the Financial Condition Report of the Group

Activities 2018: During 2018, the following topics were discussed in particular:

- annual and half year reporting with a strong focus on accounting and reserving matters as well as the Group's updates for the first three months and first nine months of the year
- the effectiveness of the internal control framework, including internal controls over financial reporting (ICFR)
- Group Audit work plans, Group Audit findings and management implementation of remedial actions
- the work of the external auditors, the terms of their engagement and the external auditor's findings on key judgments and estimates in financial statements
- the annual Group Compliance Plan, against which it monitored progress during the year, and compliance issues and trends, such as evolving regulatory expectations
- the tender process for the rotation of the external auditor

The Audit Committee meets at least four times per year. In 2018 it met eight times.

Risk and Investment Committee

Composition and membership: Zurich Insurance Group Ltd's Organizational Rules require the Risk and Investment Committee to consist of at least four non-executive Board members independent from management. Currently, the committee comprises Jeffrey Hayman (Chairman), Joan Amble, Alison Carnwath, Kishore Mahbubani and David Nish.

To facilitate an ongoing exchange of information between the Risk and Investment Committee and the Audit Committee, the Chairman of the Audit Committee is a member of the Risk and Investment Committee and a member of the Risk and Investment Committee is a member of the Audit Committee.

Key tasks and responsibilities: In general, the Risk and Investment Committee:

- supports the Board to ensure sound risk and investment management for the Group
- oversees the Group's risk portfolio, in particular the Group's risk tolerance, including agreed limits that the Board regards as acceptable for Zurich, the aggregation of agreed limits across the Group, the measurement of adherence to agreed risk limits and the Group's risk tolerance in relation to anticipated capital levels
- further oversees the Group's enterprise-wide risk governance framework, including risk management and control, risk policies and their implementation and the risk strategy and monitoring operational risks, including in particular IT and cyber risks
- reviews the methodologies for risk identification
- oversees the impact of various risk types on economic and regulatory capital
- reviews, with business management and the Group risk management function, the Group's general policies and procedures and satisfies itself that effective systems of risk management are established and maintained
- receives periodic reports from the Group risk management function and assesses whether significant issues of a risk management and control nature are being appropriately addressed by management in a timely manner
- reviews transactions above the pre-defined threshold
- receives updates on the Group's annual strategic asset allocation, market risk consumption relative to allocated market risk capital and limit and major market risk drivers, accounting investment result, economic investment return relative to liabilities, as well as updates on the performance of asset managers
- assesses the independence and objectivity of the risk management function and reviews the activities, plans, organization and the quality of the risk management and investment management functions
- oversees Zurich's overall risk management framework and investment process

Activities 2018: From an enterprise risk management perspective, during 2018 the Risk and Investment Committee in particular discussed the following topics:

- the effectiveness of the enterprise risk management (ERM) approach, including the annual revision of the Group risk appetite
- the refreshed Group Risk Management ambition and strategy and progress made in implementing it, together with an update on Integrated Assurance
- results of the Group Total Risk Profiling™ (TRP) assessment including risk ownership and mitigation actions
- the Group's Own Risk and Solvency Assessment 2018
- the Group's Recovery Plan 2018, which included a recovery exercise under conditions of stress
- the Group's risk profile and economic and regulatory capital, including development of the internal capital model and risk-based capital limits
- revisions of the Zurich Risk Policy (ZRP)
- Swiss Solvency Test (SST) internal model approval program
- Operational Risk Framework
- regulatory risk
- risk management aspects of the Group's remuneration architecture, discussed during the annual joint meeting with the Remuneration Committee
- macroeconomic developments; investment and asset/liability management, market and credit risks and controls including reports on derivatives; and performance of asset managers
- Zurich's approach on model risk management
- progress made on information security management
- Zurich's real estate investment strategy
- climate change-related risks

For further information on risk governance, see the risk review on pages 121 to 149

The Risk and Investment Committee meets at least four times per year. In 2018 it met eight times.

Areas of responsibility of the Board and management

The Board decides on the strategy of the Group, supervises senior management and addresses key matters in the area of strategy, finance, and organization. In particular, the Board approves the Group's strategic plan and the annual financial plans developed by management. It reviews and approves the Annual Report and the half-year financial reporting of the Group, as well as the Group's updates for the first three months and first nine months of the year, and the annual financial statements of Zurich Insurance Group Ltd. For more details with regard to the responsibilities of the Board see page 52.

Subject to the powers reserved to the Board, the Board has delegated management of the Group to the Group CEO and, under the Group CEO's supervision, to the ExCo and its members. The Group CEO is the highest executive officer in the Group and has responsibility and accountability for the Group's management and performance. The Group CEO represents the overall interests of the Group toward third parties to the extent such interests are not represented by the Board. The Group CEO is responsible for developing and implementing the strategic and financial plans approved by the Board. The Group CEO has specific powers and duties pertaining to strategic, financial and organizational matters and manages, supervises and coordinates the activities of the members of the ExCo and of his other direct reports.

Information and control instruments vis-à-vis the Executive Committee

The Board supervises management and monitors its performance through reporting and controlling processes. The Group CEO and other executives provide information and updates through regular reports to the Board. These include reports on key performance indicators and other Group-relevant financial data, existing and emerging risks, and updates on developments in important markets and on industry peers and other significant events. During 2018, the Chairman of the Board regularly met with the Group CEO. The Chairman meets from time to time with other ExCo members and management outside regular Board meetings. The other members of the Board do so as well, meeting with the Group CFO and the Group CRO in particular.

The Group has an information and financial reporting system. The annual plan for the Group, which includes a summary of financial and operational metrics, is reviewed by the ExCo in detail and approved by the Board. Full-year forecasts are revised if necessary to reflect changes in sensitivities and risks that may affect the results of the Group. Action is taken, where appropriate, when variances arise. This information is reviewed regularly by the ExCo and the Board.

The Group has adopted and implemented a coordinated, formal and consistent approach to risk management and control. Information concerning the Group's risk management and internal control processes is included in the risk review starting on page 121. The internal audit function, the external auditors and the compliance function also assist the Board in exercising its controlling and supervisory duties. Information on these functions' major areas of activity is set out on pages 73 to 76.

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Executive Committee

Executive Committee focused on customers and driving change

Our Executive Committee in its experienced and diverse composition is well prepared for a customer-led transformation and the challenges posed by fast changing technological developments.

Mario Greco
Group Chief Executive Officer

Nationality: Italian **Born:** 1959

66

Urban Angehrn
Group Chief Investment Officer

Nationality: Swiss **Born:** 1965

66

Amanda Blanc
CEO EMEA (Europe, Middle East & Africa)

Nationality: British **Born:** 1967

66

Jeff Dailey
CEO of Farmers Group, Inc.

Nationality: U.S. **Born:** 1957

67

Claudia Dill
CEO Latin America

Nationality: Swiss **Born:** 1966

67

Kathleen Savio
CEO North America

Nationality: U.S. **Born:** 1965

68

Jack Howell
CEO Asia Pacific

Nationality: U.S. **Born:** 1970

67

Gary Shaughnessy
Senior Advisor

Nationality: British **Born:** 1966

69

Alison Martin
Group Chief Risk Officer

Nationality: British **Born:** 1974

68

James Shea
CEO Commercial Insurance

Nationality: Canadian **Born:** 1965

69

George Quinn
Group Chief Financial Officer

Nationality: British **Born:** 1966

68

Kristof Terryn
Group Chief Operating Officer

Nationality: Belgian **Born:** 1967

69

Group Management

Executive Committee

Group Management
as of December 31, 2018

Board of Zurich Insurance Group Ltd

Group CEO

Executive Committee

Management Committees

Group Balance Sheet Committee (GBSC)	Group Risk Committee (GRC)
Chair: Group Chief Financial Officer	Chair: Group Chief Risk Officer

Technical Committees

Asset/Liability Management Investment Committee	Group Pensions Committee	Disclosure Committee
Chair: Group Chief Investment Officer	Chair: Gary Shaughnessy	Chair: Head of Group FAR

To the extent not reserved to the Board, management is delegated to the Group CEO. The Group CEO has overall responsibility and accountability for the Group's management and the performance. The ExCo serves the Group CEO as the core management team in matters of Group-wide strategic, financial and business-policy relevance, including consolidated performance, capital allocation and mergers and acquisitions.

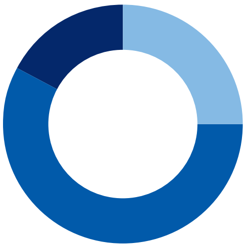
The ExCo is chaired by the Group CEO. As of December 31, 2018, to reflect both lines of business and geography, members of the ExCo included the CEO EMEA (Europe, Middle East & Africa), the CEO North America, the CEO Latin America, the CEO Asia Pacific, the CEO of Farmers Group, Inc. and the CEO Commercial Insurance. The Group CFO, the Group CIO, the Group COO, the Group CRO and Gary Shaughnessy as former CEO EMEA were also members of the ExCo as of December 31, 2018.

ExCo Composition

As of December 31, 2018, the Exco included members of six nationalities. ExCo members' business experience covers a broad range of jurisdictions, giving the ExCo profound collective knowledge of international business practices.

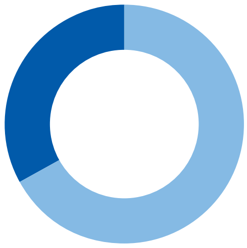
The composition as of December 31, 2018 in terms of length of tenure, gender, as well as nationality was as follows and average length of tenure was of 3 years:

Executive Committee by length of tenure
%, as of December 31, 2018



Less than 1 years	25
Between 1 and 5 years	58
More than 5 years	17

Executive Committee by gender
%, as of December 31, 2018



Male	67
Female	33

Executive Committee by nationality
%, as of December 31, 2018

Switzerland	17
Italy	8
U.S.	25
UK	33
Canada	8
Belgium	8

Changes to the ExCo

On October 5, 2018, Amanda Blanc was appointed CEO EMEA and became a member of the ExCo. Gary Shaughnessy, former CEO EMEA, decided to step down from his role as of the same date. To ensure a smooth transition, Gary Shaughnessy retired from the ExCo as of December 31, 2018.

The following cross-functional committees have been established for key areas to facilitate the coordination and alignment of recommendations to the Group CEO for approval on specific subjects.

Management committees

Group Balance Sheet Committee (GBSC)

Members: Group CFO (Chairman), Group CEO, Group CRO, Group CIO. The Group General Counsel attends the meetings ex officio but is not a voting member.

Key tasks and responsibilities: The GBSC acts as a cross-functional advisory body for matters that could materially affect the financial position of the Group as a whole. The committee issues recommendations to the Group CEO. Core topics are:

- capital management on capital allocations and lending and borrowing decisions
- balance sheet planning on liquidity, solvency, investment and asset/liability management strategies and associated capital allocation, including changes to investment strategy
- business development matters on corporate transactions with third parties, internal restructuring, investments, including real estate, and entry into new types of business and markets
- material Group reinsurance strategy and reinsurance programs
- other topics and matters that may have a material impact on the balance sheet of the Group as determined by the Chairman

The Group Risk Committee (GRC)

Members: Group CRO (Chairman), Group CFO, Group CIO, Group COO, Group General Counsel. The Head of Group Audit is invited ex officio to attend the meetings, but is not a voting member.

Key tasks and responsibilities: The GRC's main function is to review, and provide recommendations to the Group CEO on activities related to the Group's overall risk profile, including insurance, financial markets, credit, operational and strategic risks.

The GRC reviews and recommends on topics such as:

- the overall Group risk appetite, risk tolerance and risk limits, including exceptions to limits over specified thresholds
- requests to enter new lines of insurance business or types of insurance coverage that would have a significant impact on the risk profile of the Group
- changes to the Group Policy Framework and the Zurich Risk Policy (ZRP)
- regulatory developments affecting the Group's risk management and the Group's regulatory reporting
- the Group's TRP assessment and related actions
- prospective changes to capital models and methodologies that have a significant impact on economic solvency ratios
- the Group's model validation policy, and validation findings related to capital models and significant valuation models, including remedial actions
- market and credit risk internal model consumption relative to the Group's capital allocation, including remedial actions
- any significant deviations from established target solvency levels by subsidiaries, including remedial actions if needed

Technical committees

In addition to management committees, the Group's governance structure provides for committees of a more technical nature to support further aspects of Zurich's business activities; these include:

The Asset/Liability Management Investment Committee, chaired by the Group CIO, acts as a cross-divisional body and has primary responsibility for monitoring and reviewing the Group's asset/liability management and the strategic asset allocation of Zurich's invested assets.

The Group Pensions Committee, chaired by Gary Shaughnessy, is responsible for developing, reviewing and advising on the Group governance framework in matters related to retirement benefit arrangements and post-employment benefits, including the relevant policies and processes. It provides oversight and guidance on the Group's retirement benefit arrangements and post-retirement benefits in matters of benefit design, funding, investment and accounting and provides recommendations to the GBSC on material pension-related matters.

The Disclosure Committee, chaired by the Head of Group Financial Accounting and Reporting (FAR), is responsible for reviewing all external communications and disclosures that contain information material to the financial position and/or performance of the Group. In particular, it reviews half-year and year-end IFRS financial results as well as the updates for the first three and nine months of the Group and related documents, e.g., related news releases and analysts' information. It reviews other external communications that contain material information as to the financial position and performance of the Group, proposals from Group Compliance regarding projects that have an impact on the Group and respective dealing restrictions as well as controls and procedures regarding the effectiveness of the Group's internal controls over financial reporting. It makes recommendations to the Group CFO.

Panels

To enhance its understanding and assessment of the challenges and risks Zurich may face, the Group seeks external expertise and perspectives. As of December 31, 2018, the Group had access to one panel of leading academics and experts from business and industry which provides feedback and insights. Panels are not corporate bodies of the Group and have no decision-making powers. They provide expertise and advice to senior management or certain functions of the Group. The Advisory Council for Catastrophes (formerly Natural Catastrophe Advisory Council) provides insights into the patterns of occurrence, predictability and destructiveness of catastrophes and gives feedback about Zurich's approach to such catastrophes to help improve the effectiveness of its underwriting and reinsurance purchasing.

Corporate governance report (continued)

Biographies

Mario Greco
Group Chief Executive Officer

Skills and experience
Mario Greco joined Zurich in March 2016 as Group Chief Executive Officer and member of the Executive Committee.

Mr. Greco started his professional career in management consulting, working in McKinsey & Company's Milan office from 1986 until 1994, where he became a partner in 1992 and subsequently a partner leader in the insurance segment. In 1995, he joined RAS (Allianz Group) in Milan as head of the claims division. He became general manager in charge of the insurance business the following year. In 1998, he was appointed managing director and in 2000, he became the company's CEO. At the end of 2004, Mr. Greco joined Allianz AG's executive board, with responsibility for France, Italy, Spain, Portugal, Greece and Turkey. In April 2005, he joined the Sanpaolo IMI Group in Milan as CEO of EurizonVita and in October 2005, he was appointed CEO of Eurizon Financial Group. From 2007 to 2012, he served at Zurich, first as CEO Global Life and from 2010, as CEO General Insurance. In 2012 he was appointed CEO of Generali.

External appointments
Mr. Greco is a board member of The Geneva Association, a member of the board of trustees of the Lucerne Festival and a member of the International Advisory Council of Bocconi University.

Educational background
Mr. Greco holds a bachelor's degree in economics from the University of Rome and a master's degree in international economics and monetary theory from Rochester University.

Urban Angehrn
Group Chief Investment Officer

Skills and experience
Urban Angehrn joined the Executive Committee as Group Chief Investment Officer in July 2015. Before taking his current position, he served as Head of Alternative Investments and prior to that, from 2010 to 2012, as Head of Strategy Implementation in Investment Management. He joined Zurich in 2007 as Regional Investment Manager for Europe. Before joining Zurich, he held various positions in capital markets-related roles in the insurance and investment banking industries, including as Head of Allocation & Strategy in asset management at the Winterthur Group. He also served as an adviser to Swiss institutional clients in the use of derivatives, and held positions in derivatives marketing and fixed income sales at Credit Suisse and J.P. Morgan.

External appointments
Mr. Angehrn is the Chairman of the Board of Trustees of the Zurich Insurance Group Swiss Pension Plan. He is also a member of the advisory board of the Department of Banking and Finance at the University of Zurich.

Educational background
Mr. Angehrn holds a Ph.D. in mathematics from Harvard University and a Master of Science in theoretical physics from the Swiss Federal Institute of Technology in Zurich (ETH).

Amanda Blanc
CEO EMEA
(Europe, Middle East & Africa)

Skills and experience
Amanda Blanc has nearly 30 years of experience in various insurance markets and has held several senior executive roles across the industry as a qualified chartered insurer. Ms. Blanc joined Zurich as Chief Executive Officer for Europe, Middle East & Africa (EMEA) with additional responsibility for Global Banking Partnerships in October 2018, when she also became a member of the Executive Committee. Before she joined Zurich, Ms. Blanc served as Group CEO of AXA UK & Ireland from 2016 until 2018, having previously joined the board of AXA UK in 2011 as CEO of AXA Insurance, Commercial Lines. Prior to that, she held executive leadership positions at the UK-based insurance broker Towergate Partnership Ltd from 2006 until 2010, served on the executive committee at Groupama Insurance Co Ltd from 2003 until 2006 and was appointed as regional director for her first term at AXA Insurance UK from 1999 until 2003. Ms. Blanc became a management consultant at Ernst & Young in 1998 working on transformational assignments, having started her career as a graduate trainee at Commercial Union Assurance Company Ltd (now Aviva plc) in 1989. Ms. Blanc was the president of the Chartered Insurance Institute in 2013 and was also a previous chair of the UK Insurance Fraud Bureau.

External appointments
Ms. Blanc is chair of the board of the Association of British Insurers. She is a member of the UK Panel on Takeovers and Mergers and a member of the Panel's Hearings Committee.

Educational background
Ms. Blanc graduated with a bachelor's degree in history, with honors, from the University of Liverpool in 1989, and qualified as an Associate of the Chartered Insurance Institute (ACII) in 1993. She received an MBA from Leeds University Business School in 1999.

Jeff Dailey
CEO of Farmers Group, Inc.

Skills and experience
Jeff Dailey began his career in 1980 with Mutual Service Insurance Company. He also worked for Progressive Insurance Company. He went on to form Reliant Insurance Company, an auto insurance start-up owned by Reliance Group Holdings, which was sold to Bristol West Holdings, Inc. in 2001. From 2001 until 2003 Mr. Dailey was Chief Operating Officer (COO) of Bristol West Holdings, Inc. and, in 2003 he was named President and COO of Bristol West Holdings, Inc., in conjunction with the firm's initial public offering (IPO) on the New York Stock Exchange. In 2006, he became CEO of Bristol West Holdings, Inc. Mr. Dailey joined Farmers Group, Inc. in 2007 as Vice President when Farmers acquired Bristol West Holdings, Inc., and he was promoted in 2008 to Executive Vice President of Personal Lines. In January 2011, he was promoted to the position of President and COO of Farmers Group, Inc. He became a member of the Board of Farmers Group, Inc. in February 2011 and has been its Chairman since October 2015. Mr. Dailey was appointed to his current role of CEO of Farmers Group, Inc. and became a member of the Executive Committee in January 2012.

External appointments
Mr. Dailey is a member of The Institutes Board of Trustees and serves on the advisory board of Team Rubicon, a disaster relief organization that brings together military veterans, first responders, medical professionals and technology experts.

Educational background
Mr. Dailey graduated from the University of Wisconsin-Madison with a bachelor's degree in economics and has an MBA from the University of Wisconsin-Milwaukee.

Claudia Dill
CEO Latin America

Skills and experience
Claudia Dill has more than 25 years of experience in the banking and insurance sectors and has held a range of senior international positions. Ms. Dill joined Credit Suisse as an internal auditor in 1990. She moved to Japan in 1992, where she worked as an auditor for Deutsche Bank and Commerzbank. Ms. Dill spent most of 1994 working as an external auditor for Coopers & Lybrand in Moscow, before returning to Switzerland. She resumed working for Credit Suisse from the end of 1994 until 1999 in various roles in the credit risk management department. Ms. Dill joined Zurich in 1999 as Financial Controller of Group Reinsurance and in 2001 was promoted to Chief Financial Officer (CFO) for Group Reinsurance. In 2003, she was appointed CFO for the business division Continental Europe and was promoted in 2004 to CFO of the European Region and European General Insurance business division. In 2007 she was appointed Chief Operating Officer (COO) for the same business area. In 2009, Ms. Dill took on the role of CEO and President for the North America Shared Services Platform (ZFUS) and was promoted in 2010 to Head of Global Business Services, both roles based in the U.S. From 2012 until 2015, Ms. Dill served as COO for the General Insurance business, based in Switzerland. In 2015 she was named CEO General Insurance Latin America, based in Brazil, and was appointed CEO Latin America in 2016. She became a member of the Executive Committee in October 2016.

External appointments
None.

Educational background
Ms. Dill holds an MBA from the Universities of Rochester in the U.S. and Bern, Switzerland, and a master's degree in economics from the University of St. Gallen, Switzerland.

Jack Howell
CEO Asia Pacific

Skills and experience
Jack Howell has more than 20 years experience in the financial services sector, of which more than 10 have been in various senior leadership positions for insurance companies in Asia. Prior to his appointment at Zurich, Mr. Howell was the regional officer for Asia for Assicurazioni Generali based in Hong Kong. He joined Generali from Prudential plc Group, where he briefly served as CEO and President Director for PT Prudential Life Assurance, Indonesia, and for almost six years as CEO of Prudential Vietnam Assurance. Before Prudential, he held various positions in AIG in the Philippines, Hong Kong and New York, co-founded a boutique investment bank called TwentyTen, and spent several years as a consultant, including in The Boston Consulting Group. Mr. Howell joined Zurich in September 2016 as CEO for Asia Pacific and became a member of the Executive Committee in October 2016.

External appointments
None.

Educational background
Mr. Howell holds an MBA from the University of Chicago and a Bachelor of Science in quantitative economics from Tufts University in Massachusetts.

Corporate governance report (continued)

Biographies (continued)

Alison Martin
Group Chief Risk Officer

Skills and experience
Alison Martin has extensive management, financial and commercial experience within the insurance sector. In October 2017, she joined Zurich as Group Chief Risk Officer-Designate and became a member of the Executive Committee. She assumed the role of Group Chief Risk Officer in January 2018. A qualified accountant, Ms. Martin began her career at PwC, where from 1995 to 2003 she worked with insurance clients in audit and advisory roles. She then served in leading executive positions at Swiss Re, starting in 2003 as Finance Director, Life & Health. She was appointed Chief Financial Officer (CFO) of Swiss Re's UK Life & Health business unit in 2005. From 2006 to 2010 she was responsible for Swiss Re's Global Life & Health Risk Transformation team. Starting in January 2011 she served as Group Managing Director of Swiss Re's Life & Health Products Division. She was appointed Swiss Re's Head of Life & Health Business Management in 2013, a position she held until joining Zurich in 2017.

External appointments
Alison Martin became a member of the Swiss Federal Institute of Technology (ETH) Risk Center's advisory board in September 2018.

Educational background
Ms. Martin earned a bachelor's degree in law, with honors, from the University of Birmingham in 1995. In 1998 she qualified with the Institute of Chartered Accountants in England and Wales as an associate member, and in 2010 she completed the Chartered Financial Analyst investment management certificate.

George Quinn
Group Chief Financial Officer

Skills and experience
George Quinn started his career at KPMG 1988 in London, where he held several positions working with the insurance and reinsurance industry. He joined Swiss Re in 1999 as Group Chief Accounting Officer based in Zurich and later served as Chief Financial Officer (CFO) for Swiss Re Group's financial services. Mr. Quinn became the regional CFO for Swiss Re Americas based in New York in 2005. In March 2007 he became Swiss Re Group's CFO. Mr. Quinn joined Zurich in May 2014 as Group CFO and is a member of the Executive Committee.

External appointments
Mr. Quinn is a member of the finance chapter of the Swiss-American Chamber of Commerce.

Educational background
Mr. Quinn holds a degree in engineering from the University of Strathclyde. He is also a member of the Institute of Chartered Accountants in England and Wales.

Kathleen Savio
CEO North America

Skills and experience
Kathleen Savio is Chief Executive Officer for Zurich North America, a position she has held since January 2018. She has more than 25 years of experience working across several disciplines at Zurich. She became a member of the Executive Committee in October 2017 upon her appointment to the position of Chief Executive Officer-Designate for Zurich North America. From 2012 through 2017, she served as the Head of Alternative Markets for Zurich North America, which delivers products and services to customers through multiple distribution channels, including direct, program administrators, crop agents, captive consultants and brokers. Prior to that appointment Ms. Savio held the position of Chief Administrative Officer for North America Commercial. Before assuming that role, she led Corporate and Marketing Communications for North America Commercial, as well as Strategic Initiatives for Marketing and Distribution. She has also held roles in product underwriting and corporate marketing and within key business units. She joined Zurich in 1991.

External appointments
Ms. Savio is vice chair of the Executive Committee of the America Insurance Association (AIA). She is a member of The Chicago Network, an organization of Chicago's leading professional women. She also serves on the board of the St. John's University School of Risk Management.

Educational background
Ms. Savio earned a master's degree in communication and a bachelor's degree in speech communication from Illinois State University. She is also a graduate of the Harvard Business School Advanced Management Program and has participated in executive management programs at Northwestern University's Kellogg School of Management.

Gary Shaughnessy
Senior Advisor

Skills and experience
Gary Shaughnessy was appointed Chair of Zurich's Community Investment Foundation in January 2018. He also maintains some other duties at the Group, including as a strategic advisor, and served as a member of the Executive Committee until December 31, 2018. Before his promotion to CEO Global Life and to the Executive Committee in January 2016 and to CEO EMEA in July 2016 (a position he stepped down from in early October 2018), he was CEO of Zurich UK Life, a role he held from June 2012. In 2014 he assumed the additional role of Country Head for Zurich in the UK. Prior to joining Zurich, Mr. Shaughnessy worked at Fidelity Worldwide Investment, where he was managing director for the UK defined contribution and retail business. His previous experience includes nearly a decade in senior roles within the Prudential Group, including the role of UK managing director, retail life and pensions, and CEO UK retail at M&G Investments. Mr. Shaughnessy's background is in marketing and distribution, with previous roles spanning the broad financial services market at AXA, the Automobile Association and the Bank of Scotland.

External appointments
In June 2017 Mr. Shaughnessy was appointed councilor of the British-Swiss Chamber of Commerce and in August 2018 became a Trustee of Parkinson's UK.

Educational background
Mr. Shaughnessy studied Sports Science at Liverpool John Moores University in the UK.

James Shea
CEO Commercial Insurance

Skills and experience
James Shea began his insurance career at AIG in 1994 as a financial lines underwriter in New York. He joined the American International Underwriters (AIU) division in 1996, where he held several senior underwriting and general management positions. These included senior vice president of International Financial Lines, regional president for Central Europe and the Commonwealth of Independent States and managing director of AIG UK. In 2011 he was appointed president of Global Specialty Lines and in 2012 his role was expanded to CEO of Commercial Insurance for AIG in Asia Pacific. Most recently he was President of Global Financial Lines based in New York. During his career, he has worked in Canada, the U.S., UK, France, Japan and Singapore. Mr. Shea joined Zurich in September 2016 as CEO Commercial Insurance and as a member of the Executive Committee effective October 2016.

External appointments
None.

Educational background
Mr. Shea holds a bachelor's degree in political science from McGill University, Canada.

Kristof Terryn
Group Chief Operating Officer

Skills and experience
Kristof Terryn began his career in 1993 in the banking industry, where he worked in capital markets. In 1997, he joined McKinsey & Company where he held various positions within the financial services practice in Brussels and Chicago. He joined Zurich in 2004 in the Finance department. In 2007 he became Chief Operating Officer (COO) for the Global Corporate business division and in January 2009 was named COO for General Insurance. Mr. Terryn became a member of the Executive Committee in 2010 upon his appointment as Group Head Operations. In September 2013 he was appointed CEO Global Life, and after becoming CEO General Insurance in October 2015, continued to serve as CEO Global Life on an ad interim basis until the end of December 2015. He was appointed Group Chief Operating Officer effective July 2016.

External appointments
None.

Educational background
Mr. Terryn holds a law degree and a degree in economics from the University of Leuven, Belgium, as well as an MBA from the University of Michigan.

Changes to the ExCo since January 1, 2019

There were no changes to the ExCo since January 1, 2019.

Management contracts

Zurich Insurance Group Ltd has not transferred key parts of management by contract to other companies (or individuals) not belonging to (or employed by) the Group.

Shareholders' participation rights

Voting rights restrictions and representation

Each share entered into the share register entitles the holder to one vote. There are no voting rights restrictions.

A shareholder with voting rights can attend shareholders' meetings of Zurich Insurance Group Ltd in person. He or she may also authorize, in writing, another shareholder with voting rights or any person permitted under the Articles of Association and a more detailed directive of the Board to represent him or her at the shareholders' meeting. Based on the Articles of Association, minors or wards may be represented by their legal representatives, married persons by their spouses and a legal entity may be represented by authorized signatories or other authorized representatives, even if such persons are not shareholders.

In accordance with the Ordinance AEC and reflected in article 13 of our Articles of Association, authority of representation may also be given to the independent voting rights representative. The AGM elects the independent voting rights representative. The term of office ends with the conclusion of the next AGM. The independent voting rights representative may be re-elected. The shareholders may give voting instructions to the independent voting rights representative either in writing or via the online platform of Computershare Switzerland Ltd.

Zurich Insurance Group Ltd may under certain circumstances authorize the beneficial owners of shares that are held by professional persons as nominees (such as a trust company, bank, professional asset manager, clearing organization, investment fund or another entity recognized by Zurich Insurance Group Ltd) to attend shareholders' meetings and exercise votes as proxy of the relevant nominee. For further details, see page 40 of this report.

In accordance with Swiss law and practice, Zurich Insurance Group Ltd informs all shareholders at the beginning of the shareholders' meeting of the aggregate number of shares represented by shareholders and the number of shares represented by the independent voting rights representative. Zurich Insurance Group Ltd provided electronic voting devices to its shareholders for all the resolutions taken at the AGM on April 4, 2018.

Statutory quora

Pursuant to the Articles of Association (www.zurich.com/en/about-us/corporate-governance/corporate-documents), the AGM constitutes a quorum irrespective of the number of shareholders present and shares represented. Resolutions and elections generally require the approval of an absolute majority of the votes represented, unless respective provisions in the Articles of Association (of which there are currently none) or mandatory legal provisions stipulate otherwise. Article 704 of the Swiss Code of Obligations provides for a two-thirds majority of votes represented and an absolute majority of the nominal value of shares represented for certain important matters, such as a change of the company's purpose or domicile, a dissolution of the company and certain matters relating to capital increases.

Convening of shareholders' meetings

Shareholders' meetings are convened by the Board or, if necessary, by the auditors and other bodies in accordance with the provisions set out in articles 699 and 700 of the Swiss Code of Obligations. Shareholders with voting rights representing at least 10 percent of the share capital may call a shareholders' meeting, indicating the matters to be discussed and the corresponding proposals. The invitation to shareholders is mailed at least 20 calendar days before the meeting is held and, in addition, is published in the Swiss Official Gazette of Commerce.

Agenda

The Board is responsible for setting the agenda and sending it to shareholders. Shareholders with voting rights who together represent shares with a nominal value of at least CHF 10,000 may request in writing, no later than 45 days before the day of the meeting, that specific items be included in the agenda.

Registrations in the share register

With a view to ensuring an orderly process, the Board determines the date on which a shareholder needs to be registered in the share register in order to exercise his or her participation rights by attending the shareholders' meeting. That date is published, together with the invitation to the shareholders' meeting, in the Swiss Official Gazette of Commerce.

Information Policy

As of December 31, 2018, Zurich Insurance Group Ltd had 129,409 shareholders registered in its share register, ranging from private individuals to large institutional investors. Each registered shareholder receives an invitation to a shareholders' meeting. A Letter to Shareholders provides an overview of the Group's activities as the year progresses and outlines its financial performance. A more comprehensive Annual Review, the Annual Report and half-year reports are available on Zurich's website and the Annual Review and the Annual Report are also available in printed form on request. Information on the Group's updates for the first three months and first nine months of the year is also available on Zurich's website (www.zurich.com/en/investor-relations/results-and-reports). News Releases are distributed in accordance with the Directive on Ad hoc Publicity and available on Zurich's website www.zurich.com (www.zurich.com/en/media).

Zurich Insurance Group Ltd will hold its Annual General Meeting on April 3, 2019. The meeting will be conducted in the Hallenstadion in Zurich-Oerlikon. An invitation setting out the agenda for this meeting and an explanation of the proposed resolutions is issued to shareholders at least 20 days before the meeting.

For addresses see information on page 300 and further upcoming important dates, see investor section starting on page 20 (financial calendar on page 21).

Employees

The Group is committed to providing equal opportunities when recruiting and promoting people, whereby ability, experience, skills, knowledge, integrity and diversity are guiding principles. The Group actively encourages employee involvement in its activities through printed and online publications, team briefings and regular meetings with employees' representatives. Further, the Group is party to an agreement with employee representatives of the Group's companies in Europe. For further information on the Group's people management activities, see see pages 16 and 17 of the Annual Report.

In some countries, the Group has established broad-based employee share compensation and incentive plans to encourage employees to become shareholders of the Group.

Changes of control and defense measures

Duty to make an offer

The Articles of Association of Zurich Insurance Group Ltd do not provide for opting out or opting up in the meaning of articles 125 and 135 of the Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading. Therefore, mandatory offers have to be submitted when a shareholder or a group of shareholders acting in concert exceed 33 1⁄3 percent ownership of the issued and outstanding share capital of Zurich Insurance Group Ltd.

Clauses on changes of control

Employment agreements have been entered into with members of the ExCo, setting out the terms and conditions on which they are employed. The longest notice period for members of the ExCo is 12 months. No other benefits are provided in the case of a change of control.

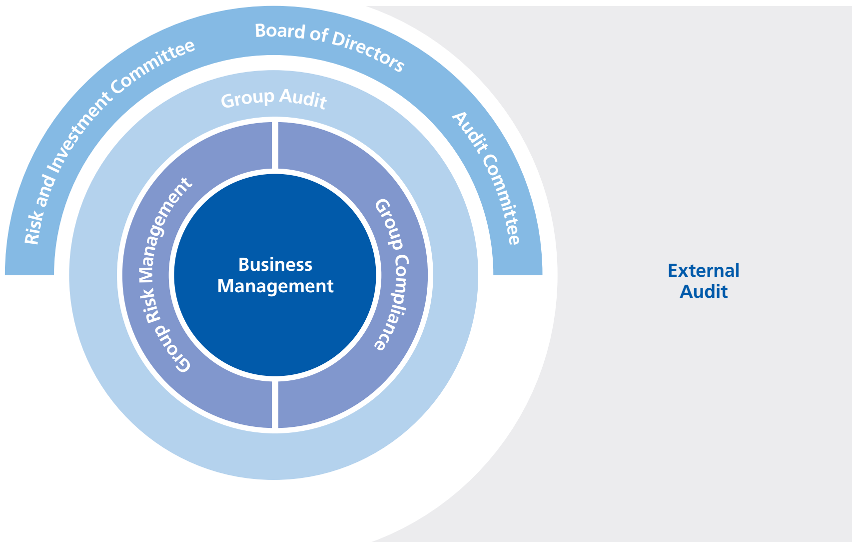
The Group's share-based compensation programs include regulations regarding the impact of a change of control. These regulations provide that in the case of a change of control, the plan administrator (the Remuneration Committee or the Group CEO, as applicable) has the right to roll over the existing share obligations into new share rights or to provide consideration for such obligations that are not rolled over. Participants who lose their employment as a result of a change of control have the right to the vesting of share obligations. No other benefits are provided to members of the ExCo in case of a change of control.

No benefits are provided for the members of the Board in case of a change of control.

Governance, controls and assurance at Zurich Insurance Group

At Zurich, various governance and control functions help to ensure that risks are identified and appropriately managed and internal controls are in place and operating effectively. The Board is ultimately responsible for the supervision of these activities. Although each governance and control function maintains its distinct mandate and responsibilities, the functions are closely aligned and co-operate with each other through a regular exchange of information, planning and other activities. This approach supports management in its responsibilities and provides confidence that risks are appropriately addressed and that adequate mitigation actions are implemented.

Three lines of defense at Zurich Insurance Group
as of December 31, 2018



Zurich uses the three- lines-of-defense model in its approach to governance and enterprise risk management. Zurich's three-lines-of-defense approach runs through Zurich's governance structure, so that risks are clearly identified, assessed, owned, managed and monitored.

- **1st line: Business management**
  The first line of defense consists of business management and all functions except Group Risk Management, Group Compliance and Group Audit. The first line takes risks and is responsible for day-to-day risk management (i.e. risks are identified and monitored, mitigation actions are implemented and internal controls are in place and operating effectively).
- **2nd line: Group Risk Management and Group Compliance**
  The second line of defense consists of the two control functions, Group Risk Management and Group Compliance.
  Group Risk Management is responsible for Zurich's enterprise risk management framework. The Group CRO regularly reports risk matters to the Group CEO, senior management committees and the Risk and Investment Committee of the Board.
  Group Compliance is responsible for providing assurance to management that compliance risks within its mandate are appropriately identified and managed. The Group Chief Compliance Officer regularly provides reports to the Audit Committee and has an additional reporting line to the Chairman of the Audit Committee and appropriate access to the Chairman of the Board.
- **3rd line: Group Audit**
  The third line of defense consists of the assurance function Group Audit.
  Group Audit is responsible for auditing risk management, control and governance processes. The Head of Group Audit reports functionally to the Chairman of the Audit Committee and administratively to the Group CEO, and meets regularly with the Chairman of the Board and the Chairman of the Audit Committee and attends each meeting of the Audit Committee.
- **Board – Audit Committee and Risk and Investment Committee**
  The Board is ultimately responsible for the supervision of the control and assurance activities. Its Audit and Risk and Investment committees receive regular updates from Group Risk Management, Group Compliance, Group Audit and external audit throughout the year.
- **External audit**
  External audit is responsible for auditing the Group's financial statements and for auditing Zurich's compliance with specific regulatory requirements. The Audit Committee regularly meets with the external auditors.

External auditors

Duration of the mandate and term of office of the auditor-in-charge

PricewaterhouseCoopers AG (PwC), Birchstrasse 160, in 8050 Zurich, is Zurich Insurance Group Ltd's external auditor.

PwC assumes all auditing functions which are required by law and by the Articles of Association of Zurich Insurance Group Ltd. The external auditors are appointed by the shareholders of Zurich Insurance Group Ltd annually. At the Annual General Meeting on April 4, 2018, PwC was re-elected by the shareholders of Zurich Insurance Group Ltd. The Board proposes that PwC be re-elected at the Annual General Meeting on April 3, 2019 as external auditors for the financial year 2019. PwC fulfills all necessary requirements under the Swiss Federal Act on the Admission and Oversight of Auditors and has been admitted as a registered auditing company by the Federal Audit Oversight Authority.

PwC and its predecessor organizations, Coopers & Lybrand and Schweizerische Treuhandgesellschaft AG, have served as external auditors of Zurich Insurance Group Ltd and its predecessor organizations since May 11, 1983. In 2000 and 2007, the Group conducted tender processes, inviting all major auditing firms to submit their work program and tender offers. After a thorough review, on both occasions the Board came to the conclusion that PwC's work program and offer prevailed and therefore proposed PwC for re-election.

Alex Finn of PwC is the Global Relationship Partner, lead auditor and auditor in charge for the statutory audit work since the business year 2018. Mark Humphreys, audit engagement partner, co-signs the auditors' report for 2018. Ray Kunz is the auditor in charge for the regulatory audit work since 2017.

This year the Group updated its policy on the rotation of the external audit mandate to adopt best practices adopted by the European Union and as a result will rotate its external auditor in 2021. The Group will thereafter tender its external audit mandate every ten years. The incumbent firm may be invited to participate in that tender, and will be eligible to be awarded the mandate for a second 10-year term, as long as the total length of service would not exceed 20 years.

In 2018, in accordance with the new policy and in order to allow the greatest amount of flexibility and time for a smooth transition to the selected audit firm, the Group ran a competitive, transparent and fair tender process to select the firm to replace PwC. The Audit Committee was actively engaged throughout. At the AGM in 2021 Ernst & Young will be proposed as external auditor for financial year 2021.

Audit fees

Total audit fees (including expenses and value added taxes) charged by PwC in the year 2018 amounted to USD 45.3 million (USD 46.3 million in 2017).

External audit fees are reviewed with the Group's Audit Committee annually. Once the fees are agreed, they are further allocated to the countries and reporting units via a global allocation process with the allocations communicated to local CFOs and FAR Controllers. As the year comes to a close, actual fees charged are reviewed and agreed with the local CFOs. At all levels – Group and local – there is a clear understanding of the basis for the current year fee including the impacts of changes in scope or other factors. Unplanned overruns are reviewed and agreed with the business (responsible CFO or audit contact).

Non-audit fees

Total fees (including expenses and value added taxes) in the year 2018 for additional services, such as tax advice, audit-related services (primarily for the MCEV review, control reports and actuarial regulatory reviews) and other services (primarily IFRS 17/9 projects and strategy) were USD 16.2 million (USD 8.9 million in 2017).

The Group has a comprehensive policy covering non-audit services. The Group's policy specifies definitions of allowable and non-allowable non-audit services as well as approval limits for non-audit service mandates at the local and Group level. The Group's external auditor tracks non-audit services and reports semi-annually to the Head of Group FAR and the Audit Committee the extent of non-audit services provided world-wide.

Non-audit fees were as follows:

Audit and non-audit fee amounts

in USD millions, as of December 31	2018	2017
Total audit fees	**45.3**	**46.3**
Total non-audit fees	**16.2**	**8.9**
– Tax advice	0.9	0.9
– Audit-related, including MCEV	5.0	7.0
– Other, primarily related to the IFRS 17/9 projects	10.3	1.0

Supervision and control over the external audit process

The Audit Committee regularly meets with the external auditors. During 2018, the Audit Committee met with the external auditors eight times. The external auditors regularly have private sessions with the Audit Committee without management present. Based on written reports, the Audit Committee and the external auditors discuss the quality of the Group's financial and accounting function and any recommendations that the external auditors may have. Topics considered during such discussions include strengthening of internal financial controls, applicable accounting principles and management reporting systems. In connection with the audit, the Audit Committee obtains from the external auditors a timely report relating to the audited financial statements of Zurich Insurance Group Ltd and the Group.

The Audit Committee oversees the work of the external auditors. It reviews, at least annually, the qualification, performance and independence of the external auditors and reviews any matters that may impair their objectivity and independence, based on a written report by the external auditors describing the firm's internal quality control procedures, any material issues raised and all relationships between the external auditors and the Group and/or its employees that could be considered to bear on the external auditors' independence. The Audit Committee evaluates the performance of the external auditors during their audit examination. It elicits the comments of management regarding the auditors' performance (based on criteria such as their understanding of Zurich's business, technical knowledge and expertise, etc.) and the quality of the working relationship (responsiveness of the external auditors to the needs of Zurich Insurance Group Ltd and the Group and the clarity of communication). The Audit Committee reviews, prior to the commencement of the annual audit, the scope and general extent of the external audit and suggests areas requiring special emphasis.

The Audit Committee proposes the external auditors to the Board for appointment by the shareholders and is responsible for approving the audit fees. A proposal for fees for audit services is submitted to management by the external auditors and validated, before it is submitted to the Audit Committee for approval. The proposal is mainly based on an analysis of existing reporting units and expected changes to the legal and operational structure during the year.

The Audit Committee has approved a written policy on the use of external auditors for non-audit services, which sets out the rules for providing such services and related matters (including a list of prohibited services). Allowable non-audit services may include tax advice, comfort and consent letters, certifications and attestations, and due diligence and audit support in proposed transactions, to the extent that such work complies with applicable legal and regulatory requirements and does not compromise the independence or objectivity of the external auditors. To avoid conflicts of interest, all allowable non-audit services need pre-approval from the Audit Committee (Chairman), the Group CFO or the local CFO, depending on the level of the expected fee. This policy further requires, among other things, an engagement letter specifying the services to be provided.

Group Audit

The Group's internal audit function (Group Audit) is tasked with providing independent and objective assurance to the Board, the Audit Committee, the Group CEO and management and to the boards and audit committees of subsidiary companies. This is accomplished by developing a risk-based plan, which is updated continuously as the risks faced by the business change. The plan is based on the full spectrum of business risks including concerns and issues raised by the Audit Committee, management and other stakeholders. Group Audit executes the plan in accordance with defined operating standards, which incorporate and comply with the International Standards for the Professional Practice of Internal Auditing, issued by the Institute of Internal Auditors (IIA). Key issues raised by Group Audit are communicated to the responsible management function, the Group CEO and the Audit Committee using a suite of reporting tools.

The Audit Committee, boards and audit committees of subsidiary companies and Group CEO are regularly informed of important audit findings, including adverse opinions, mitigation actions and attention provided by management. Group Audit is responsible for ensuring that issues identified by Group Audit, that could have an impact on the Group's operations are brought to the attention of the Audit Committee and appropriate levels of management and that timely follow-up action occurs. This is supported by the attendance of the Head of Group Audit at each meeting of the Audit Committee. In addition, the Head of Audit meets with the Chairman of the Audit Committee each month.

Group Audit is authorized to review all areas of the Group and has unrestricted access to all Group activities, accounts, records, property and personnel necessary to fulfill its duties. In the course of its work, Group Audit takes into consideration the work of other assurance functions. In particular, Group Audit co-ordinates its activities with the external auditors, sharing risk assessments, work plans, audit reports and updates on audit actions. Group Audit and the external auditors meet regularly at all levels of the organization to optimize assurance provision and efficiency.

The Audit Committee assesses the independence of Group Audit and reviews its activities, plans and organization, the quality of its work and its cooperation with the external auditors. As required by the Institute of Internal Auditors' (IIA) International Standards, the Internal Audit function is quality-reviewed at least every five years by an independent qualified assessor. This review was conducted most recently in 2016 and 2017, and reported to the Audit Committee in February 2017. The results confirmed that Group Audit's practices conform to all IIA Standards.

The Audit Committee approves the Group Audit Plan annually, and reviews reports from the function on its activities and significant risk, control and governance issues, at least three times per year. The Head of Group Audit reports functionally to the Chairman of the Audit Committee and administratively to the Group CEO, and meets regularly with the Chairman of the Board and the Chairman of the Audit Committee. Group Audit has no operational responsibilities for the areas it reviews and, to ensure independence, all Group Audit staff report (via audit managers) to the Head of Group Audit. In some instances, country audit managers also have a reporting line to the local CEO to comply with regulatory requirements.

Group Compliance

The Group is committed to comply with all applicable laws, regulations and internal requirements, professional and industry standards and its stated corporate values.

Group Compliance is a control function responsible for:

- Enabling the business to manage its compliance risks
- Being a trusted advisor
- Providing independent challenge, monitoring and assurance
- Assisting management to promote compliance culture and ethics

Group Compliance is vertically integrated to support a global framework and it is led by the Group Chief Compliance Officer.

Group Compliance performs its activities according to the global annual compliance plan and reports on progress against plan, outcomes and insights to management, the Audit Committee of the Board or to the regional and local equivalent body.

Each annual compliance plan (global, regional, local) is a risk-based plan and must be prepared on the basis of an independent forward-looking compliance risk assessment, taking into account both internal and external environment key risk drivers.

Group Compliance provides an independent compliance view on the key compliance risks to the business and performs independent risk-based monitoring and assurance activities, challenging the business. In addition, it provides compliance risk insight through relevant and targeted reporting.

The Group Chief Compliance Officer defines and issues compliance policies relevant to the Group and establishes appropriate processes and guidance.

Group Compliance supports the embedment of a strong compliance culture across the Group in a changing regulatory environment via training and awareness initiatives.

The Group Chief Compliance Officer has direct access to the Group CEO and the Chairman of the Board's Audit Committee and appropriate access to the Chairman of the Board. The Group Chief Compliance Officer has an additional reporting line to the Chairman of the Audit Committee, while maintaining functional independence as a second line of defense function.

Zurich encourages its employees to speak up and report improper conduct that they believe is illegal, unethical, or violates Zurich's code of conduct or our Group's policies. Employees are free to report their concerns to management, Human Resources, the Group's legal department, its compliance function, or through the Zurich Ethics Line (or similar service provided locally), a phone and web-based service run by an external specialist provider. Zurich does not tolerate retaliation against any employee who reports such concerns in good faith.

Risk Management and internal control framework

For information regarding the Group's risk management and internal control framework, see the Risk review of this Annual Report 2018 on pages 121 to 149. The Group no longer separately describes risk management and internal control information in this governance report.

Going concern

The Directors are satisfied that, having reviewed the performance of the Group and forecasts for the forthcoming year, the Group has adequate resources to enable it to continue in business for the foreseeable future. For this reason, the Directors have adopted the going concern basis for the preparation of the consolidated financial statements.

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Message from our Chairman of the Remuneration Committee

Incorporating customer experience in incentives

"Remuneration outcomes for 2018 reflect Zurich's good progress on strategic and financial targets and strong performance."

Christoph Franz
Chairman of the Remuneration Committee

Zurich operates a balanced and effectively managed remuneration system. The remuneration report provides further details on this, as well as the link between business performance and variable pay decisions for 2018.

Dear Shareholder

On behalf of the Remuneration Committee of the Board of Directors (Board), I am pleased to share with you our remuneration report for 2018. Corporate governance in the area of remuneration remains a focal point for regulators, advisory bodies and investors globally. As such, we continue to monitor developments and best practices, and review Zurich's remuneration approach to ensure it complies with regulatory requirements, supports our strategic objectives, incentivizes the right behaviors and considers the interests of our customers, shareholders and employees alike. We appreciate your ongoing input and engagement.

Rewards 2018

The remuneration outcomes detailed in this report reflect Zurich's performance achievements and the Executive Committee's (ExCo) progress against strategic targets. In 2018 Zurich showed continued execution on the four external targets, including 12.1 percent business operating profit after tax return on equity, expense savings of over USD 1.1 billion and cash remittance above expectations, while maintaining a very strong capital base. The business operating profit (BOP) for 2018 is up by 20 percent versus the prior year BOP and is consistent with the prior year underlying BOP which considers the impact of the US storms Harvey, Irma and Maria.

Achievements in 2018 and looking ahead

To further support our customer-led transformation, quantitative customer metrics were incorporated for the first time to assess the overall business performance and resulting STIP award levels in selected major markets and for our senior leaders. In addition, we implemented the revised target card framework for the ExCo and the wider leadership team. Targets include both quantitative measures and relevant strategic projects in the three categories of financial measures, customers and people.

The outlook section of this report outlines our plan to expand the use of customer metrics for STIP purposes to other Group markets in 2019. Information on proposed enhancements to the performance and incentive framework are also provided.

Annual General Meeting 2019

I would like to thank you for your support at last year's Annual General Meeting (AGM) and for the valuable feedback we received, especially at the corporate governance roadshow prior to our AGM in 2019.

You can find details on the binding remuneration votes of the Board and of the ExCo included in the 2019 Board of Directors Report of Zurich Insurance Group Ltd (Board of Directors Report), which accompanies the invitation to the AGM 2019 (www.zurich.com/en/investor-relations/shareholder-area/annual- general-meeting). We also welcome your feedback on this report.

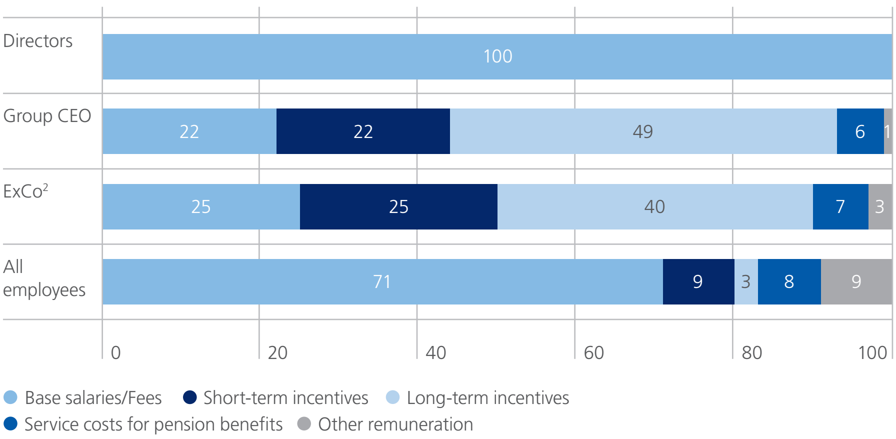
Christoph Franz

Christoph Franz
Chairman of the Remuneration Committee

Remuneration structure

Zurich's remuneration architecture puts a greater emphasis on variable remuneration elements, with a higher weighting on average towards the long term, for our most senior employees. The variable remuneration is largely determined by the achievements against predefined measures which are aligned with the Group's strategy and financial targets.

2018 remuneration structure and weighting of elements[1] %



[1] At target, as a percentage of total remuneration.
[2] Including the Group CEO.

Short-term incentive plan (STIP)

109%

Average award as a percentage of target considering the relevant BOP results and customer metrics in selected major markets, along with an assessment of overall qualitative performance for 2018 (2017: 106%).

Long-term incentive plan (LTIP)

149%

Vesting level in 2019 as a percentage of target based on the actual achievements for relative total shareholder return (TSR), net income attributable to shareholders' return on common shareholders' equity (NIAS ROE) and cash remittance for the performance period 2016 to 2018 (2018: 83%).

Total variable remuneration

USD 693m

The aggregate amount of variable remuneration for 2018 for the entire Group which is determined based on the Group's long-term economic performance (2017: USD 669m).

Remuneration report

Contents

2018 remuneration summary

This summary provides an overview of the 2018 remuneration of Zurich Insurance Group Ltd and its affiliates (Group or Zurich), including details regarding the link between business performance and variable pay decisions for 2018.

Zurich's remuneration

Zurich operates a balanced and effectively managed remuneration system which ensures competitive total remuneration opportunities, for which the resulting awards are based on the results achieved. It is an important element of the Group's risk management framework and is designed to not encourage inappropriate risk-taking.

The members of the Board receive fixed remuneration as an annual fee, of which the basic fee is paid half in cash and half in five-year sales-restricted shares which are not subject to the achievement of any specific performance conditions. Total remuneration for employees, including members of the Executive Committee (ExCo), comprises as applicable, fixed remuneration consisting of base salaries, pensions and employee benefits, as well as variable remuneration consisting of short- and long-term incentive awards. The Group short-term incentive plan (STIP) and long-term incentive plan (LTIP) aim to align the remuneration architecture with the achievement of the Group's key financial targets, the execution of the business strategy, the risk management framework and the operational plans (see the remuneration framework section for more information on the elements of Zurich's remuneration).

2018 remuneration in light of the business results

Expenditure on remuneration is considered in the context of Zurich's overall revenues, capital base and profitability. As can be seen from the metrics in the following table, relative to Zurich's overall revenues and shareholders' equity, expenditure on variable remuneration remains relatively small, also in relation to the amount of dividends payable to shareholders. The key financial figures reflect data for 2018 and 2017, and show that the total variable remuneration pool in 2018 is slightly higher compared to 2017.

Key financial figures

in USD millions, for the years ended December 31	**2018**	2017
Gross written premiums and fees[1]	52,689	52,005
Business operating profit (BOP)	4,566	3,803
Underlying business operating profit[2]	4,566	4,762
Net income attributable to shareholders (NIAS)	3,716	3,004
Shareholders' equity	30,189	33,062
Return on common shareholders' equity (ROE)	13.1%	10.9%
Dividends paid to shareholders[3]	2,805	2,639
Total variable remuneration pool for all employees gross before tax	693	669
– as a percentage of gross written premiums and fees	1%	1%
– as a percentage of shareholders' equity	2%	2%
– as a percentage of dividends paid to shareholders	25%	25%

[1] Consists of USD 49,485 million gross written premiums and policy fees, as well as USD 3,204 million Farmers management fees and other related revenues in 2018. Farmers Group, Inc., a wholly owned subsidiary of Zurich Insurance Group, provides certain non-claims administrative and management services to the Farmers Exchanges as attorney-in-fact and receives fees for its services. The Farmers Exchanges are owned by their policyholders.
[2] Adjusted in 2017 for the impact of the hurricanes Harvey, Irma and Maria, measures related to the Group's restructuring, and the impact of changes to UK capital gains tax indexation relief.
[3] Dividend at transaction day exchange rate in 2018 and 2017, respectively.

Remuneration report (continued)

The following table provides details on the overall STIP award and LTIP vesting level in relation to the performance achievements under each plan and the aggregated amount of variable remuneration for the entire Group. For further information on STIP and LTIP, see the remuneration elements described later in this report.

Remuneration in light of business performance

Short-term incentive	Average award as a percentage of target 2018	2017
Context		
The key factors driving individual awards for 2018 are primarily: ▶ Group BOP and customer metrics for members of the leadership team, control functions and Group and regional employees. ▶ The relevant BOP or other profitability metrics for countries, business units and Commercial Insurance, as well as customer metrics in selected major markets. ▶ Investment results for Investment Management. ▶ Specific growth, profitability and customer-related metrics for Farmers. Based on the relevant BOP performance, the analysis of customer metrics (which showed overall results in line with plan), and a qualitative assessment, the average award for plan participants across the Group (more than 39,000 employees) is slightly higher compared with 2017.	109%	106%
Long-term incentive	**Vesting level as a percentage of target in 2019**	**2018**
Context		
The key factors driving the vesting level in 2019, for the three-year performance period from 2016 to 2018, are: ▶ The Group's relative TSR against an international peer group of insurance companies ▶ NIAS ROE ▶ Cash remittance Each performance criteria has an equal weighting and no discretionary adjustment has been made to the calculated vesting level. Based on the achievements under the predefined performance criteria, the calculated vesting level is higher compared with the vesting level in 2018.	149%	83%
Total variable remuneration pool	**Aggregate amount in USD million of variable remuneration for the entire Group 2018**	**2017**
Context		
In determining the amount of the total variable remuneration pool for all employees, the Board considers the long-term economic performance of the Group as well as other relevant factors. The average economic profit is calculated by subtracting the required return on economic capital, based on the weighted average cost of capital, from the adjusted BOP[1] after tax. In this respect, the Group has continued to generate economic profit over the long-term which exceeds the actual expenditure on variable pay.	693	669

[1] The adjusted BOP is the amount before interest and variable remuneration.

The total variable remuneration pool includes the following elements:

- The total expenditure on cash incentives to be paid for the performance year comprising the amount of the aggregated funding pools under the STIP, and the amounts to be paid under local short-term incentive plans.
- The value of the target share allocations made in 2018 on the assumption that the allocations will vest at 100 percent of the target level in 2021 for performance over the three years 2018, 2019 and 2020.
- The total amount of sign-on payments[1] committed in 2018, regardless of when the payments are due, for people taking up their employment in 2018.
- The total amount of severance payments[2] committed in 2018, regardless of when the payments are due.

Commission payments made to employed sales agents are not included in the variable remuneration pool.

For 2018, the remuneration amounts were as follows:

Remuneration amounts

in USD millions, for the years ended December 31	**Base salaries/ Fees**[1]	**Short-term incentives**[2]	**Long-term incentives**[3]	**Other remuneration**[4]	**Total remuneration 2018**[5]	Total remuneration 2017[5]
Directors	4.4	–	–	–	4.4	4.9
ExCo	11.1	16.2	18.6	4.7	50.6	47.1
All employees[6]	3,739	534	136	939	5,348	5,287

1 Includes the portion paid in sales-restricted shares to Directors.
2 The cash incentives earned for the year for all employees comprising the amounts under the STIP, as well as payments under local incentive plans which are subject to approval by the applicable local Boards.
3 Represents the value of the target share allocations made in 2018, which assumes vesting in 2021 at 100 percent of target.
4 Can include employee benefits such as perquisites and benefits-in-kind, international assignment allowances, service costs for pension benefits and any other payments due under employment contracts.
5 Actual, gross and for cash amounts based on the accrual principle.
6 Includes the remuneration for members of the ExCo. The 'other remuneration' of all employees also includes sign-on and severance payments committed in cash and/or in shares for comparison reasons.

1 Zurich defines payments (whether paid immediately or over time) that are agreed on the execution of an employment contract. Sign-on payments may include compensation made prior to a person joining the company and providing any services (payments in advance) or compensation for benefits foregone with a previous employer (replacement payments). Payments in advance are not paid to members of the Board or the ExCo.
2 Zurich defines payments that are provided in connection with the termination of an employment relationship. Zurich does not include under the term severance payments, garden leave or similar payments for employees in jurisdictions where such payments are required by applicable law, or where they are based on contractual notice periods which conform with recognized market practice, or where they are non-contractual, but in line with recognized market practice. However, Zurich does include garden leave or similar payments that go beyond recognized market practice, irrespective of whether these are provided pursuant to an agreement or are ex gratia. Severance payments are not paid to members of the Board or the ExCo.

Outlook summary for 2019

- **Performance and incentive architecture:** Adjustments are proposed following engagement and syndication across the organization, including discussions with the ExCo, the Remuneration Committee and the Board. With employee experience, simplicity and flexibility in mind, certain changes are proposed to the performance assessment and incentive framework effective in 2019. The enhancements, which are outlined in more detail in the outlook section of this report, ensure that the key principles of differentiation and meritocracy are maintained and continue to support the achievement of the Group's strategic goals and consider the interests of shareholders, customers, employees and other stakeholders.

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- **Customer metrics:** The use of customer metrics for STIP award purposes will be expanded to additional markets in 2019. The transactional net promoter score (TNPS) was first used as part of the assessment of business performance for STIP award purposes in selected major markets for 2018. In 2019 this will be expanded to additional markets.

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- **Board:** No changes are proposed to the fee structure of the Board for the period AGM 2019 – AGM 2020. Board fees will remain in line with the fee structure that has been in place since the AGM in 2015 with another benchmarking analysis planned later in 2019.

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- **ExCo:** No changes are proposed to the remuneration structure of the ExCo in 2019. A benchmarking analysis including a review of best practices, market data, internal relativities and alignment with the strategy, will be carried out again in 2019.

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Remuneration framework

Legal and regulatory requirements

This remuneration report provides all the information that is required by the following regulations with which Zurich complies:

- Chapter 5 of the Directive on Information Relating to Corporate Governance of the SIX Exchange Regulation (as of March 20, 2018).
- Swiss Code of Best Practice for Corporate Governance (Swiss Code of Best Practice), issued in 2002 by economiesuisse, as amended in October 2007 and in August 2014.
- Articles 14–16 of the Ordinance Against Excessive Compensation (AEC) (replacing the information in the notes to the consolidated financial statements according to Article 663bbis of the Swiss Code of Obligations).
- Information as required by Article 663c para 3 of the Swiss Code of Obligations.
- Requirements of the Circular 2010/1 on minimum standards for remuneration schemes of financial institutions, issued by the Swiss Financial Market Supervisory Authority (FINMA) on October 21, 2009 as amended on June 1, 2012, December 3, 2015 and September 22, 2016, as well as further guidance issued on January 19, 2011 (FINMA Circular on Remuneration Schemes).

Zurich's approach to implementing the requirements of the Ordinance AEC

The Ordinance AEC came into effect on January 1, 2014 with a two-year transition period. During this time Zurich has amended its Articles of Association as approved by shareholders at the AGM in 2014. Since the AGM in 2015, shareholders are authorized to vote on and approve the maximum total amount of remuneration for the Board for the one-year period from AGM to AGM and the maximum total amount of remuneration for the ExCo for the subsequent financial year (Article 18 para 1 Articles of Association: www.zurich.com/en/investor-relations/our-shares/articles-of-association). Details of the votes can be found in the Board of Directors Report accompanying the invitation to the AGM 2019 (www.zurich.com/en/investor-relations/shareholder-area/annual-general-meeting).

According to the Ordinance AEC and Article 18 para 4 Articles of Association, the Group and/or its subsidiaries are authorized to make payments to any member who joins the ExCo during a period for which the AGM has already approved the remuneration of the ExCo, of a supplementary amount for the period(s) in question, where the total amount already approved for such remuneration is not sufficient. The sum of all supplementary amounts may not exceed, during any one remuneration period, 30 percent of the respective total amount of approved maximum remuneration of the ExCo. Details on the votes on pay, on performance-related remuneration for the ExCo, allocation of shares as well as the approach regarding loans and credits can be found in Articles 18, 28 and 34 of the Articles of Association (www.zurich.com/en/investor-relations/our-shares/articles-of-association).

Further, the information provided according to Articles 14–16 of the Ordinance AEC contained in the remuneration report has been externally audited following the audit requirements of the Ordinance AEC (Article 13 para 1 and Article 17 of the Ordinance AEC) and the information subject to audit is marked in the respective sections of the remuneration report.

Remuneration philosophy

The remuneration philosophy is an integral part of the overall employment offering to employees. Based on established remuneration principles, the Group operates a balanced and effectively managed remuneration system that provides competitive total remuneration opportunities which attract, retain, motivate and reward employees to deliver outstanding performance. The remuneration system and practices are embedded in the Group's risk management framework and take into consideration legal and regulatory requirements, as well as market developments.

Total remuneration for an individual employee and its composition is influenced by factors including the scope and complexity of the role, level of responsibility, risk exposure, business performance and affordability, individual performance, internal relativities, external competitiveness, geographic location and legal requirements. Target opportunities are benchmarked to median levels in clearly defined markets and take into account the internal remuneration structures. Depending on the role, the relevant market can be global, regional or local, and reflect practices in either insurance, financial services or general industry. Remuneration is delivered through an overall framework overseen by the Remuneration Committee and the Board.

In addition, Zurich has a clearly defined global performance management process which supports the achievement of the overall business strategy and operating plans, and links individual pay with business and individual performance. Actions of Zurich employees continue to be guided by the Group's Code of Conduct and its purpose and values (www.zurich.com/en/about-us/corporate-governance/code-of-conduct). Performance management objectives are therefore assessed not only in terms of what has been achieved, but also in terms of how they have been achieved according to the behaviors underlying the Group's Code of Conduct and its purpose and values.

Guiding principles of the remuneration philosophy

The guiding principles of the remuneration philosophy as set out in Zurich's Remuneration Rules are as follows:

- The remuneration architecture is simple, transparent and can be put into practice.
- Remuneration is tied to long-term results for individuals who have a material impact on the Group's risk profile.
- The structure and level of total remuneration are aligned with the Group's risk policies and risk-taking capacity.
- A high performance culture is promoted by differentiating total remuneration based on the relative performance of businesses and individuals.
- Expected performance is clearly defined through a structured system of performance management and this is used as a basis for remuneration decisions.
- Variable remuneration awards are linked to key performance factors which include the performance of the Group, countries, business units, functions, as well as individual achievements.
- The Group's STIP and LTIP, used for variable remuneration, are linked to appropriate performance criteria and the overall expenditure on variable pay is considered in connection with the Group's long-term economic performance.
- The structure of the LTIP links remuneration with the future development of performance and risk by including features for deferred remuneration.
- Employees are provided with a range of benefits based on local market practices, taking into account the Group's risk-taking capacity on pension funding and investments.
- Reward decisions are made on the basis of merit – performance, skills, experience, qualifications and potential – and are free from discrimination toward or against particular diverse backgrounds. The remuneration system and practices ensure all employees have equal opportunities.

Governance framework

Remuneration governance framework

The Board is responsible for the design and implementation of Zurich's Remuneration Rules[3], which include the overall remuneration philosophy, principles, system and practices. To support the Board in performing these duties, the Board has established a Remuneration Committee. Under the Ordinance AEC and as reflected in the Articles of Association, the members of the Remuneration Committee are elected individually at the AGM. Their term of office ends with the conclusion of the next AGM with re-election being possible. The Remuneration Committee consists of at least three members of the Board, all of whom are experienced in the area of remuneration. As of the AGM in 2018, there continued to be four members in the Committee. The Remuneration Committee evaluates the remuneration architecture and Zurich's Remuneration Rules on an annual basis, and if appropriate, proposes amendments to the Board.

While reviewing the remuneration structures and practices on a regular basis, the Remuneration Committee and the Board receive independent advice from the executive compensation practices at Meridian Compensation Partners LLC (Meridian) and New Bridge Street, part of Aon Corporation (Aon Hewitt). The Remuneration Committee reviews the mandates and fees, and evaluates ongoing performance. Both Meridian and New Bridge Street provide advice to the Board, with the lead consultant employed by Meridian. Meridian does not provide any other services to the Group. Although certain practice areas within Aon Hewitt – a large, international brokerage and human resources firm – undertake work for the Group from time to time, the Remuneration Committee does not consider that the independence and integrity of the advice it receives from New Bridge Street is compromised by these separate assignments.

The remuneration approval framework is set out as follows:

Approval framework

Subject	Recommendation from	Final approval from
Overall remuneration architecture	Remuneration Committee and Risk and Investment Committee based on proposal by the Group CEO	Board
Organizational Rules (Annex – Charter of the Committees, Chapter 7: Remuneration Committee)	Remuneration Committee	Board
Zurich's Remuneration Rules	Remuneration Committee	Board
Remuneration report	Remuneration Committee	Board and consultative, non-binding vote by the shareholders
Remuneration payable to Directors (including Chairman and Vice-Chairman)	Remuneration Committee	Board and ultimately from shareholders via a vote as an aggregate maximum amount
Remuneration to the Group CEO	Remuneration Committee	Board and ultimately from shareholders via a vote as an aggregate maximum amount
Remuneration to the ExCo	Group CEO	
Total variable remuneration pool	Remuneration Committee	Board
STIP funding pools	Remuneration Committee based on proposals by the Group CEO taking into account a risk assessment by Group Risk Management	Board
Vesting levels under the LTIP	Remuneration Committee based on proposals by the Group CEO taking into account a risk assessment by Group Risk Management	Board

[3] The remuneration policy of the Company which serves as a framework for the governance, design, implementation and monitoring of the Group's remuneration architecture; is designed to support the Group's business strategy, risk management framework and operational and financial plans, and takes into account legal and regulatory requirements.

The STIP and the LTIP designs are regularly reviewed by the Remuneration Committee and the Board. Moreover, the Board reviews the implementation of the plans on a regular basis. The incentive plans are discretionary and can be terminated, modified, changed or revised at any time.

The results of benchmarking studies are taken into account in setting the fee levels for Directors and the remuneration structure and levels for the Group CEO and the other members of the ExCo. In analyzing the results of the benchmarking studies, market practices in the various countries and internal relativities between positions are taken into account. Overall positioning of target remuneration packages is toward the median levels. The Board and management are supported in these activities by a variety of firms operating in the field of international executive compensation.

At Remuneration Committee and Board meetings where decisions are made on the individual remuneration of the Chairman, the Chairman is not present. In making decisions on the individual remuneration of the Group CEO, the Group CEO is not present. Where decisions are made on the individual remuneration of other members of the ExCo, those members are also not present at the meetings. See page 54 in the corporate governance report for further details on the Remuneration Committee's responsibilities.

Remuneration and risk

The Remuneration and Risk and Investment Committees meet jointly once a year to discuss a risk review of the remuneration architecture and the remuneration governance framework. The assessment of risk in making reward decisions, and the ability to apply risk adjustments and exercise malus and clawback, if required, are features of Zurich's remuneration framework. Group Risk Management evaluated the remuneration architecture in 2018 and reported that the remuneration architecture is consistent with effective risk management and does not encourage inappropriate risk-taking that exceeds the Group's level of tolerated risk.

To help align remuneration with the Group's risk-taking capacity, Group Risk Management consults with other control and assurance functions to provide the Group CEO with a review of risk factors to consider when assessing overall performance for the annual funding of incentive awards. The Group Chief Risk Officer (Group CRO) is available to discuss these findings with the Remuneration Committee and the Board. The Group CEO takes into account Group Risk Management's assessment, amongst other factors, when proposing the STIP awards to the Remuneration Committee, which in turn makes its recommendation to the Board for final approval.

Group Risk Management reviews the processes and criteria for identifying the key risk taker roles annually. The criteria are based on factors that materially affect risk-taking within the Group, such as overall governance, capital consumption for each risk type as determined by the internal model, strategy and reputation. The criteria are then applied to those who take and those who control the specific risks at the level of the Group where the risks are most material. When applying the criteria in 2018, the number of key risk taker roles remained similar to the previous year and included all leadership team roles.

The remuneration for key risk taker positions includes STIP and LTIP with a greater emphasis toward long-term and therefore deferred remuneration. Group Risk Management, together with other control and assurance functions, provide risk and compliance information about each key risk taker as part of the annual individual performance assessment and for the target cards of the leadership team including the ExCo. This is taken into account when assessing performance and making reward decisions.

The variable remuneration of employees in control functions is structured to avoid conflicts of interest, by linking to Group profitability metrics rather than the profitability of the business controlled by such functions.

Group Audit regularly assesses the operational implementation of Zurich's Remuneration Rules to verify that the remuneration architecture is adhered to across the Group.

Share ownership guidelines

To align the interests of the Board and the ExCo with those of shareholders, Directors and members of the ExCo are required to meet the following levels of share ownership:

- Members of the Board: once the basic annual fee.
- Group CEO: vested awards at five times the base salary.
- Other members of the ExCo: vested awards at two-and-a-half times the base salary.

Directors achieve this requirement by obtaining part of their fee in five-year sales-restricted shares and market purchases. Members of the ExCo achieve this through their participation in the LTIP and market purchases. Directors, the Group CEO and other members of the ExCo have a period of five years to meet their ownership requirements and the Remuneration Committee monitors compliance with these guidelines on an annual basis.

As of December 31, 2018, Directors held 16,991 shares and members of the ExCo held 103,413 vested shares. At the end of 2018, all Directors and all members of the ExCo, who have served at least five years on the Board or the ExCo respectively, met the required share ownership level.

Share dilution

In 2018, Zurich began purchasing its own shares on the market to fulfill share obligations for long-term compensation awards and currently the intention is to continue doing this moving forward. Zurich has also taken additional measures to offset the impact of dilution from previously vested long-term share plans with the completion of its public share buyback program for cancellation purposes in 2018. Zurich will propose to the AGM 2019 that the Group's ordinary share capital be reduced via the cancellation of the 1.74 million shares repurchased under the share buy-back program.

Share dilution as of December 31

		2018	2017
Share dilution	Registered shares as of December 31	151,348,027	151,339,851
	Shares issued during the year[1]	8,176	732,445
	– as percentage of share capital based on the registered shares	0.01%	0.48%
LTIP	Total number of unvested target shares[2]	1,912,087	1,506,385
	– as percentage of share capital based on the registered shares	1.26%	0.99%

[1] The number of shares issued during 2018 fell compared to 2017 as the LTIP and other employee share plans were instead predominantly funded by shares bought back from the market, as well as by treasury-owned shares. Moving forward, Zurich intends to continue purchasing shares on the market instead of issuing new shares to fund the LTIP and other employee share plans.

[2] Given the vesting level of 149 percent for the share allocations vesting in 2019 and assuming 100 percent vesting in 2020 and 2021. For 2017 the figure represents vesting of 83 percent in 2018 and assumed 100 percent vesting for 2019 and 2020.

Remuneration elements

Total remuneration

Target total remuneration is set around the relevant market median[4] and includes the following elements:

Remuneration elements

	Fixed remuneration	Variable remuneration		Fixed benefits
	Base salary	**Short-term incentives**	**Long-term incentives**	**Pensions and employee benefits**
Description	Fixed pay for the role performed to attract and retain employees. It is reviewed annually.	Discretionary incentive awards to reward achievement of key business and individual objectives during the year.	Annual performance-based target share allocations, subject to vesting in accordance with predefined performance criteria. Designed to support Zurich's longer term goals, encourage participants to operate the business in a sustainable manner and align the Group's long-term interests with those of shareholders.	Employee benefits are provided to attract and retain employees, in line with market practices and positioned toward the market median. Pension plans are designed and managed in line with the Group guidelines.
Drivers and/or performance metrics	Scope and complexity of the role, level of responsibility and geographic location.	Award is driven by: – The relevant business profitability achievements and customer experience in selected major markets. – Individual performance on personal objectives and behavior in line with Zurich's values, as assessed through the performance management process.	Vesting is determined based on (i) the position of the TSR compared with an international peer group of insurance companies derived from the Dow Jones Insurance Titans 30 Index, (ii) the NIAS ROE and (iii) cash remittance.	Market practice and Group guidelines.
Duration	n.a.	1 year.	3–6 years (target shares subject to three-year cliff vesting and for the ExCo one-half of the vested shares are sales-restricted for an additional three years).	n.a.
Range of opportunity	Generally paid within an 80–120 percent range around the relevant market median.	Award of 0 to 200 percent of an individual's target amount.	Vesting level of 0–200 percent of the individual target shares and dividend equivalent target shares.	n.a.
Eligibility	All employees.	Country specific (more than 39,000 plan participants in 2018).	Members of the ExCo and a defined group of the most senior positions, including key risk takers.	Country-specific.
Delivery	Fixed cash.	Performance-based cash.	Performance-based shares.	Country-specific fixed benefits.
Clawback, malus and hedging	n.a.	Clawback framework established for members of the ExCo to allow for recovery, forfeiture and/or clawback, subject to specific conditions. Malus conditions to reduce or eliminate awards applicable to all STIP participants.	Clawback framework established for members of the ExCo to allow for recovery, forfeiture and/or clawback, subject to specific conditions. Malus conditions to reduce or eliminate awards applicable to all LTIP participants. Individual hedging of share-based remuneration prohibited.	n.a.

[4] To assist with decisions regarding remuneration structures and amounts, a review of internal relativities is carried out, along with benchmarking analyses within the relevant market, with a view to position toward the market median. The relevant market is dependent on the nature of an individual's role and considers, amongst other factors, geographical location and scope, and peer companies based on industry and size.

Base salary

See the remuneration elements table for information regarding base salaries.

Variable remuneration

Incentive plans are designed to provide a range of award opportunities linked to levels of performance. Business and individual performance may result in remuneration levels above target for superior performance, and reduced levels that are below target for performance below expectations. Variable remuneration opportunities are provided to motivate employees to achieve key short-term and long-term business goals to increase shareholder value. Variable remuneration opportunities may include both short-term and long-term incentives. Further information on the STIP and LTIP are set out below.

Short-term incentives

Short-term (one-year) incentives are performance-driven based on the following design for 2018:

Short-term incentives support employees to focus their performance on the achievement of key short-term financial, customer and individual objectives set at the beginning of the year. The final individual STIP award for the year ending December 31, 2018, is determined by the target STIP award (STIP target), financial performance, customer metrics in selected major markets, the resulting STIP award levels and individual performance as set out in the following illustration.

Certain enhancements to the performance and incentive framework, including STIP, are proposed for 2019. These are covered in the outlook section later in this report.

Business performance

Key financial and customer metrics per STIP pool

Primarily based on Group, country or business unit BOP and customer metrics in selected major markets

The key driver for determining the STIP award levels per STIP pool is the relevant financial performance during the year, including a qualitative assessment of the results. In addition, performance on customer metrics is considered in selected major markets.

STIP award levels

Business performance, together with a qualitative assessment, determines the funding and the range of STIP awards for each level of individual performance.

Individual performance

Objectives and key achievements

1 Individual objective	2 Individual objective	Etc.

Individual objectives relevant to the role of the employee are defined and agreed at the beginning of the year. The line manager assesses performance achievements, including alignment with Zurich's values, during and at the end of the year, supported by the Group performance management process.

STIP award

The individual STIP award, as determined by the relevant business performance, resulting STIP award levels and individual performance, is paid in cash and capped at 200 percent of the individual STIP target.

A detailed description of the STIP design for 2018 is laid out below:

Vehicle and target award

STIP awards are paid in cash. Each participant has a STIP target established for the performance year at a maximum of 100 percent of the base salary at the end of the performance year (unless otherwise approved by the Board). The participant is allocated to one of the STIP pools within the overall STIP pool architecture for 2018:

- Group pools: covering the leadership team, control functions, Group and regional employees.
- Investment Management pool.
- Commercial Insurance pool.
- Country pools.
- Farmers: including a pool for Farmers New World Life.
- Joint venture pools.

The STIP pool architecture is reviewed and approved by the Board annually and is aligned with the organizational structure of Zurich.

Business performance

The key measures to fund the pools typically include:

- Group BOP and the overall customer transactional net promoter score (TNPS) in selected major markets for members of the leadership team, control functions, and Group and regional employees.
- The relevant BOP or other profitability metrics for countries, business units and Commercial Insurance, as well as TNPS in selected major markets.
- Investment results for Investment Management.
- Specific growth, profitability and customer metrics for Farmers.

At year-end the key measures are evaluated in relation to the business plan which was approved by the Board in the December meeting prior to the relevant performance year. A qualitative assessment of the performance also takes place to ensure a holistic evaluation of performance, including the remuneration review carried out by the Group CRO. Depending on the outcome of this assessment, the funding of the STIP pools can vary between 0 percent and 175 percent of target, however typically, the funding varies in the range of 80 percent to 120 percent of target.

The Group CEO makes recommendations to the Remuneration Committee on the proposed funding for the STIP pools and on the aggregate amount required for STIP award payments across the Group. Following review and analysis, the Remuneration Committee discusses their final recommendations with the Board and seeks the Board's approval.

STIP award levels

The business performance defines the funding available for each STIP pool and also the resulting range of potential STIP awards for varying levels of individual performance. For example, if the business performance meets expectations then the award for an individual that successfully achieves his or her individual objectives, will be in line with their STIP target. If the business performance only partially meets expectations however, then the STIP award for an individual who successfully achieves his or her individual objectives will be lower than target and can potentially be 0 percent of their STIP target. Similarly, if business performance is above expectations, than an award for an individual can also be above target, but is capped at 200 percent of an individual's STIP target.

Individual performance

At the beginning of the year, each individual jointly with his or her line manager, defines and agrees annual objectives. The individual performance achievements and behaviors are then assessed during and at the end of the year through the Group's performance management process. This process utilizes a rating scale between 1 and 5, with 5 being the highest rating. There is a distribution and payout guideline for each of the ratings. Any violations of internal or external rules or requirements by an individual are taken into account in the individual performance assessment and subsequent rating.

STIP award

The business performance and the resulting STIP award levels, together with the individual performance assessment, determine the final individual STIP award for the year which can vary between 0 percent and 200 percent of the individual's STIP target. In this way, STIP awards are differentiated based on business and individual performance.

Short-term incentives are delivered primarily through STIP, although there are also local plans in a small proportion of countries. The Group plan is utilized across the organization and in many countries covers all employees. In other countries, based on market practice in that location, only the most senior individuals participate in STIP. Where local plans exist, they broadly follow the same principles as the Group STIP.

Long-term incentives

Long-term (three- to six-year) incentives are performance-driven based on the following design for the performance period 2018 to 2020:

To support the achievement of the Group's longer term financial goals, long-term incentives are utilized for a defined group of executives and the most senior roles whose specific focus is on the performance drivers of long-term shareholder value. This group contains the individuals with the highest levels of total remuneration, as well as those individuals whose activities have a significant influence on the risk profile of the Group. In addition, the LTIP aligns the incentives and behaviors of participants with the interests of the Group and its shareholders. To further support this purpose, the individual hedging of any shares of Zurich Insurance Group Ltd is prohibited.

In alignment with the Group's risk profile and business strategy and taking into account best practice principles among insurance companies, views from proxy advisers and shareholders, long-term incentives are provided with a deferral element that takes into account material risks and their time horizon. Such deferred remuneration is structured to promote the risk awareness of participants and to encourage participants to operate the business in a sustainable manner. An overview of the LTIP for the performance period 2018 to 2020 is set out below.

Financial performance

Vesting grid

Performance criteria	0% vesting	50% vesting	100% vesting	150% vesting	200% vesting
Relative TSR position	13th – 18th	10th – 12th	7th – 9th	4th – 6th	1st – 3rd
NIAS ROE	< 9.75% p.a.	9.75% p.a.	12.00% p.a.	13.125% p.a.	≥ 14.25% p.a.
Cash remittance	< USD 8.5 bn	USD 8.5 bn	USD 9.5 bn	USD 10.0 bn	≥ USD 10.5 bn

The vesting grid is based on predefined performance criteria and used to assess the overall vesting level.

Vesting level

The vesting level is calculated according to an assessment of the performance criteria in the vesting grid during the three-year performance period. Each performance criteria is assessed independently and has an equal weighting. For the NIAS ROE and cash remittance metrics, linear interpolation is used. The vesting level is applied to all LTIP participants and defines the percentage of target shares that will vest.

LTIP award

Allocations are made in the form of target shares. Target shares vest according to the calculated vesting level three years after they were allocated. Half of the vested shares are sales-restricted for an additional three-year period after the date of vesting. The final LTIP award for an individual is capped at 200 percent of the aggregate number of target shares and dividend equivalent shares.

A detailed description of the LTIP is set out below:

Vehicle and target amount
Allocations are made in the form of target shares on the third working day in April. Each participant has an annual target amount established for the year of allocation which is determined as a percentage of the annual base salary. The number of target shares is calculated by dividing the target amount by the closing share price on the day prior to the allocation.

Financial performance
The financial performance is determined by the assessment of the performance criteria as per the vesting grid, which is set and reviewed by the Board annually in order to ensure alignment with the strategy and financial targets.

The performance criteria for the period 2018 to 2020 comprise:

(i) The position of the total shareholder return (TSR) over the performance period compared with an international peer group of insurance companies derived from the Dow Jones Insurance Titans 30 Index. The Remuneration Committee reviews the peer companies to be included in the relative TSR assessment regularly to ensure that the peer group exhibits a strong TSR correlation and reflects the Group's business profile and geographic spread. The resulting industry peer group includes the following companies: AIG, Allianz, Allstate, Aviva, AXA, Chubb, Generali, Legal & General, Manulife Financial Corp., MetLife, Munich Re, Progressive Ohio, Prudential Plc, QBE, Swiss Re, The Hartford and Travelers Cos. Inc.

(ii) NIAS ROE (average annual rate over three years) and

(iii) Cash remittance (cumulative over the three-year period).

The cash remittance goals were re-calibrated in 2017 with an increase of USD 0.5 billion as shown in the vesting grid on the previous page. This is relevant for the LTIP in 2017 and 2018, vesting in 2020 and 2021 respectively. For the vesting decision in 2019 from the 2016 plan allocation, the vesting grid outlined in the remuneration report for 2016 is relevant.

The performance criteria for the LTIP have been approved by the Board to support the key strategic targets and foster long-term value generation. The NIAS ROE is a key measure for shareholders and supports the alignment of LTIP participants with shareholder interests. The NIAS ROE goals for the LTIP are also aligned to the targets in the financial plan. Ensuring Zurich generates sufficient cash is another key component of Zurich's financial targets and demonstrates the commitment to creating liquidity for the business and shareholder requirements, hence the inclusion of the cash remittance measure in the LTIP. Finally, the relative TSR measure ensures that an external market industry view is taken by considering Zurich's performance in comparison to its peers.

Each performance metric is assessed independently over a three-year period starting at the beginning of the calendar year when the target shares are allocated. Each metric has an equal weighting of one-third. The vesting level is defined according to the vesting grid.

Vesting level
The vesting level defines the percentage of target shares that will vest. The target shares will not vest if all three performance criteria do not meet their respective minimum thresholds.

The vesting level is proposed by the Group CEO to the Remuneration Committee and ultimately approved by the Board. The Board may exercise discretion to prevent unreasonable outcomes, or to reflect the financial impact of decisions taken to implement the strategy, or to deal with exceptional circumstances. An adjustment of +/–25 percent to the calculated vesting level may be applied and this can be positive or negative.

Exceptional individual adjustments
The right to modify awards to reflect individual circumstances is reserved for the Group CEO except for modifications regarding members of the ExCo where this right is reserved for the Remuneration Committee and the Board. An adjustment of +/–25 percent to the calculated final vesting level may be applied on an individual level prior to vesting. However, if performance under exceptional or unusual circumstances warrants it, exceptions to the +/–25 percent adjustment may be made. In this respect Zurich reserves the right to adjust and even set the vesting level to 0 percent for an individual to reflect specific circumstances (e.g. in connection with a breach of internal or external rules) during the period prior to vesting. Any such adjustment is reserved exclusively for the Remuneration Committee and the Board.

The final vesting level, which may include exceptional individual adjustments, is then used to assess the number of shares for vesting.

LTIP award
Any vesting of shares for the LTIP award, based on meeting the thresholds defined in the LTIP vesting grid shown earlier, takes place on April 3, three years after the target shares were allocated to the participant. In no circumstances can the LTIP award for an individual be more than 200 percent of the aggregate number of target shares and dividend equivalent target shares noted below.

Half of any vested shares are sales-restricted for a further three-year period following the date of vesting. This takes the overall vesting and sales-restriction period to a six-year holding period for this part of the award.

Dividend equivalent target shares
To further align plan participants with the interests of shareholders, target shares may be credited with dividend equivalent target shares. The number of dividend equivalent target shares takes into account the actual dividends paid to shareholders prior to vesting (vesting period). Each year during the vesting period, the dividend amount is calculated on the number of target shares provided at the date of allocation and this amount is subsequently converted into dividend equivalent target shares based on the closing share price on the day prior to the dividend payment. No dividend equivalent target shares are credited in the year of allocation if the allocation is made after the ex-dividend date. At the vesting date, the number of target shares plus the dividend equivalent target shares will in aggregate be assessed for vesting against the performance criteria as per the LTIP vesting grid. In this way only the number of shares vesting from the target shares will be eligible for accrual of dividend equivalent target shares. Further, no dividends will accrue on the dividend equivalent target shares. The vested dividend equivalent target shares are subject to the same sales restriction periods as the vested target shares.

LTIP vesting levels
To increase transparency for the reader, a table with the vesting levels under the LTIP is provided below.

Vesting levels for LTIP

		Vesting level as percentage of target in			
		2018	**2019**	**2020**	**2021**
Year of LTIP allocation	2015	83%			
	2016		149%		
	2017[1]			n.a.	
	2018[1]				n.a.

[1] For the 2017 and 2018 allocations, the vesting level will be known in 2020 and 2021 respectively.

Pensions

The Group provides a range of pension benefits to employees, which are designed to reflect local market practices. Benefit levels are positioned toward the relevant market median. The Group Pensions Committee oversees the management of the Group's pension arrangements within the de-risking frameworks established for benefit design, investments, funding and accounting. On a regular basis, the Group Pensions Committee and the local countries assess the competitive environment with regard to pensions. In recent years, there has been a significant shift away from final salary defined benefit pension arrangements such that almost all new employees are now enrolled in defined contribution and/or cash balance-type arrangements.

Other remuneration including employee benefits

The Group also provides a range of other relevant employee benefits in line with the local market, for example life insurance, medical coverage and flexible benefits. Further, the Group operates a number of mobility-related policies to facilitate the movement of people across the organization.

Audited

The information provided according to Articles 14–16 of the Ordinance AEC contained in the remuneration report needs to be externally audited following the audit requirements of the Ordinance AEC (Article 13 para 1 and Article 17 of the Ordinance AEC). In addition, the information according to Article 663c of the Swiss Code of Obligations is being audited and disclosed as such in the remuneration report. All audited sections have been highlighted accordingly.

2018 remuneration and shareholdings

The following section sets out the remuneration and shareholdings of Directors and of members of the ExCo, as well as the remuneration of all employees.

Directors

Directors' fees

As a global insurance provider, Zurich's Directors' fees need to be established at a level which enables the Group to attract and retain high caliber individuals with diverse backgrounds. To assist in determining Board remuneration, an independent adviser carries out benchmarking studies on a regular basis. Zurich aims to set the remuneration of its members of the Board at the relevant median levels using the Swiss Market Index (SMI) as a basis. Based on the role and the fee structure, fee levels are established for each member of the Board. Fees are paid in cash and in shares, with approximately half of the basic fee provided in five-year sales-restricted Zurich shares. The fees paid to Directors (including the portion provided in sales-restricted shares) are not subject to the achievement of any specific performance conditions.

The following table sets out the fee structure and levels for the Chairman, the Vice-Chairman and the members of the Board, as well as committee fees and chair fees for the four committees.

All Directors of Zurich are also members of the Board of Directors of Zurich Insurance Company Ltd, and the fees cover the duties and responsibilities under both boards.

Fee structure for members of the Board[1]

	Fee elements in cash (CHF 000)	Fee elements in sales-restricted shares (CHF 000)	Total fees in 2018 (CHF 000)	Total fees in 2017 (CHF 000)
Basic fee for the Chairman of the Board[2]	750	750	1,500	1,500
Basic fee for the Vice-Chairman of the Board[2]	200	200	400	400
Basic fee for a Member of the Board	120	120	240	240
Committee fee[3]	60	–	60	60
Chair fee for the Audit Committee	80	–	80	80
Chair fee for the Remuneration Committee[4]	60	–	60	60
Chair fee for the Risk and Investment Committee	60	–	60	60
Chair fee for the Governance, Nominations and Sustainability Committee[5]	60	–	60	60

[1] These amounts are for the period from AGM to AGM. The table excludes other fees for board memberships of subsidiary boards of Zurich.
[2] Neither the Chairman nor the Vice-Chairman receive any additional fees for their committee work on the Board of Zurich.
[3] Amount remains the same irrespective of the number of committees on which a member of the Board serves.
[4] For 2018, the Chair fee for the Remuneration Committee was only paid for the first quarter, as the Vice-Chairman of the Board was designated as Chair of the Remuneration Committee since the AGM in 2018.
[5] For 2018 and 2017 no Chair fees were paid for the Governance, Nominations and Sustainability Committee, as the Chairman of the Board has been chairing this committee.

Remuneration report (continued)

The committees on which the Directors serve are set out in the corporate governance report on page 44. In 2018, the Board consisted entirely of non-executive Directors independent from management.

Where a Director is also a member of one or more subsidiary boards of Zurich, the Director is entitled to an additional fee of CHF 50,000 per annum plus CHF 10,000 per annum if he or she also chairs an audit committee of such a board. The fee structure for subsidiary boards can be modified if certain circumstances, for example, the additional time commitment to discharge the duties of a board member, warrant it.

The total aggregate fees allocated to the Directors of Zurich and Zurich Insurance Company Ltd for the calendar year ended December 31, 2018, amounted to CHF 4,257,500. This included CHF 2,467,500 in cash and CHF 1,790,000 in five-year sales-restricted shares. The share price at the allocation date was CHF 297.20. The corresponding amount for 2017 was CHF 4,832,000, which comprised CHF 2,802,000 in cash and CHF 2,030,000 in five-year sales-restricted shares. The share price at the allocation date in 2017 was CHF 285.90. The Directors' fees are not pensionable.

The following tables set out the actual fees paid to the Directors for 2018 and 2017 in Swiss francs. In 2018, eight members served for the full year and four members served for part of the year. In 2017, 10 members served for the full year and one member served for part of the year.

Audited

Directors' fees 2018

in CHF	2018[1]						
	Fee elements in cash					Total sales	
	Basic fee	Committee fee[2]	Chair fee[3]	Other fees[4]	Total cash	restricted shares[5, 6]	Total fees
M. Liès, Chairman[7, 8]	562,500	n.a.	n.a.	–	562,500	750,000	1,312,500
T. de Swaan, former Chairman[7, 8]	187,500	n.a.	n.a.	–	187,500	–	187,500
C. Franz, Vice-Chairman[7, 8]	180,000	15,000	15,000	–	210,000	200,000	410,000
F. Kindle, former Vice-Chairman[7, 8]	50,000	n.a.	n.a.	–	50,000	–	50,000
J. Amble, Member	120,000	60,000	–	–	180,000	120,000	300,000
C. Bessant, Member[8]	120,000	60,000	–	–	180,000	120,000	300,000
S. Bies, Member[8]	30,000	15,000	15,000	12,500	72,500	–	72,500
A. Carnwath, Member	120,000	60,000	80,000	–	260,000	120,000	380,000
J. Hayman, Member	120,000	60,000	45,000	–	225,000	120,000	345,000
K. Mahbubani, Member	120,000	60,000	–	–	180,000	120,000	300,000
M. Mächler, Member	120,000	60,000	–	–	180,000	120,000	300,000
D. Nish, Member	120,000	60,000	–	–	180,000	120,000	300,000
Total in CHF[9]	**1,850,000**	**450,000**	**155,000**	**12,500**	**2,467,500**	**1,790,000**	**4,257,500**

Audited

Directors' fees 2017

in CHF	2017[1]						
	Fee elements in cash					Total sales	
	Basic fee	Committee fee[2]	Chair fee[3]	Other fees[4]	Total cash	restricted shares[5, 10]	Total fees
T. de Swaan, Chairman[7]	750,000	n.a.	n.a.	27,000	777,000	750,000	1,527,000
F. Kindle, Vice-Chairman[7]	200,000	n.a.	n.a.	–	200,000	200,000	400,000
J. Amble, Member[11]	120,000	60,000	40,000	–	220,000	120,000	340,000
C. Bessant, Member[12]	90,000	45,000	–	–	135,000	120,000	255,000
S. Bies, Member	120,000	60,000	60,000	50,000	290,000	120,000	410,000
A. Carnwath, Member[11]	120,000	60,000	40,000	–	220,000	120,000	340,000
C. Franz, Member	120,000	60,000	60,000	–	240,000	120,000	360,000
J. Hayman, Member	120,000	60,000	–	–	180,000	120,000	300,000
K. Mahbubani, Member	120,000	60,000	–	–	180,000	120,000	300,000
M. Mächler, Member	120,000	60,000	–	–	180,000	120,000	300,000
D. Nish, Member	120,000	60,000	–	–	180,000	120,000	300,000
Total in CHF[9]	**2,000,000**	**525,000**	**200,000**	**77,000**	**2,802,000**	**2,030,000**	**4,832,000**

1 The remuneration shown in the tables is gross, based on the accrual principle and does not include any business-related expenses incurred in the performance of the Directors' services.
2 Members of a committee receive a cash fee of CHF 60,000 for all committees on which they serve, irrespective of the number. The committees on which the Directors serve are set out in the corporate governance report.
3 Committee chairs receive an annual fee of CHF 60,000 and the chair of the Audit Committee receives an additional CHF 20,000. The committees on which the Directors serve and the chairs are set out in the corporate governance report.
4 In addition to the fees received as a Director of Zurich Insurance Group Ltd, Susan Bies earned fees for her board membership of the subsidiary board Zurich American Insurance Company on a pro rata basis for her time in the role in 2018 and for the full year in 2017. Also in 2017, recognizing the Chairman's long service and outstanding contribution to Zurich, Tom de Swaan received a farewell present worth CHF 27,000. The resulting Swiss tax obligations were met by the company.
5 The shares allocated to the Directors are not dependent on the achievement of performance criteria and are sales-restricted for five years.
6 As of June 16, 2018, Michel Liès was allocated 2,523 shares, Christoph Franz was allocated 672 shares, and the other members of the Board were allocated 403 shares. The share price as of June 15, 2018 (CHF 297.20) was adopted to calculate the number of shares based on the fixed portion of the fee allocated in shares for the respective members. Where the value of the allocated shares did not equal the value of the portion of the fee to be allocated in shares, the difference was paid in cash.
7 Neither the Chairman nor the Vice-Chairman received any additional fees for their committee work on the Board of Zurich.
8 At the AGM on April 4, 2018, Michel Liès was elected to the Board as Chairman of the Board; Tom de Swaan, Fred Kindle and Susan Bies retired from the Board; and Michel Liès and Catherine Bessant were newly elected as members of the Remuneration Committee. At the constituent Board meeting following the AGM, the Board appointed Christoph Franz as Vice-Chairman of the Board.
9 In line with applicable laws, Zurich paid the company-related portion of contributions to social security systems, which amounted to CHF 192,690 in 2018. The corresponding contributions in 2017 have been restated to CHF 153,036 instead of CHF 177,366 as previously disclosed in the remuneration report 2017. Any personal contributions of the Directors to social security systems are included in the amounts shown in the table above. Swiss-based Directors are eligible for selected employee benefits.
10 As of June 16, 2017 Tom de Swaan was allocated 2,623 shares, Fred Kindle was allocated 700 shares, and the other members of the Board were allocated 420 shares. The share price as of June 15, 2017 (CHF 285.90) was adopted to calculate the number of shares based on the fixed portion of the fee allocated in shares for the respective members. Where the value of the allocated shares did not equal the value of the portion of the fee to be allocated in shares, the difference was paid in cash.
11 Joan Amble stood down from her role as Chairman of the Audit Committee as of June 26, 2017. Alison Carnwath took on the role from this date.
12 At the AGM on March 29, 2017, Catherine Bessant was elected to the Board.

Remuneration report (continued)

Audited

Special payments and termination arrangements, additional honoraria and remuneration and personal loans for Directors

At the AGM on April 4, 2018, Michel Liès was elected as the new Chairman of the Board. No replacement payments or other benefits were provided. Further, Tom de Swaan, Fred Kindle and Susan Bies stood down. No termination payments (i.e. golden parachutes) were made nor any other benefits such as waiver of lock-up periods for equities or additional contribution to occupational pension schemes were provided to the leaving members of the Board.

As disclosed in the Directors' fees 2017 table, Tom de Swaan received a farewell present to the value of CHF 27,000 recognizing the Chairman's service and outstanding contribution to Zurich. None of the Directors received any additional honoraria, remuneration or benefits-in-kind from the Group or from any of the Group's companies other than what is set out earlier. In addition none of the Directors had any outstanding loans, advances or credits as of December 31, 2018 and 2017.

Remuneration and personal loans for former Directors

No benefits (or waiver of claims), loans, advances or credits have been provided to former Directors during 2018 at conditions which are not at arm's length, nor were any provided during 2017.

Related parties to the Directors or to former Directors

No benefits (or waiver of claims) have been provided to related parties of the Directors or related parties of former members of the Board during the years 2018 and 2017, nor had any related party of the Directors or of former members of the Board any outstanding loans, advances or credits as of December 31, 2018 and 2017.

Share plans and shareholdings of Directors

The shareholdings of the Directors who held office at the end of 2018, in shares of Zurich Insurance Group Ltd are shown in the following table. All interests shown include the portion of shares allocated to the Directors as part of their fees, shares acquired in the market by the Directors and shares held by parties related to the Directors.

Directors' shareholdings[1]

Number of Zurich Insurance Group Ltd shares as of December 31	Ownership of shares	
	2018	2017
M. Liès, Chairman	2,523	n.a.
C. Franz, Vice-Chairman	2,338	1,601
J. Amble, Member	1,778	1,375
C. Bessant, Member	823	420
A. Carnwath, Member	2,703	2,300
J. Hayman, Member	1,361	958
K. Mahbubani, Member	1,778	1,375
M. Mächler, Member	2,326	1,923
D. Nish, Member	1,361	958
Total	**16,991**	**10,910**

[1] None of the Directors, including parties related to them, held more than 0.5 percent of the voting rights of Zurich Insurance Group Ltd shares as of December 31, 2018 or 2017, respectively.

Executive Committee

Remuneration of the ExCo

A number of key elements are in place to provide a well-balanced and effectively managed remuneration architecture. These elements include a Group-wide remuneration philosophy, robust short- and long-term incentive plans, effective governance, and strong links to the business planning and risk policies of the Group.

To assist with decisions regarding the remuneration of the ExCo, the Board conducts benchmarking studies on a regular basis. The remuneration structures and practices of a selected industry peer group of relevant companies in the Dow Jones Insurance Titans 30 Index, are analyzed. This index is comprised of the largest insurance companies throughout the world, predominantly in Europe and in the U.S.

The core peer group, which is reviewed by the Remuneration Committee on a regular basis, consists of the following insurance and reinsurance firms:

AIG, Allianz, Allstate, Aviva, AXA, Chubb, Generali, Legal & General, Manulife Financial Corp., MetLife, Munich Re, Progressive Ohio, Prudential Plc, QBE, Swiss Re, The Hartford and Travelers Cos. Inc.

Further, the analysis is supplemented by additional benchmarking studies as appropriate, e.g., by reviewing practices of large SMI companies in Switzerland or similarly sized companies in other countries. The Remuneration Committee also regularly reviews the benchmarking approach.

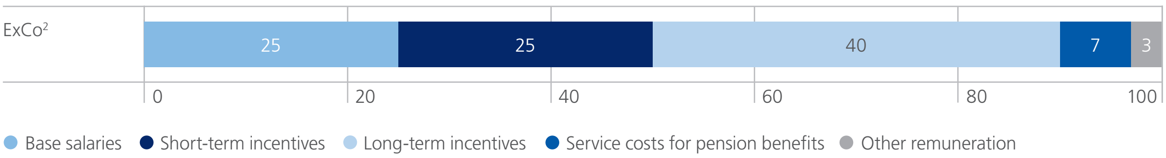
The remuneration structure and the mix of the individual remuneration elements for members of the ExCo are determined by taking into account relevant market practices within the peer groups outlined above and internal relativities.

The total remuneration of the members of the ExCo for 2018 comprised the value of base salaries, short-term cash incentives, the target share allocations made under the LTIP in 2018, pensions and other remuneration including employee benefits.

The distribution of the individual elements making up the total remuneration of the ExCo in 2018, is set out in the following chart and is based on the target values for the performance-related remuneration.

2018 remuneration structure and weighting of elements[1]

%



[1] At target, as a percentage of total remuneration.
[2] Including the Group CEO.

As shown in the chart above, there is an appropriate balance of remuneration elements with a significant emphasis on performance-related remuneration through both STIP and LTIP. The distribution of the target values between short-term (one-year) and long-term incentives (three- to six-years), reflects an emphasis on long-term incentives.

Remuneration report (continued)

Elements and amounts of remuneration for the ExCo

The individual remuneration elements and the corresponding amounts are described in more detail below. The amounts for the highest-paid executive and comparative figures for 2017 are also included.

Elements and amounts of remuneration for the ExCo (including the Group CEO)

	Description	Amount
Base salaries paid during the year	See remuneration elements, page 90.	The total amount of base salaries for all members of the ExCo paid in 2018 was USD 11.1 million compared to USD 11.3 million in 2017.
Cash incentive awards earned for the year (under STIP)	For members of the ExCo the STIP target percentages for 2018 are 100 percent of the base salary. The maximum STIP award for all members of the ExCo is 200 percent of the individual target amount. Further information regarding STIP is set out on the next page.	The total amount of annual cash incentive awards to be paid in 2019 for the 2018 performance year for all members of the ExCo is USD 16.2 million compared to USD 14.4 million for 2017. The annual cash incentive awards are determined individually and are performance-based.
Value of target share allocations made during the year (under LTIP)	In 2018, each member of the ExCo received an annual allocation of target shares under the LTIP for the three-year performance cycle 2018–2020. For members of the ExCo the LTIP target percentages in 2018 varied between 125 percent and 225 percent of base salary. As in previous years, the allocations of target shares for 2018 were based on the closing share price from the second working day in April, i.e. on April 4, 2018. The value of target share allocations does not include dividend equivalent target shares. The maximum vesting level, to be assessed in 2021, is 200 percent of the aggregate number of target shares and dividend equivalent target shares.	The total number of target shares allocated in 2018 to members of the ExCo was 57,555 which reflects a value of USD 18.6 million on the second working day in April. This is based on the assumption of 100 percent vesting in 2021, a share price of CHF 309.70 (2017: CHF 263.80) and an exchange rate of CHF 1 = USD 1.04237. This compares with 63,341 target shares allocated in 2017 at a value of USD 16.7 million for the allocations made in 2017.
Service costs for pension benefits during the year	Members of the ExCo participate in the pension plan arrangements of the entities where they are employed. The Group's philosophy is to provide pension benefits through cash balance and/or defined contribution plans where funds are accumulated throughout a career to provide retirement benefits. The majority of members of the ExCo participate in such plans and over time, all future members of the ExCo will participate in such plans. The remaining members of the ExCo participate in defined benefit plans that provide retirement benefits based on final pensionable earnings and the number of years of service. Normal retirement ages vary from 60 to 65.	The total value of pension benefits accruing to members of the ExCo during 2018, calculated on the basis of the service costs for the company as assessed under IAS 19 accounting principles, was USD 3.0 million (compared to USD 3.2 million in 2017). Service costs value the amount of the pension benefits accruing during the year and for defined contribution plans take the amount of the company contribution paid during the year.
Value of other remuneration including employee benefits during the year	Members of the ExCo received other remuneration in 2018 in relation to employee benefits, expatriate allowances, perquisites, benefits-in-kind and any other payments due under each member's employment contract.	The total value of other remuneration in 2018 was USD 1.7 million (compared to USD 1.5 million in 2017). Benefits-in-kind have been valued using market rates.

ExCo STIP performance assessment

This section provides further insight into the assessment of the individual STIP awards of the members of the ExCo.

The individual STIP award is determined in a similar way as for all employees, taking into account business performance, the resulting STIP award levels and individual performance.

With regard to objective setting, each member of the ExCo receives a target card for their area of responsibility at the beginning of the year. The target cards include objectives related to the execution of the strategy, in particular in the areas of financial measures, customers, people and relevant strategic projects, with a significant weighting on financial measures.

To assess performance against these objectives, a final review takes place at the end of the year. Each member of the ExCo conducts a self-assessment of their performance achievements in relation to the targets set for the year. Group Risk Management, together with other control and assurance functions, provide risk and compliance information to be considered as part of the ExCo members' individual performance assessment. A discussion is subsequently held between each member of the ExCo and the Group CEO. In a rigorous process, the Group CEO and the Remuneration Committee review the individual performance achievements of each member of the ExCo in relation to the targets set for the year, taking into account behavior and risk aspects.

In a similar way, the Remuneration Committee and the Board review the performance achievements of the Group CEO.

For the ExCo, including the Group CEO, the key metrics to determine the award structure for 2018 are the Group's BOP performance during the year and the relevant customer TNPS. In evaluating the Group BOP performance, a qualitative assessment of the overall achievement is carried out. The BOP for 2018 is USD 4.6 billion reflecting a 20 percent increase compared with the BOP for 2017 and is consistent with the underlying BOP for the prior year. The overall customer TNPS result, including a qualitative assessment, is in line with the plan set for the year, and as this was the first year to include customer metrics for STIP purposes, the results will be used to determine appropriate baselines for the following year.

As a result of the funding, and of the assessment of the performance achievements by the Remuneration Committee and the Group CEO, individual STIP awards for each member of the ExCo are determined and approved by the Board.

Replacement payments for members of the ExCo appointed in 2018

In extraordinary circumstances payments may be made to new hires to replace forfeitures under the incentive plans of the previous employer. In these circumstances, the payments mirror the type and timing of the forfeited payments and can include cash payments and/or awards of restricted or performance shares. Where payments are made in cash, there is typically a clawback period if the employee leaves the company voluntarily during the first two years of employment. Restricted share allocations typically vest over three to five years following the date of allocation. Effective July 1, 2018, the restricted share allocations are also credited with dividend equivalent shares as applicable during the vesting period to compensate for the dividend paid, similar to the treatment of performance share allocations under the LTIP. Restricted shares and associated dividend equivalent shares are forfeited if the holder of such share allocations leaves the company voluntarily before the vesting date and the employment relationship terminates.

Replacement payments were made to the new member of the ExCo who took up employment with the Group during 2018. The overall value of replacement payments for 2018 is USD 2.6 million at the relevant exchange rates throughout the year and at the year-end rate for payments in 2019 and later. They comprise payments in cash in 2019 and restricted share allocations that vest in 2020 and 2021. In 2017, the overall value of replacement payments made was USD 3.8 million.

Summary of total remuneration in 2018

The following table shows that the total remuneration of the members of the ExCo, comprising base salaries, cash incentive awards earned for the year, the value of target share allocations in 2018 (to be assessed for vesting in 2021), pensions, and the value of other remuneration including employee benefits, amounted to USD 50.6 million. In 2017, the corresponding amount was USD 47.1 million. Below the total amounts, the values of any one-time remuneration awards and the amounts of contractually agreed remuneration after stepping down from the ExCo and during the notice period are disclosed.

Remuneration report (continued)

Audited

All members of the ExCo (incl. the highest paid)

in USD millions, for the years ended December 31	2018[1, 2]	2017[1, 3]
Base salaries	11.1	11.3
Cash incentive awards earned for the year	16.2	14.4
Value of target performance share allocations	18.6	16.7
Service costs for pension benefits	3.0	3.2
Value of other remuneration[4]	1.7	1.5
Total in USD[5]	**50.6**	**47.1**
Total in CHF[5, 6]	**49.2**	**46.4**
in USD million, for the years ended December 31	**2018[1, 2]**	2017[1, 3]
Other payments and share allocations[7]	2.6	3.8
Contractually agreed remuneration after stepping down and during notice period in the respective year[8]	5.8	1.1

1 The remuneration shown in the table is gross, based on the accrual principle, for the time employees are members of the ExCo during the year and does not include any business-related expenses incurred in the performance of the members' services.
2 On the basis of 14 members and former members of the ExCo, of whom 11 served during the full year in 2018.
3 On the basis of 14 members and former members of the ExCo, of whom 11 served during the full year in 2017.
4 Includes perquisites and benefits-in-kind.
5 In line with applicable laws where the executives are employed, Zurich paid the company-related portion of contributions to social security systems, which amounted to USD 2.1 million in 2018 and USD 2.1 million in 2017. Since the contributions are based on full earnings, whereas benefits are capped, there is no direct correlation between the costs paid to social security systems and the benefits received by the executives.
6 The amounts have been translated from USD to CHF at the relevant exchange rates throughout the year and the cash incentive to be paid in 2019 has been translated at the year-end rate in 2018.
7 Other payments and share allocations are extraordinary and include payments and share allocations to compensate incentive plan forfeitures with previous employers. The amount for 2018 has been translated into USD at the relevant exchange rates throughout the year and at the year-end rate for payments in 2019 and later.
8 The amount relates to contractually agreed remuneration for the period of employment in 2018 after stepping down from the ExCo and during the notice period. Such remuneration includes pro-rated base salaries, cash incentives, LTIP target allocations, pension service costs and other remuneration including employee benefits, for the financial year 2018.

Based on these figures, the value of the total remuneration for all members of the ExCo comprises 31 percent (34 percent in 2017) in fixed remuneration (comprising base salaries, service costs for pension benefits and other remuneration including employee benefits) and 69 percent (66 percent in 2017) in performance-related elements (comprising the cash incentive awards under the STIP and the value of the target share allocations under the LTIP). The emphasis within variable remuneration lies on the deferred part, with 53 percent represented by target performance shares under the LTIP and 47 percent as cash incentive awards under the STIP.

The amount of LTIP included in the total of USD 50.6 million above, is the value of target share allocations of USD 18.6 million allocated in 2018 and assumed to vest at 100 percent of target in 2021. The value of shares vesting in 2019 from the 2016 LTIP allocation (performance period ending December 31, 2018) for members of the ExCo who served in full or for part of the year, is estimated to be USD 33.7 million. This considers the vesting level of 149 percent for all LTIP participants (no discretion has been applied to the calculated vesting level), includes the associated dividend equivalent shares that have accrued during the performance period, uses the 2018 year-end share price of CHF 293.10 (compared to CHF 203.20 which was the share price on the second working day in April 2016 used to determine the initial number of target shares allocated), and the 2018 year-end foreign exchange rate. As a result, the value of actual earned total remuneration for the period ending December 31, 2018, is estimated to be USD 65.7 million compared to the total remuneration of USD 50.6 million shown above.

Member of the ExCo with the highest remuneration

The highest-paid individual in 2018 was Mario Greco, Group CEO, with his total remuneration of CHF 8.8 million representing the base salary, cash incentive awards earned for the year, the value of target shares allocated in 2018 under the LTIP, the value of pension benefits and other remuneration including employee benefits. There were no changes to Mario Greco's compensation structure in 2018. The difference between the total amounts of remuneration in 2018 compared to 2017 can be explained by the value of the STIP award.

Audited

Highest paid executive, Mario Greco

in CHF millions, for the years ended December 31	**2018[1]**	2017[1]
Base salary	1.6	1.6
Cash incentive awards earned for the year	3.0	2.8
Value of target performance share allocations	3.6	3.6
Service costs for pension benefits	0.5	0.5
Value of other remuneration	0.1	0.1
Total in CHF	**8.8**	**8.6**
Total in USD[2]	**9.1**	**8.7**

[1] The remuneration shown in the table is gross, based on the accrual principle and does not include any business-related expenses incurred in the performance of the Group CEO's services.
[2] The remuneration is paid in Swiss francs. The amounts have been translated from Swiss francs to U.S. dollars at the relevant exchange rates throughout the year. The cash incentive to be paid in 2019 has been translated at the year-end rate in 2018.

The amount of LTIP included in the total of CHF 8.8 million above is the value of the target share allocation of CHF 3.6 million allocated in 2018 and assumed to vest at 100 percent of target in 2021. In 2019, Mario Greco will receive the first vesting of shares since joining Zurich in 2016. The value of shares vesting in 2019 from the 2016 LTIP allocation (performance period ending December 31, 2018), made on a pro rata basis, is estimated to be CHF 8.2 million. This considers the vesting level of 149 percent for all LTIP participants (no discretion has been applied to the calculated vesting level), includes the associated dividend equivalent shares that have accrued during the performance period, and uses the 2018 year-end share price of CHF 293.10 (compared to CHF 203.20 which was the share price on the second working day in April 2016 used to determine the initial number of target shares allocated). As a result, the value of actual earned total remuneration for the period ending December 31, 2018, is estimated to be CHF 13.4 million compared to the total remuneration of CHF 8.8 million shown above.

Regarding the replacement payments for Mario Greco made in 2016 and disclosed in the remuneration report for 2016, 19,532 target shares were allocated as additional target performance shares in the 2016 – 2018 LTIP to be assessed for vesting in 2019. Taking into consideration the dividend equivalent units credited during the performance period and the relevant vesting level, the amount of shares vesting in April 2019 will be 35,185.

Remuneration report (continued)

Audited

Special payments and termination arrangements, additional honoraria and remuneration, and personal loans for members of the ExCo

During 2018, there was one new member appointed to the ExCo as an external appointment, and three members relinquished their responsibilities as members of the ExCo.

There were no termination payments (golden parachutes) or payments in advance made, nor any other benefits, such as agreements concerning special notice periods or longer-term employment contracts (exceeding 12 months in duration), waiver of lock-up periods for equities, shorter vesting periods or additional contributions to occupational pension schemes, provided.

None of the members of the ExCo received any remuneration from the Group or from any of the Group's companies in 2018 or 2017 other than as set out in the tables above.

As of December 31, 2018 and 2017, there were no loans, advances or credits outstanding for members of the ExCo.

Remuneration and personal loans for former members of the ExCo

Former members of the ExCo are eligible to continue their mortgage loans following retirement on similar terms to those when they were employed, in line with the terms available to employees in Switzerland. As of December 31, 2018 and 2017, no former member of the ExCo had any outstanding loans, advances or credits.

No former member of the ExCo received remuneration in 2018, other than disclosed in the remuneration report 2018.

Related parties to members or former members of the ExCo

No benefits (or waiver of claims) have been provided to related parties of members of the ExCo or related parties of former members of the ExCo during 2018 and 2017. No party related to members of the ExCo or former members of the ExCo had any outstanding loans, advances or credits as of December 31, 2018 and 2017.

Shareholdings of the members of the ExCo

This section provides a summary of total outstanding share commitments under the LTIP and from restricted share allocations for members of the ExCo as of December 31, 2018.

Target share allocations under the LTIP and from restricted share allocations

As of December 31, 2018, the total number of unvested target share allocations under the LTIP was 218,142 (202,749 as of December 31, 2017). Further, the number of unvested restricted shares was 13,616 in 2018 (15,719 in 2017).

A summary of the unvested target share allocations as of December 31, 2018, under the LTIP and from restricted share allocations is set out in the following table:

Summary of unvested target share allocations for the ExCo as of December 31

		Year of vesting			
	Year of allocation	2019	2020	2021	Total
LTIP[1]	2016	97,470	–	–	97,470
	2017	–	60,963	–	60,963
	2018	–	–	59,709	59,709
Restricted shares[2]	2016	2,294	1,935	–	4,229
	2017	1,748	1,748	–	3,496
	2018	45	3,062	2,784	5,891

[1] Dividend equivalent target shares are credited within the regular LTIP and are included in these amounts where they have already accrued. At the vesting date, the original number of target shares allocated, plus the dividend equivalent target shares, will be assessed for vesting in aggregate based on the performance achievements against the vesting grid. No dividends will accrue on the dividend equivalent target shares.
[2] No performance conditions are applicable for vesting. As of July 1, 2018, dividend equivalent shares are credited during the vesting period and included in these amounts where they have already accrued.

Within the context of the regular LTIP allocations made in 2018, these performance-based share allocations will be considered for vesting in 2021, with half of the resulting vested shares being sales-restricted for an additional three-year period.

The actual level of vesting is determined in accordance with the remuneration principles and vesting criteria set out in this report.

Remuneration report (continued)

Audited

Shareholdings of the members of the ExCo

The following table sets out the actual shareholdings of each member of the ExCo as of December 31, 2018 and 2017. In addition to any shares acquired in the market, the numbers also include vested shares, whether sales-restricted or not, received under the LTIP. The table does not however, include the share interests of the members of the ExCo that are currently unvested target shares or unvested restricted shares.

All interests include shares held by related parties to members of the ExCo.

Shareholdings of the members of the ExCo[1]

Number of shares, as of December 31	Shares	
	2018	2017
M. Greco, Group CEO	2,000	2,000
U. Angehrn, Group Chief Investment Officer	7,289	6,117
A. Blanc, CEO EMEA[2]	–	n.a.
J. Dailey, CEO of Farmers Group, Inc.	12,055	10,211
C. Dill, CEO Latin America	13,865	12,509
J. Howell, CEO Asia Pacific	5,046	2,316
A. Martin, Group Chief Risk Officer[3]	2,487	–
G. Quinn, Group Chief Financial Officer	31,779	24,598
K. Savio, CEO North America[3]	4,723	4,028
G. Shaughnessy, former CEO EMEA[2]	10,033	9,540
J. Shea, CEO Commercial Insurance	–	–
K. Terryn, Group Chief Operating Officer	14,136	17,170
Total	**103,413**	**88,489**

[1] None of the members of the ExCo, together with parties related to them, held more than 0.5 percent of the voting rights as of December 31, 2018 or 2017.
[2] Amanda Blanc was appointed CEO EMEA as an external appointment effective October 5, 2018. Gary Shaughnessy stepped down as CEO EMEA effective October 5, 2018, and as a member of the ExCo effective December 31, 2018.
[3] Alison Martin was appointed Group Chief Risk Officer-Designate as an external appointment effective October 1, 2017. Kathleen Savio was appointed CEO North America-Designate as an internal appointment effective October 1, 2017.

Trading plans

To facilitate the sale of shares for members of the ExCo, the Board approved the implementation of trading plans under a predefined transaction program effective as of 2008. The terms and conditions of the transactions have to be defined and they cannot be changed. All trading plans require the approval of the Chairman of the Board. The establishment of a trading plan by an ExCo member is reported to the SIX Swiss Exchange according to the rules on disclosure of management transactions. As of December 31, 2018, there were no trading plans in place. Further, no trading plans were entered into in 2018 or 2017.

All employees

Remuneration of all employees

Please refer to the remuneration framework section on page 90 for the key elements of remuneration and the benchmarking approach for all employees. Note that the benchmarking analysis is mainly carried out and approved at a local level. The Group had 52,267 full-time equivalent employees as of December 31, 2018 (51,633 in 2017).

The following section includes information regarding the total remuneration earned by employees for 2018 and 2017 across the Group, including remuneration for members of the ExCo.

Total remuneration for all employees

in USD millions, for the years ended December 31		**2018**	2017
Fixed compensation	Base salaries	3,739	3,740
	Value of other remuneration including employee benefits	480	476
	Service costs for pension benefits[1]	436	401
Variable remuneration	Cash incentive awards earned for the year[2]	547	533
	Value of target share allocations made in the year[3]	146	136
Total remuneration		**5,348**	**5,286**

1 This represents the present value of the defined benefits from pension and post-retirement benefit plans, plus employers' contributions to defined contribution plans, arising from employee service over the accounting period. The amount included in this figure for defined benefit plans is calculated using actuarial factors and can vary year-on-year as economic conditions change. These numbers are explained in greater detail in note 20 of the consolidated financial statements.
2 Includes sign-on and severance payments in cash.
3 Includes sign-on payments in shares.

Value of outstanding deferred remuneration

The Group's remuneration system includes instruments for the deferral of remuneration. The following table provides an overview of the overall value of outstanding deferred remuneration as of December 31, 2018 and 2017.

Value of outstanding deferred remuneration for all employees

in USD millions, for the years ended December 31	**2018**	2017
Unvested target share allocations	413	408
Unvested restricted share allocations	20	18
Vested but sales-restricted shares	113	138
Value of overall outstanding deferred remuneration	**546**	**564**

The value of the deferred and unvested remuneration has been determined by multiplying the number of outstanding shares by the relevant share price at the original date of allocation and reflects the assumption of a future vesting level of 100 percent. The value of the vested, but sales-restricted shares considers the taxable value at the time of vesting.

Remuneration report (continued)

Impact on net income in 2018 and 2017 from remuneration made in prior years

Under the LTIP, the vesting level is used to determine the actual number of shares to be awarded to participants relative to the target shares initially allocated. Differences in value between the target shares allocated and the actual shares vesting is reflected in the consolidated income statement in the year of vesting in line with the accounting principles. For the 2016 and 2017 plans with shares vesting in 2019 and 2020 respectively, there was an increase of USD 11 million in the expense recognized in the 2018 income statement to reflect actual performance compared to original estimates. In 2017, there was a reduction of USD 20 million to the expense recognized in the income statement to reflect the actual amounts.

Key risk takers

The following definition and principles for sign-on and severance payments apply.

- **Sign-on payments** are payments that are agreed on the execution of an employment contract (whether paid immediately or over time). Sign-on payments may include compensation made prior to a person joining the company and providing any services (payments in advance) or compensation for benefits foregone with a previous employer (replacement payments). Payments in advance are not paid to members of the Board or the ExCo. Any replacement payments for members of the ExCo, including the Group CEO, have to be approved by the Board based on a proposal by the Remuneration Committee.
- **Severance payments** are provided in connection with the termination of an employment relationship. Zurich does not include under the term severance payments, garden leave or similar payments for employees in jurisdictions where such payments are required by applicable law, or where they are based on contractual notice periods which conform with recognized market practice, or where they are non-contractual, but in line with recognized market practice. Zurich does include garden leave or similar payments however, that go beyond recognized market practice, irrespective of whether these are provided pursuant to an agreement or are ex gratia. Severance payments are not paid to members of the Board or the ExCo.

The Group as a principle does not make any sign-on or severance payments, however if circumstances in the Group's interest warrant such payments, these can be approved through a clear governance process. Any such payment with a value of CHF 1 million or more is approved by the Chairman of the Remuneration Committee prior to the time the employment offer is made or prior to the time the severance payment is committed to.

The following table discloses sign-on and severance payments committed to key risk takers. For key risk taker roles where the incumbent is a member of the ExCo, no payments in advance and/or severance payments have been made. Replacement payments for the ExCo in 2018 and 2017 are included.

Sign-on and severance payments for key risk takers

in USD millions, for the years ended December 31	**2018**		2017	
	Amount (USD m)	**Number of beneficiaries**	Amount (USD m)	Number of beneficiaries
Sign-on payments/number of beneficiaries	11.6	15	7.0	6
Severance payments/number of beneficiaries	0.1	1	–	–

2019 outlook

Zurich continues to evolve the remuneration architecture to support the achievement of strategic and financial objectives, to ensure compliance with legal and regulatory requirements and to align with risk considerations. Following organization-wide engagement during 2018, with a specific focus on employee experience, simplicity and flexibility, the following adjustments to the Group's performance assessment and incentive framework are proposed. The enhancements, which are effective from 2019, ensure that the key principles of differentiation and meritocracy are maintained and continue to support the achievement of the Group's strategic goals.

Performance management:

- The performance assessment process is to be simplified with a move from a five-point rating scale to three categories depending on the level of performance.

Short-term incentive plan:

- Zurich will continue with the current STIP approach, including the funding of STIP awards based on the relevant BOP results and customer metrics in certain markets, as well as a qualitative assessment of these results.
- The use of customer metrics for STIP purposes will be extended to additional markets in 2019.
- For employees above a certain job level, differentiated STIP awards have been defined for each performance category, taking into account how results have been achieved.

Long-term incentive plan:

- The existing LTIP framework, including the performance criteria outlined in the vesting grid, the performance period and the vehicle used, will remain for the 2019 allocation.
- The sales restrictions on half of the vested shares will continue to apply for members of the ExCo.

Shareholders will again be given the opportunity to express their opinion on the remuneration report 2018, through a consultative, non-binding vote at the AGM in 2019. Shareholders will also receive the Board of Directors Report 2019 (www.zurich.com/en/investor-relations/shareholder-area/annual-general-meeting) which includes information regarding the two remuneration votes on the total maximum amounts of remuneration for the Board and for the ExCo, taking place at the AGM on April 3, 2019. The votes allow shareholders to have a say on the prospective remuneration for the Board and for the ExCo arising from Zurich's remuneration policies.

The Remuneration Committee will continue to seek dialogue with investors and proxy advisers in 2019. Further, the Committee will ensure that the remuneration framework, including reviews of the framework and any subsequent changes proposed, are aligned with the strategy, embedded in the risk framework and comply with legal and regulatory requirements. As in previous years, the Committee enforces the governance framework and carefully monitors the link between key performance factors and variable remuneration awards.

Report of the statutory auditor

Report of the statutory auditor

to the General Meeting of Zurich Insurance Group Ltd, Zurich

We have audited the accompanying remuneration report of Zurich Insurance Group Ltd for the year ended December 31, 2018. The audit was limited to the information according to articles 14–16 of the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance) contained in the tables labeled 'audited' on pages 100 to 102, pages 106 to 108 and page 110 of the remuneration report.

Board of Directors' responsibility
The Board of Directors is responsible for the preparation and overall fair presentation of the remuneration report in accordance with Swiss law and the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance). The Board of Directors is also responsible for designing the remuneration system and defining individual remuneration packages.

Auditor's Responsibility
Our responsibility is to express an opinion on the accompanying remuneration report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the remuneration report complies with Swiss law and articles 14–16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the remuneration report with regard to compensation, loans and credits in accordance with articles 14–16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the remuneration report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of remuneration, as well as assessing the overall presentation of the remuneration report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion
In our opinion, the remuneration report of Zurich Insurance Group Ltd for the year ended December 31, 2018 complies with Swiss law and articles 14–16 of the Ordinance.

PricewaterhouseCoopers AG

Mark Humphreys Audit expert Auditor in charge	Nicolas Juillerat Audit expert

Zurich, February 6, 2019

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Risk review

Message from our Group Chief Risk Officer

Building a resilient future is at the heart of all we do.

"Keeping a critical eye on the dynamic changes in the global risk landscape, their impact on our customers, our communities and our business, enables us to build a resilient future."

Alison Martin
Group Chief Risk Officer

For Zurich, 2018 was another year of continuous improvement in our strong risk management practices.

Managing risk and opportunities

Our enterprise risk management framework supports the achievement of the Group's strategy by upholding an efficient and effective risk-based control environment and helps protect capital, liquidity, earnings and reputation. By effectively managing our risks, we maintain our resilience and make sure we are there when our customers need us. Zurich's risk review describes our major risks and how we manage them.

Among the risks we focused on in 2018 are the uncertainties of geopolitical and macroeconomic environments, inflation, credit and cyber risks, and risks to the execution of our organizational transformation.

As the Group continues to embrace technological and innovative solutions, risk management provides assurance by making use of our Total Risk Profiling™ (TRP) risk assessment process to stay on top of both external and internal risks to our strategy and financial plan.

Digital transformation

The digital transformation of the industry can be seen in all aspects of our business, and we support the Group to manage the risks associated with driving digital transformation throughout the customer journey. We follow a holistic approach by providing risk insights on major digital trends and developments in our risk management organization.

Managing security risks, including cyber risk, remains a key focus for Zurich. We introduced a dedicated framework to measure exposure to this risk. We enhanced our capabilities by increasing the emphasis on risk types resulting from digital transformation, notably focusing on information security, emerging technologies, and innovation.

Finding ways of doing things differently, using digital capabilities and focusing on providing assurance, insight, and oversight for all our stakeholders are key factors driving our digitalization.

Focus on climate risk

Identifying risks and opportunities in our dynamic environment enables us to support sustainable and relevant solutions for our customers.

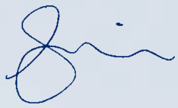
In 2018 we published a white paper, 'Managing the Impacts of Climate Change: Risk Management Responses.' The paper highlights the interconnected nature of climate change risk and emphasizes its increasing relevance to businesses. Managing this risk is vitally important when considering exposure to both physical and transition risk. Provided in this report are a number of risk management tools and practices at companies' disposal to support customers in managing this systemic risk.

Financial strength supports the Group's dividend strategy

We use sensitivity and scenario analyses to assess the potential impact of conditions under stress.

The Group identifies plausible threat scenarios and quantifies their potential impact on financial resources, or capital required, or both. Depending on the outcome, we develop, implement and monitor appropriate actions.

In this report, we present the Zurich Economic Capital Model (Z-ECM) results as well as sensitivity analysis to adverse scenarios. Zurich's very strong Z-ECM capital position, together with strong cash-remittances, demonstrates the resilience of the Group's dividend strategy to external events.



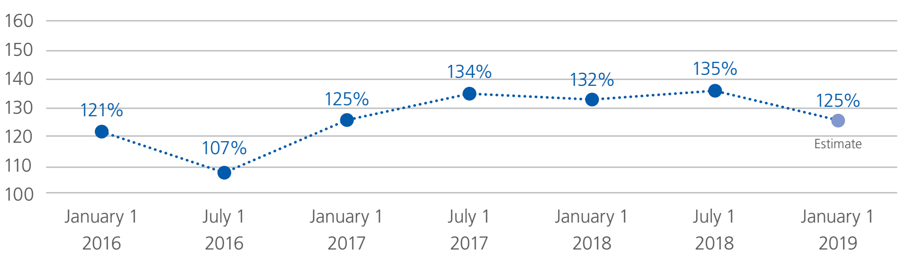
Alison Martin
Group Chief Risk Officer

Economic risk profile

The Group's Z-ECM ratio increased from 132 percent as of January 1, 2018 to 135 percent as of July 1, 2018. The January 1, 2019 estimate is 125 percent with an error margin of +/– 5 percentage points. The development of the Z-ECM ratio in 2018 was driven mainly by adverse financial market performance, economic profit generation, and selective acquisitions.

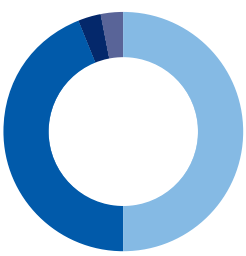
Z-ECM ratio

%



Total Z-ECM capital required: USD 30.7 billion

%, as of July 1, 2018



Insurance risk	50%
Market risk, including investment credit risk	44%
Other credit risk	3%
Operational risk	3%

Highlights by risk type

Insurance risk

The Group's insurance risk is diversified by geography, line of business, product and customer, supported by our centralized purchase of reinsurance.

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Market risk

In 2018 the Group's overall market risk position remained stable and in line with our risk appetite. Interest rate risk contribution has moderately increased following liability modelling refinements, partially off-set by a lower credit risk position.

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Other credit risk

Our credit exposures related to reinsurance assets were of sustained high credit quality and remained basically unchanged in 2018 compared with 2017.

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Operational risk

We established a dedicated framework for key focus areas such as information security and cyber risk.

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Risk review

Contents

The risk review information marked 'audited' is an integral part of the consolidated financial statements.

Audited

This 'audited' symbol indicates that the information contained within the shaded panel is audited and forms an integral part of the consolidated financial statements.

Audited

Risk management

Objectives of risk management

Taking risk is inherent to the insurance business, but such risk-taking needs to be made in an informed and disciplined manner, and within a pre-determined risk appetite and tolerance.

The major risk management objectives at Zurich Insurance Group (Zurich, or the Group) are to:

- Support achievement of the Group strategy and protect capital, liquidity, earnings and reputation by monitoring that risks are taken within the Group's risk tolerance
- Enhance value creation by embedding disciplined risk-taking in the company culture and contribute to an optimal risk-return profile where risk reward trade-offs are transparent, understood, and risks are appropriately rewarded
- Efficiently and effectively diversify risk and mitigate unrewarded risks
- Encourage openness and transparency to enable effective risk management
- Support decision-making processes by providing consistent, reliable and timely risk information
- Protect Zurich's reputation and brand by promoting a sound culture of risk awareness, and disciplined and informed risk taking

Risk management framework

The risk management framework is based on a governance process that sets forth clear responsibilities for taking, managing, monitoring and reporting risks.

The Zurich Risk Policy is the Group's main risk governance document; it sets standards for effective risk management throughout the Group. The policy describes the Group's risk management framework, identifies Zurich's principal risk types and defines the Group's appetite for risks at Group level. Risk-specific policy manuals provide guidelines and procedures to implement the principles in the Zurich Risk Policy. Ongoing assessments verify that requirements are met.

The Group regularly reports on its risk profile at local and Group levels. The Group has procedures to refer risk issues to senior management and the Board of Directors in a timely way. To foster transparency about risk, the Board receives quarterly risk reports and risk updates. In 2018, reporting was supplemented with in-depth risk insights into topics such as macroeconomic developments, information security management, climate change-related risks, and credit risk and country risk.

The Group assesses risks systematically and from a strategic perspective through its proprietary Total Risk Profiling™ (TRP) process, which allows Zurich to identify and evaluate the frequency and severity of a risk scenario. The Group then develops, implements and monitors improvements. The TRP process is integral to how Zurich deals with change, and is particularly suited to evaluate strategic risks, as well as risks to Zurich's reputation. At Group level, this process is ongoing, with regular reviews with senior management.

Risk review (continued)

Audited

The Group's risk appetite statement includes capital, liquidity, earnings volatility and non-financial metrics. The Group regularly measures and quantifies material risks to which it is exposed. Zurich's policy is to maintain capital consistent with an 'AA' financial strength rating for the Group. The Group translates that goal into a quantified risk tolerance. The primary metric used to steer business is the Zurich Economic Capital Model (Z-ECM) which provides a key input into the Group's strategic planning process as an assessment of the Group's risk profile against the Group's risk tolerance. The Z-ECM forms the basis for optimizing the Group's risk-return profile by providing consistent risk measurement across the Group.

Group's Z-ECM overall risk appetite and tolerance

<90%	90–100%	100–120%	120–140%	>140%
Z-ECM ratio below Group risk tolerance level, requiring appropriate remedial actions	Position may be tolerated for a certain length of time depending on the risk environment	'AA' target range No action required as within stated objective and equivalent to 'AA' rating	Consider increased risk-taking or remedial actions	Z-ECM ratio indicating over-capitalization, requiring implementation of mitigating actions

Z-ECM ratio

Risk-based remuneration

Based on the Group's remuneration rules, the Board of Directors designs and structures remuneration arrangements that support the achievement of strategic and financial objectives, and ensures such arrangements do not encourage inappropriate risk-taking. With regard to the latter, the Group Chief Risk Officer (Group CRO) consults with the other assurance, control and governance functions to provide the Group CEO with a review of risk factors to consider in the annual variable-compensation process. In consultation with these functions, the Group CRO also provides an individual assessment of Group key risk takers as part of their annual individual performance assessment. For more information on Zurich's remuneration system, see the 'remuneration report.'

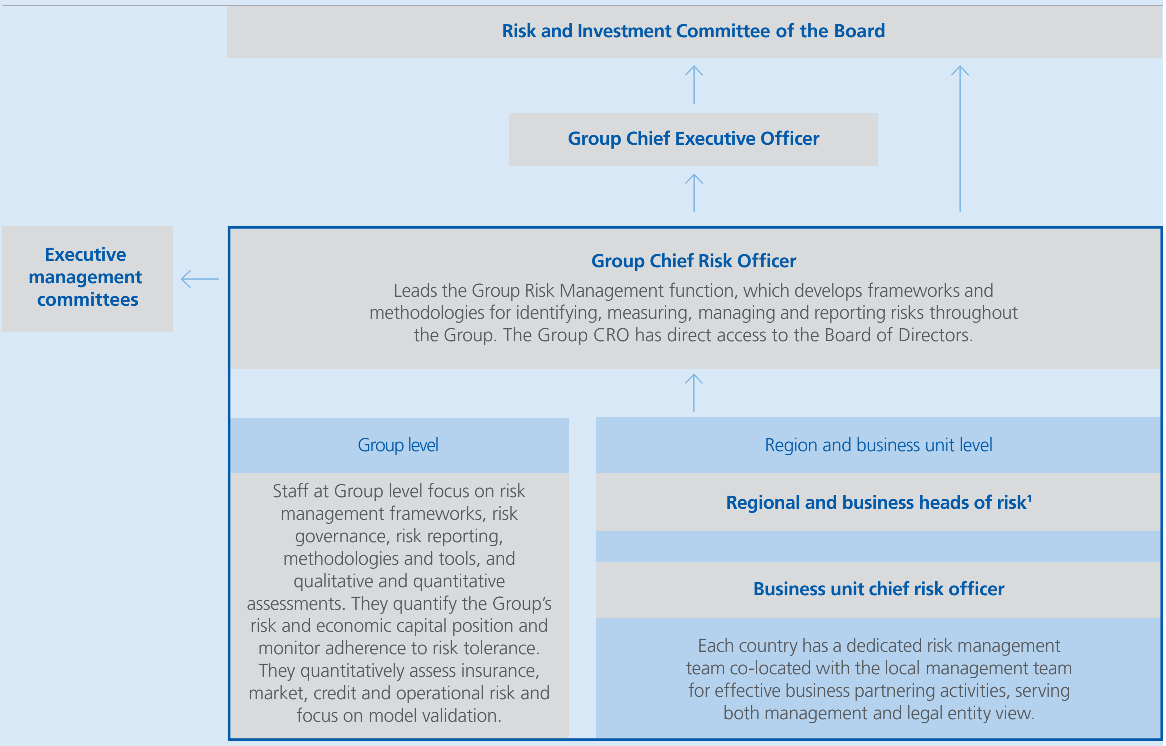
Audited

Risk governance and risk management organization

For information on the Group's overall governance, including the Board of Directors and Group executive level, see the 'corporate governance report (unaudited).'

Risk management organization

The Group Risk Management function is a global function, led by the Group CRO.



Risk function
Reporting about risks

The Group has committees covering oversight activities that encompass major business areas. The committees review certain risk management matters for their respective areas. At the local level, these oversight activities are conducted through risk and control committees.

[1] Farmers Chief Risk Officer has a matrix reporting line into the Group CRO.

The risk function is independent of the business by being a vertically integrated function where global risk employees directly report into the Group CRO, unless otherwise required by local laws or regulations. Risk officers are embedded in the business, positioning them to support and advise, and independently challenge, business decisions from a risk perspective. As business advisers on risk matters, the risk officers, equipped with technical risk skills as well as business skills, help foster a risk-aware culture in the business.

Audited

Capital management

Objectives of capital management

The Group manages its capital to maximize long-term shareholder value while maintaining financial strength within its ‘AA’ target range, and meeting regulatory, solvency and rating agency requirements. In particular, the Group endeavors to manage its shareholders’ equity under IFRS to balance maximization of shareholder value and constraints imposed by its economic framework, rating agencies and regulators. As of December 31, 2018, shareholders' equity of USD 30.2 billion, subordinated debt of USD 6.8 billion and senior financial debt not maturing within the next year of USD 2.4 billion (since the second quarter 2018, excluding net new issued senior debt) were part of the capital available in the Group’s economic framework. Further adjustments usually include such items as intangible assets, deferred tax assets and liabilities, allowing for discounting of liabilities and the value of in-force business or excluding new net issuances of senior debt. For more information, see ‘analysis of the Group’s Z-ECM available financial resources’ (unaudited).

Zurich strives to simplify the Group’s legal entity structure to reduce complexity and increase fungibility of capital.

Capital management framework

The Group’s capital management framework forms the basis for actively managing capital within Zurich. The Group uses a number of different capital models, taking into account economic, regulatory, and rating agency constraints. The Group’s capital and solvency position is monitored and regularly reported to the Executive Committee (ExCo).

Zurich’s policy is to allocate capital to businesses earning the highest risk-adjusted returns, and to pool risks and capital as much as possible to operationalize its risk diversification.

The Group’s executive management determines the capital management strategy and sets the principles, standards and policies to execute the strategy. Group Treasury and Capital Management executes the strategy.

Capital management program

The Group’s capital management program comprises various actions to optimize shareholders’ total return and to meet capital needs, while enabling Zurich to take advantage of growth opportunities. Such actions include paying and receiving dividends, capital repayments, share buy-backs, issuance of shares, issuance of senior and hybrid debt, securitization and purchase of reinsurance.

The Group seeks to maintain a balance between higher returns for shareholders on equity held, and the security a sound capital position provides. Dividends, share buy-backs, and issuances and redemption of debt have a significant influence on capital levels. In 2018, the Group paid a dividend out of retained earnings and the capital contribution reserve, executed a share repurchase program, issued senior debt to finance redemptions and investments in the Group’s development, and called hybrid debt that was re-financed during 2018.

The Swiss Code of Obligations stipulates that dividends may only be paid out of freely distributable reserves or retained earnings. Apart from what is specified by the Swiss Code of Obligations, Zurich Insurance Group Ltd faces no legal restrictions on dividends it may pay to its shareholders. As of December 31, 2018, the amount of the statutory general legal reserve is more than 40 times the paid-in share capital. The ability of the Group’s subsidiaries to pay dividends may be restricted or indirectly influenced by minimum capital and solvency requirements imposed by insurance and other regulators in the countries in which the subsidiaries operate. Other limitations or considerations include foreign exchange control restrictions in some countries, and rating agencies’ methodologies.

For details on issuances and redemptions of debt, see note 18 of the consolidated financial statements.

For details on the share repurchase program, see note 19 of the consolidated financial statements.

Audited

Risk and solvency assessment

Economic capital adequacy

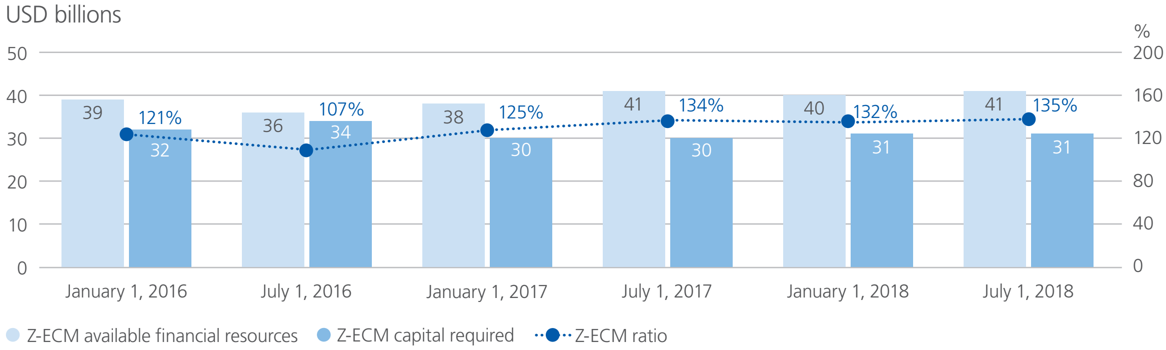
Internally, the Group uses its Zurich Economic Capital Model (Z-ECM), which also forms the basis of the Swiss Solvency Test (SST) model. Z-ECM targets a total capital level that is calibrated to an 'AA' financial strength. Zurich defines the Z-ECM capital required as being the capital required to protect the Group's policyholders in order to meet all of their claims with a confidence level of 99.95 percent over a one-year time horizon.

The Group uses Z-ECM to assess the economic capital consumption of its business on a one-balance-sheet approach. Z-ECM is an integral part of how the Group is managed. It is embedded in the Group's organization and decision-making processes, and is used in capital allocation, business performance management, pricing, and communication. Z-ECM quantifies the capital required for insurance-related risk (including premium and reserve, natural catastrophe, business and life insurance), market risk including investment credit risk, reinsurance credit risk, other credit risk, and operational risk.

At the Group level, Zurich compares Z-ECM capital required to the Z-ECM available financial resources (Z-ECM AFR) to derive an economic solvency ratio (Z-ECM ratio). Z-ECM AFR reflects financial resources available to cover policyholder liabilities in excess of their expected value. It is derived by adjusting the IFRS shareholders' equity to reflect the full economic capital base available to policyholders to absorb any unexpected volatility in the Group's business activities.

The chart below shows the development of the Group's Z-ECM AFR, Z-ECM capital required and Z-ECM ratio over time. As of January 1, 2019, the Z-ECM ratio was estimated at 125% with an error margin of +/–5 percentage points.

Analysis of the Group's Z-ECM available financial resources and Z-ECM capital required
USD billions

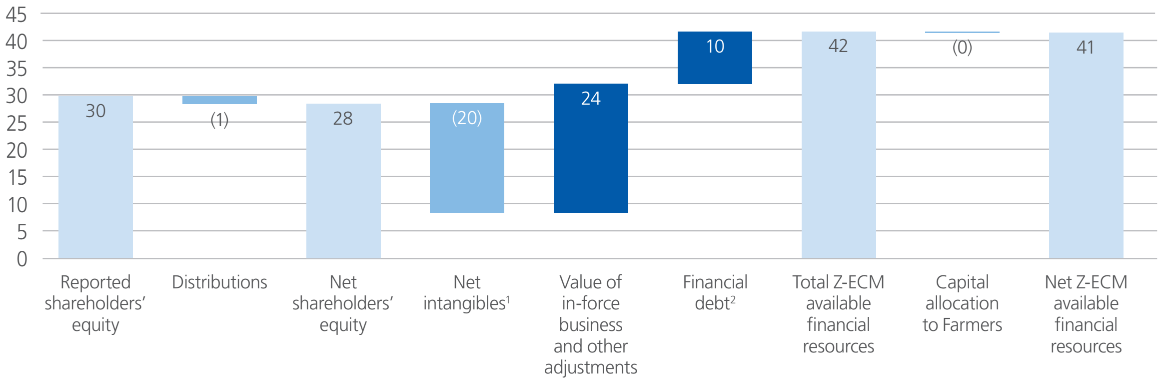


Risk review (continued)

The chart below shows an analysis of the composition of the Group's Z-ECM available financial resources as of July 1, 2018.

Analysis of the Group's Z-ECM available financial resources

USD billions, as of July 1, 2018

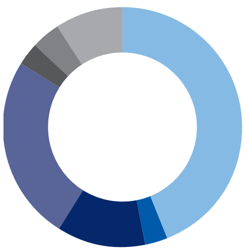


[1] Shareholders' intangible assets including deferred tax assets less deferred front-end fees and deferred tax liabilities
[2] All debt issues (senior and subordinated) excluding those classified as operational debt or maturing within one year

The chart below shows the Z-ECM capital required, split by risk type as of July 1, 2018 and as of January 1, 2018. As of July 1, 2018, the largest proportion of Z-ECM capital required arose from market risk which comprised 44 percent of the total. Z-ECM capital required for premium and reserve risk was the second-largest, comprising 25 percent.

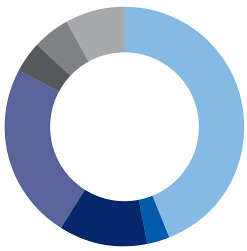
Z-ECM capital required, split by risk type

July 1, 2018
Total Z-ECM capital required: USD 30.7 billion



Market risk	**44%**
Operational risk	**3%**
Business risk	**12%**
Premium & reserve risk	**25%**
Reinsurance credit risk	**3%**
Life insurance risk	**4%**
Natural catastrophe risk	**9%**

January 1, 2018
Total Z-ECM capital required: USD 30.6 billion

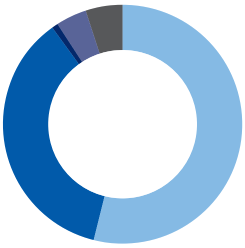


Market risk	**44%**
Operational risk	**3%**
Business risk	**12%**
Premium & reserve risk	**24%**
Reinsurance credit risk	**4%**
Life insurance risk	**5%**
Natural catastrophe risk	**8%**

The total allocated capital as of July 1, 2018 equaled USD 30.9 billion. As of July 1, 2018 the largest proportions of Z-ECM capital required were allocated to Property & Casualty with 54 percent and Life with 36 percent of the total. The following chart shows the Z-ECM capital required allocated to the businesses as of July 1, 2018 and January 1, 2018.

Total capital allocated, by business

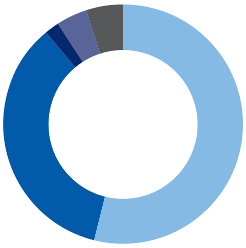
July 1, 2018
Total capital allocated: USD 30.9 billion[1]



Property and Casualty	**54%**
Life	**36%**
Group Functions	**1%**
Farmers[1]	**4%**
Non-Core Businesses	**5%**

[1] Includes direct allocation of USD 0.2 billion to Farmers.

January 1, 2018
Total capital allocated: USD 31.0 billion[2]



Property and Casualty	**54%**
Life	**35%**
Group Functions	**2%**
Farmers[2]	**4%**
Non-Core Businesses	**5%**

[2] Includes direct allocation of USD 0.4 billion to Farmers.

Sensitivity and scenario analysis

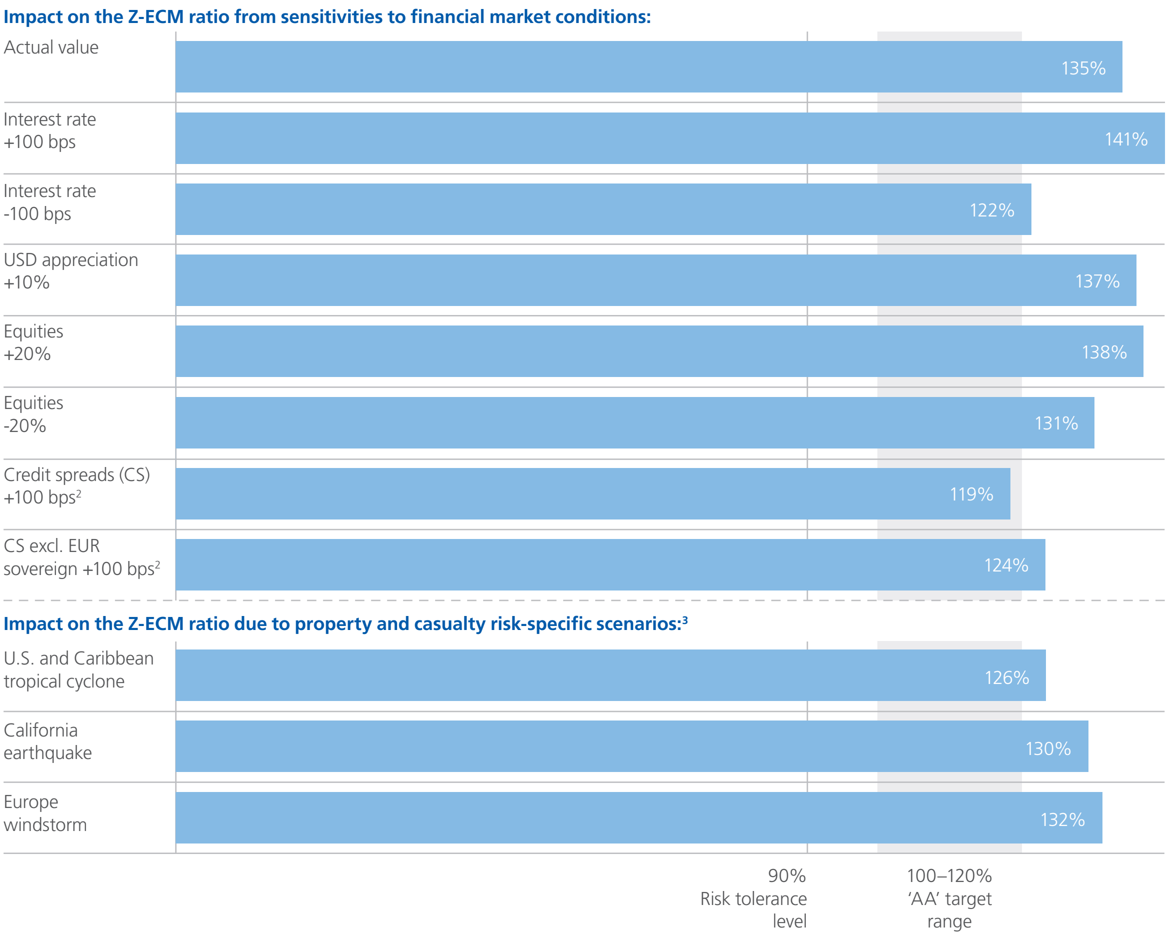
The Group evaluates sensitivities to, and stress scenarios on, the Z-ECM ratio, and presents results relative to Zurich's risk tolerance and appetite. The sensitivities and stress scenarios in the following chart capture two key risks to the Group: market risk and insurance risk. For insurance risk, the chart shows the three largest natural catastrophe events to which the Group is exposed.

Market risk sensitivities show the estimated impact on the Group's Z-ECM ratio of a one percentage point (100 basis points or bps) increase/decrease in yield curves, a 10 percent appreciation in the U.S. dollar, a 20 percent rise/decline in all stock markets, and a one percentage point change in credit spreads, with and without euro-denominated sovereign bonds. The sensitivities are considered as separate but instantaneous scenarios. They are a best estimate and non-linear, i.e., a change in the scenario input could result in disproportionally higher (or lower) impact on the Z-ECM ratio depending on the prevailing market conditions at the time.

Scenarios are defined as events that have a very small probability of occurring but that could, if realized, negatively affect the Group's Z-ECM AFR. The impact of insurance-specific scenarios on the required capital is not taken into account.

Risk review (continued)

Z-ECM sensitivities and scenarios[1]
as of July 1, 2018



[1] Z-ECM is calibrated at 99.95 value at risk (equivalent to an 'AA' rating).
[2] Credit spreads (CS) include mortgages, and including and excluding euro sovereign spreads. Sensitivity is net of profit sharing with policyholders.
[3] The insurance risk-specific scenarios relate to natural catastrophe events that are estimated on a modeled 250-year net aggregate loss (equivalent to a 99.6 percent probability of non-exceedance).

Audited

Insurance financial strength rating

The Group has interactive relationships with three global rating agencies: Standard & Poor's, Moody's, and AM Best. The insurance financial strength rating (IFSR) of the Group's main operating entity, Zurich Insurance Company Ltd (ZIC), is an important element of Zurich's competitive position. The Group's credit ratings derived from the financial strength ratings also affect the cost of capital.

In October 2018, Standard & Poor's affirmed ZIC's 'AA–' IFSR with a stable outlook and stated that "Zurich's performance (...) proves its management's ability to control the strategic plan's execution and adjust it accordingly." As a result, Standard & Poor's reassessed the management and governance factor in the rating analysis to strong from satisfactory.

Standard & Poor's sees Zurich's enterprise risk management as 'very strong,' based on a positive view of our risk management culture, risk controls, emerging risk management, risk models and strategic risk assessment.

As of December 31, 2018, the IFSR of ZIC, the main operating entity of the Group, was 'AA–/Stable' by Standard and Poor's, 'Aa3/Stable' by Moody's, and 'A+ (Superior)/Stable' by A.M. Best.

Audited

Regulatory capital adequacy

The Group endeavors to manage its capital so that all of its regulated entities meet local regulatory capital requirements at all times.

In each country in which the Group operates, the local regulator specifies the minimum amount and type of capital that each of the regulated entities must hold in addition to their liabilities. In addition to the minimum capital required to comply with the solvency requirements, the Group aims to hold an adequate buffer to ensure regulated subsidiaries meet local capital requirements.

Regulatory requirements in Switzerland

Under the Swiss Solvency Test (SST), insurance companies and insurance groups can apply to use company-specific internal models to calculate risk-bearing and target capital, as well as the SST ratio. The SST ratio has to be calculated as per January 1 and must be submitted to the Swiss Financial Market Supervisory Authority (FINMA). Zurich filed with FINMA an SST ratio of 216 percent (unaudited) as of January 1, 2018.

In 2018, Zurich continued to enhance its internal model, advanced the approval process with FINMA, and has received approval for specific enhancements of the model. The model approval process continues for other parts of the internal model. The 2019 model changes will primarily address new regulatory requirements that enter into force in 2020 and that have not yet been implemented into the Group’s internal model. Zurich intends to file these modules for FINMA's approval during the course of 2019. The Group does not expect a material impact on the SST ratio as of January 1, 2019 from the changes made to the model in 2018 (unaudited).

Regulatory requirements in other countries

Regulatory requirements in the European Economic Area (EEA)

The main regulatory framework governing the Group’s subsidiaries in the EEA is Solvency II. This is a risk-based capital framework which covers capital requirements (pillar 1), governance and risk management (pillar 2) and reporting (pillar 3). All EEA-based legal entities of the Group use the Solvency II standard formula for their pillar 1 requirements with the exception of Zurich Insurance plc (Ireland) that applies an approved internal model, which is aligned with the Z-ECM.

Regulatory requirements in the U.S.

In the U.S., required capital is determined to be ‘company action level risk-based capital’ calculated using the National Association of Insurance Commissioners’ risk-based capital model. This method, which builds on regulatory accounts, measures the minimum amount of the capital for an insurance company to support its overall business operations by taking into account its size and risk profile.

Regulatory requirements in Asia Pacific, Latin America, and Middle East and Africa

Every country has a capital standard for insurance companies. Several jurisdictions (e.g., Brazil and Mexico) have taken approaches similar to Solvency II.

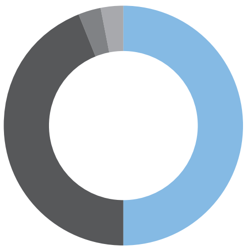
Risk review (continued)

Analysis by risk type

Insurance risk

Section highlights

Total Z-ECM capital required: USD 30.7 billion
%, as of July 1, 2018



Insurance risk	50%
Market risk, including investment credit risk	44%
Other credit risk	3%
Operational risk	3%

Key risk and capital indicators
Z-ECM, in USD billions

	Q2 2018	Q2 2017
Business risk	3.7	2.8
Life liability risk	1.3	1.6
Premium & reserve risk	7.5	7.1
Natural catastrophe risk	2.7	2.0

Audited

Insurance risk is the inherent uncertainty regarding the occurrence, amount or timing of insurance cash flows. The profitability of insurance business is also susceptible to business risk in the form of unexpected changes in expenses, policyholders' behavior, and fluctuations in new business volumes. Zurich manages insurance risk through:

- Strong underwriting and claims standards and controls
- Robust reserving processes
- External reinsurance

Property and casualty insurance risk

Property and casualty insurance risk arises from coverage provided for motor, property, liability, special lines and worker injury. It comprises premium and reserve risk, catastrophe risk, and business risk. Premium and reserve risk covers uncertainties in the frequency of the occurrence of the insured events as well as in the severity of the resulting claims. Catastrophe risk predominantly relates to uncertainty around natural catastrophes. Business risk for property and casualty predominantly relates to unexpected increases in the expenses relating to claims handling, underwriting, and administration.

Management of Property & Casualty business insurance risk

The Group's underwriting strategy takes advantage of the diversification of Property & Casualty (P&C) risks across lines of business and geographic regions. Zurich's underwriting governance is applicable throughout the Group. Underwriting discipline is a fundamental part of managing insurance risk. The Group sets limits on underwriting capacity and delegates authority to individuals based on their specific expertise, and sets appropriate underwriting and pricing guidelines. Technical reviews confirm whether underwriters perform within authorities and adhere to underwriting philosophies and policies.

Property & Casualty insurance reserves are regularly estimated, reviewed and monitored by qualified and experienced actuaries at local, regional and Group levels. To arrive at their reserve estimates, the actuaries take into consideration, among other things, the latest available facts, trends and patterns of loss payments. Inflation is monitored with insights feeding into actuarial reserving models and Zurich's underwriting processes and pricing.

To ensure a common understanding of business insights and new trends for reserve analysis, financial plans, underwriting and pricing decisions, the Group has established a culture of continuous cross-functional collaboration. For this, underwriting, actuarial (pricing and reserving), claims, finance, sales and distribution, risk engineering and risk management contribute to quarterly meetings on local and Group level.

Zurich has an Emerging Risk Group, with cross-functional expertise from core insurance functions such as underwriting, claims and risk management to identify, assess and recommend actions for emerging risks.

Audited

Actions are underway to rebalance the portfolio, reducing exposure to long tail lines. Governance is in place to ensure appropriate focus on top-line targets and profitability. Reinsurance is deployed to help manage insurance risk. Group Risk Management also provides independent assurance through risk reviews.

The Group is exposed to losses that could arise from natural and man-made catastrophes. The main concentrations of risks arising from such potential catastrophes are regularly reported to executive management. In 2018, risk-based capital (RBC) for catastrophe risk increased as a result of growth in short tailed lines of business. The most important peril regions and natural catastrophes (Nat Cat) continue to be U.S. and Caribbean windstorm, California earthquake and Europe windstorm.

Natural catastrophes

The Group uses third-party models (adjusted to Zurich's view) to manage its underwriting and ensure accumulations stay within intended exposure limits. The same view Zurich has on natural catastrophe risk also underpins profitability assessment and strategic capacity allocation and guides the type and quantity of reinsurance Zurich buys.

To ensure global consistency, Nat Cat exposures are modeled centrally. Potential losses from property policies with material exposure in hazard-prone geographical areas and from worker injury policies with material exposure in U.S. seismic zones are probabilistically modeled. Losses for other lines of business are estimated based on adjustments to these modelled results. Risk modeling mainly addresses climate-induced perils such as windstorm, flood, tornado, and hail, and geologically-induced perils such as earthquake.

Zurich constantly strives to improve its modeling and improve data quality. It supplements internal knowledge with external knowledge (e.g., the Advisory Council for Catastrophes). Zurich is a governor sponsor of the Global Earthquake Model Foundation, is a shareholder of PERILS AG, and is a member of the Oasis Loss Modeling Framework.

Man-made catastrophes

Man-made catastrophes include events such as industrial accidents, terrorism and cyber attacks.

For terrorism, worker injury and property risk exposures are analyzed to identify areas with significant risk concentration. Other lines of business are assessed, although the potential exposure is not as significant. A vendor- provided catastrophe model is used to evaluate potential exposures in every major U.S. city and selected cities in Europe. The Group's analysis for the P&C business has shown that its exposures outside of North America are lower, in a large part due to government-provided pools. Outside the modeled areas, exposure concentrations are identified in Zurich's Risk Exposure Data Store (REDS). Exposure concentrations for location-based man-made scenarios, other than terrorism, are also identified in REDS, for example industrial explosions at global ports.

The Group uses third-party models to manage its underwriting and accumulations for cyber and casualty catastrophe. We are actively monitoring and managing our cyber exposure and continue to refine products to ensure their appropriateness. Improving modeling capabilities and data capture for cyber and casualty catastrophe risks are key focus areas.

Concentration of Property & Casualty business insurance risk

The Group defines concentration risk in the Property & Casualty (P&C) business as the risk of exposure to increased losses associated with inadequately diversified portfolios. Concentration risk for a property and casualty insurer may arise due to a concentration of business written within a geographical area or of underlying risks covered.

Tables 1.a and 1.b show the Group's concentration of risk within the P&C business by region and line of business based on direct written premiums before reinsurance. P&C premiums ceded to reinsurers (including retrocessions) amounted to USD 7.0 billion and USD 6.5 billion for the years ended December 31, 2018 and 2017, respectively. Reinsurance programs are managed on a global basis, and therefore, net premium after reinsurance is monitored on an aggregated basis.

Risk review (continued)

Audited

Table 1.a

Property & Casualty business – Direct written premiums and policy fees by line of business – current period

in USD millions, for the year ended December 31, 2018	Motor	Property	Liability	Special lines	Worker injury	Total
Europe, Middle East & Africa	4,546	4,118	1,962	1,986	343	12,955
North America[1]	1,422	4,622	2,638	2,494	2,735	13,912
Other regions	1,595	1,402	356	1,769	150	5,272
Total	**7,563**	**10,142**	**4,957**	**6,249**	**3,228**	**32,139**

[1] In 2018, the crop business line in North America was reclassified, resulting in a USD 1.7 billion shift from special lines to property.

Table 1.b

Property & Casualty business – Direct written premiums and policy fees by line of business – prior period

in USD millions, for the year ended December 31, 2017	Motor	Property	Liability	Special lines	Worker injury	Total
Europe, Middle East & Africa	4,459	3,869	1,927	1,895	335	12,486
North America	1,750	2,691	3,175	3,864	2,934	14,414
Other regions	1,472	1,184	341	1,646	138	4,781
Total	**7,681**	**7,745**	**5,443**	**7,405**	**3,408**	**31,681**

Analysis of sensitivities for Property & Casualty business risks

Tables 2.a and 2.b show the sensitivity of net income before tax and the sensitivity of net assets, using the Group effective income tax rate, as a result of adverse development in the net loss ratio by one percentage point. The sensitivities do not indicate a probability of such an event and do not consider any non-linear effects of reinsurance. Based on the assumptions applied in the sensitivity analysis in tables 2.a and 2.b, each additional percentage point increase in the loss ratio would have a linear impact on net income before tax and net assets. The Group also monitors insurance risk by evaluating extreme scenarios, taking into account the non-linear effects of reinsurance contracts.

Table 2.a

Insurance risk sensitivity for the Property & Casualty business – current period

in USD millions, for the year ended December 31, 2018	Europe, Middle East & Africa	North America	Asia Pacific	Latin America	Reinsurance	Total
+1% in net loss ratio						
Net income before tax	(121)	(100)	(23)	(21)	1	(264)
Net assets	(91)	(75)	(17)	(16)	–	(199)

Table 2.b

Insurance risk sensitivity for the Property & Casualty business – prior period

in USD millions, for the year ended December 31, 2017	Europe, Middle East & Africa	North America	Asia Pacific	Latin America	Reinsurance	Total
+1% in net loss ratio						
Net income before tax	(119)	(105)	(19)	(19)	1	(260)
Net assets	(79)	(70)	(13)	(13)	1	(174)

Audited

Life insurance risk

The risks associated with life insurance include:

Life liability risk

- Mortality risk – when on average, the death incidence among the policyholders is higher than expected
- Longevity risk – when on average, annuitants live longer than expected
- Morbidity risk – when on average, the incidence of sickness or disability among the policyholders is higher or recovery rates from disability are lower than expected

Business risk

- Policyholder behavior risk – on average, the policyholders discontinue or reduce contributions or withdraw benefits prior to the maturity of contracts at a rate that is different from expected
- Expense risk – expenses incurred in acquiring and administering policies are higher than expected
- New business risk – volumes of new business are insufficient to cover fixed acquisition expenses

Market risk

- Market risk – the risk associated with the Group's balance sheet positions where the value or cash flow depends on financial markets, which is analyzed in the 'market risk, including investment credit risk' section

Credit risk

- Credit risk – the risk associated with a loss or potential loss from counterparties failing to fulfill their financial obligations, which is analyzed in the 'market risk, including investment credit risk' and 'other credit risk' sections

A more diversified portfolio of risks is less likely than an undiversified portfolio to be affected across the board by a change in any subset of the risks. The offsetting effects between unit-linked and traditional business reduce some of the risk associated with the life business.

Management of Life business insurance risk

The Group has local product development committees and a Group-level committee to analyze potential new life products that could significantly increase or change the nature of its risks. The Group regularly reviews the continued suitability and the potential risks of existing life products.

Unit-linked products are designed to reduce much of the market and credit risk associated with the Group's traditional business. Risks that are inherent in these products are largely passed on to the policyholder, although a portion of the Group's management fees is linked to the value of funds under management, and hence is at risk if fund values decrease. To the extent that there are guarantees built into the product design, unit-linked products carry mortality/morbidity risk and market risk. Contracts may have minimum guaranteed death benefits where the sum at risk depends on the fair value of the underlying investments. For certain contracts, these risks are mitigated by mortality and morbidity charges.

Other life insurance liabilities include traditional life insurance products, such as protection and life annuity products. Protection products carry mortality, longevity and morbidity risk, as well as market and credit risk. Changes in medical treatments and lifestyle changes are among the most significant factors that could result in earlier or more claims than expected. Disability, defined in terms of the ability to perform an occupation, could be affected by adverse economic conditions. To reduce pricing cross-subsidies, where permitted, premiums are adjusted for factors such as age, gender and smoker status. Policy terms and conditions and disclosure requirements in insurance applications are designed to mitigate the risk arising from non-standard and unpredictable risks that could result in severe financial loss. In the life annuity business, medical advances and improved social conditions that lead to increased longevity are the most significant insurance risk. Annuitant (beneficiary) mortality assumptions include allowance for future mortality improvements.

Risk review (continued)

Audited

The Group is also exposed to risks posed by policyholder behavior and fluctuating expenses. Policyholder behavior risk is mitigated by designing products that, as closely as possible, match revenue and expenses associated with the contract. Expense risk is reduced by carefully controlling expenses, and through regular expense analysis and allocation exercises.

The Group is also exposed to investment and surrender risks related to bank-owned life insurance contracts sold in the U.S. These risks have reduced significantly in recent years as several major clients have switched into less risky investment divisions. See heading 'other contracts' in note 7 of the consolidated financial statements for additional information.

Interest rate guarantees (with concentration in traditional, guaranteed business in Germany and Switzerland and variable annuity business in the U.S. containing minimum guaranteed death benefits) expose Zurich to financial losses that may arise as a result of adverse movements in interest rates. These guarantees are managed through a combination of asset-liability management and hedging.

The Group has a dynamic hedging strategy to reduce the investment risk associated with the closed book of variable annuities written by its U.S. subsidiary Zurich American Life Insurance Company. This exposure has fallen substantially as a result of several policy buy-back programs since 2015.

Concentration of Life business insurance risk

The Group defines concentration risk in the life business as the risk of exposure to increased losses associated with inadequately diversified portfolios of assets or obligations. Concentration risk for a life insurer may arise with respect to investments in a geographical area, economic sector, or individual issuers, or due to a concentration of business written within a geographical area, of a policy type, or of underlying risks covered.

Observing best-estimate assumptions on cash flows related to benefits of insurance contracts gives some indication of the size of the exposure to risks and the extent of risk concentration. Table 3 shows the Group's concentration of risk within Life by region and line of business based on reserves for life insurance on a net of reinsurance basis. The life insurance reserves also include policyholder surplus reserves with a loss absorbing capacity[1], predominantly in Germany for an amount of USD 7.4 billion in 2018 (2017: USD 8.2 billion) and in the UK for an amount of USD 0.5 billion in 2018 (2017: USD 0.6 billion). The Group's exposure to life insurance risks varies significantly by geographic region and line of business and may change over time. See note 8 of the consolidated financial statements for additional information on reserves for insurance contracts.

[1] Policyholder surplus reserves with loss absorbing capacity refer to funds allocated to the policyholders that can be used by the shareholders, under certain conditions which may require regulatory approval.

Table 3

Reserves, net of reinsurance, by region

in USD millions, as of December 31	Unit-linked insurance contracts		Other life insurance liabilities		Total reserves	
	2018	2017	**2018**	2017	**2018**	2017
Life						
Europe, Middle East & Africa	41,229	46,802	77,756	81,182	118,985	127,984
of which:						
United Kingdom	15,323	18,699	3,271	3,468	18,594	22,167
Germany	15,976	17,178	36,980	39,638	52,956	56,817
Switzerland	634	731	17,294	18,123	17,928	18,854
Italy	1,568	1,073	4,521	4,155	6,089	5,228
Ireland	2,347	3,133	2,021	2,260	4,368	5,393
Spain	699	856	11,415	11,182	12,114	12,038
Zurich International	4,339	4,784	309	277	4,648	5,061
Rest of Europe, Middle East & Africa	342	349	1,946	2,078	2,288	2,427
North America	9,241	9,298	893	841	10,135	10,139
Asia Pacific	539	584	2,791	2,731	3,330	3,315
Latin America	13,159	13,687	5,385	5,075	18,544	18,762
Group Reinsurance	–	–	2	–	2	–
Eliminations	–	–	(13)	(3)	(13)	(3)
Subtotal	64,168	70,371	86,814	89,826	150,982	160,197
Other businesses	**4,598**	**5,042**	**9,474**	**9,404**	**14,072**	**14,446**
Total	**68,766**	**75,413**	**96,288**	**99,230**	**165,054**	**174,643**

Audited

Analysis of sensitivities for Life business insurance risk

The Group uses market-consistent embedded value reporting principles, which allow Zurich to increase its understanding of, and report on, the risk profile of its life products, and how these risks would change under different market conditions. Embedded value is a measure that markets use to value life businesses. For more information, see the 'embedded value report 2018' (unaudited but subject to assurance review) at www.zurich.com/investor-relations/results-and-reports.

Reinsurance for Property & Casualty and Life businesses

The Group's objective in purchasing reinsurance is to provide market-leading capacity for customers while protecting the balance sheet, supporting earnings volatility management, and achieving capital efficiency. The Group follows a centralized reinsurance purchasing strategy for both Property & Casualty (P&C) and Life, and bundles programs, where appropriate, to benefit from diversification and economies of scale. In support of the Group's empowerment- based management model and to align risk-bearing capacities between the Group and individual country operations, the internal reinsurance vehicle introduced in 2017 has been successfully implemented and applied to all externally reinsured lines of business. In addition, to actively manage and reduce potential claims-recovery risks on facultative cessions and to support the strategy on operational excellence, the Group started to tailor specific facultative property and casualty facilities.

The Group structures and aligns its external reinsurance protection to its capital position to achieve an optimum risk-return ratio. This includes participation in the underlying risks through self-retentions. The Group manages its central reinsurance purchasing according to these principles. The cession rate for P&C was 21.0 percent and 19.7 percent as of December 31, 2018 and December 31, 2017, respectively. The cession rate for Life was 7.0 percent and 8.0 percent as of December 31, 2018 and December 31, 2017, respectively.

The Group uses traditional and collateralized reinsurance markets to protect itself against extreme single events, multiple event occurrences across regions, or increased frequency of events. Specifically, to protect the Group against man-made and natural catastrophe scenarios, Zurich arranges per event and annual aggregate global covers as illustrated on the graph on the next page.

The Group participates in the underlying risks through its retention and through its co-participation in excess layers. The contracts are on a loss-occurrence basis except the Global Aggregate Catastrophe cover, which operates on an annual aggregate basis. The current catastrophe covers are placed annually with the exception of the USD 750 million Global Catastrophe treaty, which is a three-year treaty expiring in 2019. In addition to these covers, the Group has some local catastrophe covers, a bilateral risk swap, and various line of business-specific risk treaties in place. These covers are reviewed continuously and are subject to change going forward.

Major changes in 2018 amongst others included the external protection of the Group's financial lines portfolio to support and strengthen the commercial financial lines portfolio management and strategic execution. The structure chosen provides protection against extreme large loss experience.

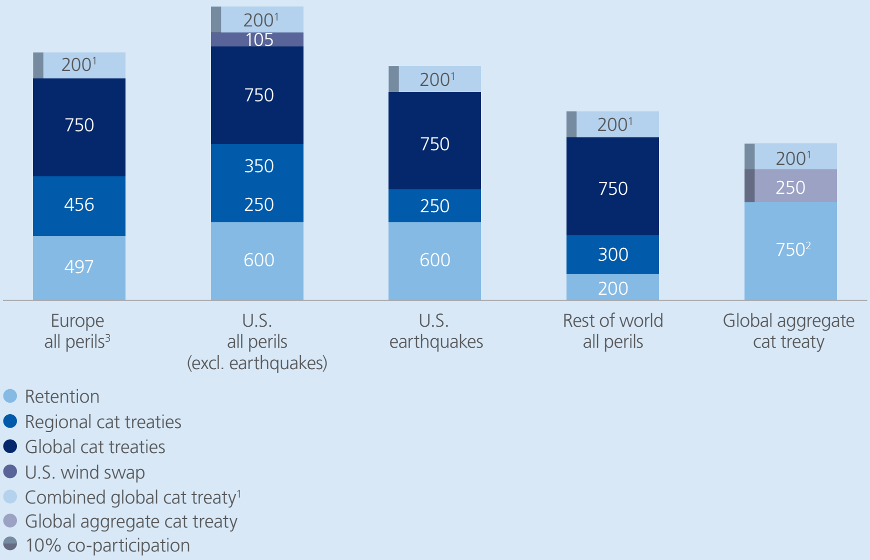
To complement existing treaties, the Group purchases catastrophe reinsurance specific to life insurance for its exposure to natural and man-made catastrophes.

Risk review (continued)

Audited

2018 Group catastrophe reinsurance protection

USD millions, as of December 31, 2018



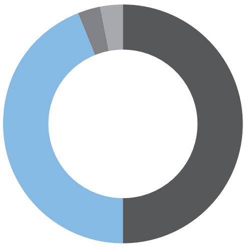
[1] This cover can be used only once, either for aggregated losses or for an individual occurrence or event.
[2] Franchise deductible of USD 25 million, i.e. losses greater than USD 25 million count toward the erosion of the retention (annual aggregate deductible).
[3] Europe cat treaty calculated with EUR/USD exchange rate as of July 31, 2018.

Market risk, including investment credit risk

Section highlights

Total Z-ECM capital required: USD 30.7 billion

%, as of July 1, 2018



Insurance risk	50%
Market risk, including investment credit risk	44%
Other credit risk	3%
Operational risk	3%

Key risk and capital indicators

Z-ECM, in USD billions

	Q2 2018	Q2 2017
Market risk, including investment credit risk	13.5	15.2

Audited

Market risk is the risk associated with the Group's balance sheet positions where the value or cash flow depends on financial markets. Risk factors include:

- Equity market prices
- Real estate market prices
- Interest-rate risk
- Credit and swap spread changes
- Defaults of issuers
- Currency exchange rates

The Group manages the market risk of assets relative to liabilities on an economic total balance sheet basis. This is done to achieve the maximum risk-adjusted excess return on assets relative to the liability benchmark, while taking into account the Group's risk appetite and tolerance and local regulatory constraints.

The Group has policies and limits to manage market risk and keep its strategic asset allocation in line with its risk capacity. Zurich centrally manages certain asset classes to control aggregation of risk, and provides a consistent approach to constructing portfolios and selecting external asset managers. It diversifies portfolios, investments and asset managers, and regularly measures and manages market risk exposure. The Group has set limits on concentration in investments in single issuers and certain asset classes, as well as by how much asset interest rate sensitivities can deviate from liability interest-rate sensitivities. The Group regularly reviews its capacity to hold illiquid investments.

The Asset/Liability Management Investment Committee reviews and monitors Group strategic asset allocation and tactical boundaries, and monitors Group asset/liability exposure. The Group oversees the activities of local asset/liability management investment committees and regularly assesses market risks at both Group and local business levels. The economic effect of potential extreme market moves is regularly examined and considered when setting the asset allocation.

Risk assessment reviews include the analysis of the management of interest-rate risk for each major maturity bucket and adherence to the aggregate positions with risk limits. The Group applies processes to manage market risks and to analyze market risk hotspots. Actions to mitigate risk are taken if necessary to manage fluctuations affecting asset/liability mismatch and risk-based capital.

Audited

The Group may use derivative financial instruments to mitigate market risks arising from changes in currency exchange rates, interest rates and equity prices, from credit quality of assets, and from commitments to third parties. The Group enters into derivative financial instruments mostly for economic hedging purposes and, in limited circumstances, the instruments may also meet the definition of an effective hedge for accounting purposes.

In compliance with Swiss insurance regulation, the Group's policy prohibits speculative trading in derivatives, meaning a pattern of 'in and out' activity without reference to an underlying position. The Group addresses the risks arising from derivatives through a stringent policy that requires approval of a derivative program before transactions are initiated, and by subsequent regular monitoring by Group Risk Management of open positions and annual reviews of derivative programs.

For more information on the Group's investment result, including impairments and the treatment of selected financial instruments, see note 6 of the consolidated financial statements. For more information on derivative financial instruments and hedge accounting, see note 7 of the consolidated financial statements.

Risk from equity securities and real estate

The Group is exposed to risks from price fluctuations on equity securities and real estate. These could affect the Group's liquidity, reported income, economic surplus and regulatory capital position. Equity risk exposure includes common stocks, including equity unit trusts, private equity, common stock portfolios backing participating-with-profit policyholder contracts, and equities held for employee benefit plans. Exposure to real estate risk includes direct holdings in property and property company shares and funds. Returns on unit-linked contracts, whether classified as insurance or investment contracts, may be exposed to risks from equity and real estate, but these risks are borne by policyholders. However, the Group is indirectly exposed to market movements from unit-linked contracts with respect to both earnings and economic capital. Market movements affect the amount of fee income earned when the fee income level is dependent on the valuation of the asset base. Therefore, the value of in-force business for unit-linked business can be negatively affected by adverse movements in equity and real estate markets.

The Group manages its risks from equity securities and real estate as part of the overall investment risk management process, and applies limits as expressed in policies and guidelines. Specifically, Zurich limits holdings in equities, real estate and alternative investments. To realize an optimal level of risk diversification, the strategy for equities is defined through a composite of market benchmark indices. The Group has the capability and processes in place to change the exposure to the key equity markets within a short time frame through the use of derivatives.

For additional information on equity securities and investment property, see note 6 of the consolidated financial statements.

Risk from interest rates and credit spreads

Interest-rate risk is the risk of loss resulting from changes in interest rates, including changes in the shape of yield curves. The Group is exposed to interest-rate risk from debt securities, reserves for insurance contracts, liabilities for investment contracts, debt issued by the Group, commercial and residential mortgages, employee benefit plans, and loans and receivables.

The Group manages credit-spread risk, which describes the sensitivity of the values of assets and liabilities due to changes in the level or the volatility of credit spreads, over the risk-free interest rate yield curves. Movements of credit spreads are driven by expected probability of default, expected losses in cases of defaults of issuers, the uncertainty of default probabilities and losses.

Returns on unit-linked contracts, whether classified as insurance or investment contracts, are at the risk of the policyholder; however, the Group is exposed to fluctuations in interest rates and credit spreads in so far as they affect the amount of fee income earned if the fee income level is dependent on the valuation of the asset base.

Audited

Analysis of market risk sensitivities for interest rate, equity and credit-spread risks

Group investments sensitivities

The economic market risk sensitivities for the fair value for Group investments before tax as of 2018 is a negative USD 9.9 billion (negative USD 10.7 billion as of 2017) for a 100-basis-point increase in interest rate. For a 100-basis-point decrease in interest rate, the sensitivity is USD 11.1 billion (USD 12.0 billion as of 2017). For a 10 percent decline in equity market, Group investments drop in value by USD 1.1 billion compared to USD 1.2 billion as of 2017. A 100-basis-point increase in credit spreads results in a decrease of USD 5.2 billion compared to USD 5.4 billion as of 2017.

The following describes limitations of the Group investment sensitivities. Group sensitivities show the effects of a change of certain risk factors, while other assumptions remain unchanged. The interest rate scenarios assume a parallel shift of all interest rates in the respective currencies. They do not take into account the possibility that interest rate changes might differ by rating class; these are disclosed separately as credit spread risk sensitivities. The sensitivity analysis is based on economic assets, and not on shareholders' equity or net income as set out in the consolidated financial statements. The sensitivities only cover Group investments, not insurance or other liabilities. The equity market scenarios assume a concurrent movement of all stock markets. The sensitivity analysis does not take into account actions that might be taken to mitigate losses. Actions may involve changing the asset allocation, for example through selling and buying assets. The sensitivities do not indicate a probability of such events occurring in the future. They do not necessarily represent the Group's view of expected future market changes.

In addition to the sensitivities, management uses stress scenarios to assess the impact of more severe market movements on the Group's financial condition. For more information on stress scenarios, see 'Group economic net asset sensitivities' (unaudited), below.

Group economic net asset sensitivities

Basis of presentation – Property & Casualty, Life, and rest of the business

The basis of the presentation for tables 4, 5, and 6 is an economic valuation represented by the fair value for Group investments. IFRS insurance liabilities are discounted at risk-free market rates to reflect the present value of insurance liability cash flows and other liabilities, for example, own debt. The Group describes risk-free market rates as swap rates. In the sensitivities, own debt does not include subordinated debt, which Zurich considers available to protect policyholders in a worst-case scenario.

The basis of presentation for the Life business to financial market movements uses replicating portfolios. The replicating portfolios are portfolios of assets that replicate the cash flows or present values of the life insurance liabilities under stochastic scenarios from the embedded value models. They are calibrated to match dependencies of life insurance liabilities on developments in the financial markets, in respect of interest rates, equity and property. The options and guarantees of the underlying life insurance liabilities are captured through the inclusion of options in the replicating portfolios.

The net impact – the difference between the impact on Group investments and liabilities – represents the economic risk related to changes in market risk factors that the Group faces. Tables 4, 5 and 6 show the estimated economic market risk sensitivities of the net impact. Positive values represent an increase in the balance, and values in parentheses represent a decrease. Mismatches in changes in value of assets relative to liabilities represent an economic risk to the Group.

In determining the sensitivities, investments and liabilities are fully re-valued in the given scenarios. Each instrument is re-valued separately, taking the relevant product features into account. Non-linear effects, where they exist, are reflected in the model. The sensitivities are shown before tax. They do not include the impact of transactions within the Group.

Sensitivities for the rest of the business include Farmers, Group Finance and Operations, and Non-Core Businesses.

Analysis of economic sensitivities for interest-rate risk

Table 4 shows the estimated net impact before tax of a 100 basis point increase/decrease in yield curves after consideration of hedges in place, as of December 31, 2018 and 2017.

Economic interest rate sensitivities*

Table 4

In USD millions, as of December 31	2018	2017
100 basis point increase in the interest rate yield curves		
Property and casualty	(180)	(278)
Life[1]	655	244
Rest of the business	(192)	(275)
100 basis point decrease in the interest rate yield curves		
Property and casualty	(8)	100
Life[1]	(2,103)	(1,127)
Rest of the business	151	236

[1] Modeling enhancements introduced in 2018 for the German Life business that extended the maximum maturity to 60 years compared to 40 years previously.

Analysis of economic sensitivities for equity risk

Table 5 shows the estimated net impact before tax from a 10 percent decline in stock markets, after consideration of hedges in place, as of December 31, 2018 and 2017.

Economic equity price sensitivities*

Table 5

In USD millions, as of December 31	2018	2017
10% decline in stock markets		
Property & Casualty	(593)	(642)
Life	(395)	(422)
Rest of the business	(83)	(74)

Analysis of economic sensitivities for credit spread risk

Table 6 shows the estimated net impact before tax from a 100 basis points increase in corporate credit spreads, as of December 31, 2018 and 2017. The sensitivities apply to all fixed income instruments, excluding government, supranational and similar debt securities. For Life business the loss-absorbing capacity of liabilities for losses on credit spreads are not included, as they are not modeled in the replicating portfolios.

Economic credit spread sensitivities*

Table 6

In USD millions, as of December 31	2018	2017
100 basis point increase in credit spreads		
Property & Casualty	(1,614)	(1,694)
Life	(3,048)	(3,095)
Rest of the business	(338)	(564)

* Limitations of the economic sensitivities: same limitations apply as for Group investments sensitivities, except that the above sensitivities are based on economic net assets including liability representation: see Note 1 of the consolidated financial statements.

Audited

Risks from defaults of counterparties

Debt securities

The Group is exposed to credit risk from third-party counterparties where the Group holds securities issued by those entities. The default risk is controlled by Group counterparty concentration risk limits keeping the size of potential losses to an acceptable level.

Table 7

Debt securities by rating of issuer

as of December 31	2018		2017	
	USD millions	% of total	USD millions	% of total
Rating				
AAA	35,283	25.2%	37,426	25.2%
AA	37,362	26.7%	39,664	26.7%
A	20,998	15.0%	26,011	17.5%
BBB	39,529	28.3%	38,360	25.9%
BB and below	5,341	3.8%	6,033	4.1%
Unrated	1,357	1.0%	767	0.5%
Total	**139,870**	**100.0%**	**148,261**	**100.0%**

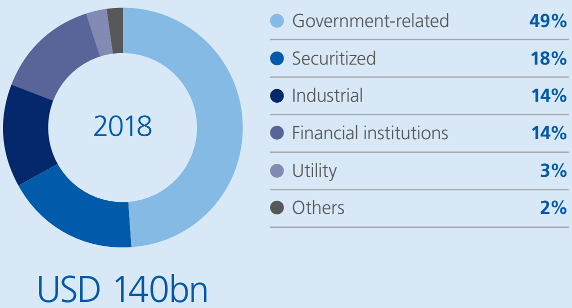
Table 7 shows the credit risk exposure of debt securities, by credit rating. As of December 31, 2018, 95.2 percent of the Group's debt securities was investment grade and 25.2 percent was rated 'AAA.' As of December 31, 2017, 95.4 percent of debt securities was investment grade and 25.2 percent was rated 'AAA.'

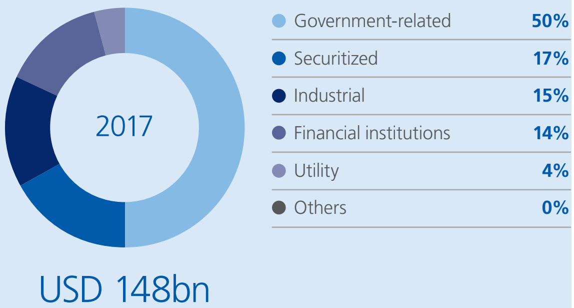
Exposure-level limits are in place and are based on default and recovery rates that tighten progressively for lower ratings. Where the Group identifies investments expected to trigger limit breaches, appropriate actions are implemented.

The risk-weighted average credit rating of the Group's debt securities portfolio is 'A–' in 2018, compared with 'A–' in 2017.

Debt securities – credit risk concentration by industry

%, as of December 31





As of December 31, 2018, the largest concentration in the Group's debt securities portfolio was government-related at 49 percent of all debt securities. In all other categories, a total of USD 31.4 billion (44 percent) was secured. As of December 31, 2017, 50 percent of the Group's debt portfolio was invested in government-related securities. In all other categories, a total of USD 30.0 billion (41 percent) was secured. Industry classifications in the fixed income portfolio were revised during 2018 to better align with the management view of the portfolio and financial industry practice. The 2017 figures were restated accordingly.

The second-largest concentration in the Group's debt securities portfolio is securitized, including structured finance securities and covered bonds.

Risk review (continued)

Audited

In addition to debt exposure, the Group had loan exposure of USD 4.4 billion and USD 4.9 billion to the German central government or the German federal states as of December 31, 2018 and 2017, respectively. For more information, see the 'mortgage loans and other loans' section.

Cash and cash equivalents

To reduce concentration, settlement and operational risks, the Group limits the amount of cash that can be deposited with a single counterparty. The Group also maintains an authorized list of acceptable cash counterparties.

Cash and cash equivalents amounted to USD 8.6 billion as of December 31, 2018 and USD 8.2 billion as of December 31, 2017. The risk-weighted average rating of the overall cash portfolio was 'A–' as of December 31, 2018 and December 31, 2017. The ten largest global banks represent 77 percent of the total, whose risk-weighted average rating was 'A+' as of December 31, 2018 and 'A' as of December 31, 2017.

Mortgage loans and other loans

Mortgage loans amounted to USD 6.6 billion as of December 31, 2018 and USD 7.0 billion as of December 31, 2017. The Group's largest mortgage loan portfolios are held in Switzerland (USD 3.4 billion) and in Germany (USD 2.3 billion); these are predominantly secured against residential property but also include mortgages secured by commercial property. The Group invests in mortgages in the U.S. (USD 0.6 billion); these are mainly participations in large mortgage loans secured against commercial property.

The credit risk arising from other loans is assessed and monitored together with the 'debt securities' portfolio. Out of the USD 7.6 billion reported loans as of December 31, 2018, 62 percent are government-related, of which 94 percent are to the German central government or the German federal states. As of December 31, 2018, USD 4.7 billion were rated as 'AAA' (61 percent) compared with 5.1 billion as of December 31, 2017; USD 0.7 billion as 'AA' (10 percent) compared with 0.7 billion as of December 31, 2017; USD 0.3 billion as 'A' (4 percent) compared to with 0.6 billion as of December 31, 2017; USD 1.2 billion as 'BBB' and below (16 percent) compared with 1.2 billion as of December 31, 2017; and USD 0.7 billion as unrated (10 percent) compared with 1.2 billion as of December 31, 2017.

Derivatives

The replacement value of outstanding derivatives represents a credit risk to the Group. These instruments include interest rate and cross-currency swaps, forward contracts and purchased options. A potential exposure could also arise from possible changes in replacement values. The Group regularly monitors credit risk exposures arising from derivative transactions. Outstanding positions with external counterparties are managed through an approval process embedded in derivative programs.

To limit credit risk, derivative financial instruments are typically executed with counterparties rated 'A–' or better by an external rating agency, unless collateral is provided as per Zurich's risk policy manuals. The Group's standard practice is to only transact derivatives with those counterparties for which the Group has in place an ISDA Master Agreement, with a Credit Support Annex. This mitigates credit exposures from over-the-counter transactions due to close-out netting and requires the counterparty to post collateral when the derivative position exceeds an agreed threshold. The Group further mitigates credit exposures from derivative transactions by using exchange-traded or centrally cleared instruments whenever possible.

Risk from currency exchange rates

Currency risk is the risk of loss resulting from changes in exchange rates. The Group operates internationally and therefore is exposed to the financial impact of changes in the exchange rates of various currencies. The Group's presentation currency is the U.S. dollar, but its assets, liabilities, income and expenses are denominated in many currencies, with significant amounts in euro, Swiss franc and British pound, as well as the U.S. dollar. On local balance sheets a currency mismatch may cause a balance sheet's net asset value to fluctuate, either through income or directly through equity. The Group manages this risk by matching foreign currency positions on local balance sheets within prescribed limits. Residual local mismatches are reported centrally to make use of the netting effect across the Group. Zurich hedges these residual local mismatches within an established limit through a central balance sheet. For information on net gains/losses on foreign currency transactions included in the consolidated income statements, see note 1 of the consolidated financial statements. The monetary currency risk exposure on local balance sheets is considered immaterial.

Differences arise when functional currencies are translated into the Group's presentation currency, the U.S. dollar. The Group applies net investment hedge accounting to protect against the impact that changes in certain exchange rates might have on selected net investments.

Audited

Table 8 shows the total IFRS equity's sensitivity to changes in exchange rates for the main functional currencies to which the Group is exposed. Positive values represent an increase in the value of the Group's total equity. See notes 1, 3 and 7 of the consolidated financial statements for additional information on foreign currency translation and transactions.

Table 8

Sensitivity of the Group's total IFRS equity to exchange rate fluctuations

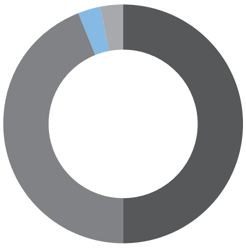
in USD millions, as of December 31	**2018**	2017
10% increase in		
EUR/USD rate	336	467
GBP/USD rate	215	245
CHF/USD rate	350	447
BRL/USD rate	163	147
Other currencies/USD rates	624	645

The sensitivities show the effects of a change of the exchange rates only, while other assumptions remain unchanged. The sensitivity analysis does not take into account management actions that might be taken to mitigate such changes. The sensitivities do not indicate a probability of such events occurring in the future. They do not necessarily represent Zurich's view of expected future market changes. While table 8 shows the effect of a 10 percent increase in currency exchange rates, a decrease of 10 percent would have the converse effect.

Other credit risk

Section highlights

Total Z-ECM capital required: USD 30.7 billion
%, as of July 1, 2018



Insurance risk	50%
Market risk, including investment credit risk	44%
Other credit risk	3%
Operational risk	3%

Key risk and capital indicators
Z-ECM, in USD billions

	Q2 2018	Q2 2017
Reinsurance credit risk	0.9	0.9

Audited

Credit risk is the risk associated with a loss or potential loss from counterparties failing to fulfill their financial obligations. See section 'risks from defaults of counterparties' for market-risk-related asset categories. The Group's exposure to other credit risk is derived from the following main categories of assets:

- Reinsurance assets
- Receivables

The Group's objective in managing credit risk exposures is to maintain them within parameters that reflect the Group's strategic objectives, and its risk appetite and tolerance. Sources of credit risk are assessed and monitored, and the Group has policies to manage specific risks within various subcategories of credit risk. To assess counterparty credit risk, the Group uses ratings assigned by external rating agencies, qualified third parties such as asset managers, and internal rating assessments. If external rating agencies' ratings differ, the Group generally applies the lowest, unless other indicators justify an alternative, which may be an internal credit rating.

The Group regularly tests and analyzes credit risk scenarios and prepares possible contingency measures that may be implemented if the credit risk environment worsens.

The Group actively uses collateral to mitigate credit risks. Nevertheless, underlying credit risks are managed independently from the collateral. The Group has limits and quality criteria to identify acceptable letter-of-credit providers. Letters of credit enable Zurich to limit the risks embedded in reinsurance captives, deductibles, trade credit and surety.

The Group has counterparty limits, which are regularly monitored. Exposure to counterparties' parent companies and subsidiaries is aggregated to include reinsurance assets, investments, derivatives, and for the largest counterparties, certain insurance products. There was no unapproved material exposure in excess of the Group's limits for counterparty aggregation as of December 31, 2018 nor December 31, 2017.

On-balance sheet exposures are the main source of credit risk. Off-balance sheet credit exposures are related primarily to certain insurance products, reinsurance and collateral used to protect underlying credit exposures on the balance sheet. The Group also has off-balance sheet exposures related to undrawn loan commitments of USD 2 million and USD 16 million as of December 31, 2018 and 2017, respectively. See note 22 of the consolidated financial statements for undrawn loan commitments.

Audited

Credit risk related to reinsurance assets

The Group's Corporate Reinsurance Security Committee manages the credit quality of cessions and reinsurance assets. The Group typically cedes new business to authorized reinsurers with a minimum rating of 'A–.' As of December 31, 2018 and 2017 respectively, 52 percent and 52 percent of the exposure ceded to reinsurers that are rated below 'A–' or are not rated, was collateralized. Of the exposure ceded to reinsurers that are rated below 'A–' or are not rated, 50 percent was ceded to captive insurance companies in 2018, and 51 percent in 2017.

Reinsurance assets included reinsurance recoverables (the reinsurers' share of reserves for insurance contracts) of USD 21.3 billion and USD 21 billion, and receivables arising from ceded reinsurance of USD 1.1 billion and USD 1.2 billion as of December 31, 2018 and 2017, respectively, gross of allowance for impairment. Reserves for potentially uncollectible reinsurance assets amounted to USD 113 million as of December 31, 2018 and USD 94 million as of December 31, 2017. The Group's policy on impairment charges takes into account both specific charges for known situations (e.g., financial distress or litigation) and a general, prudent provision for unanticipated impairments.

Reinsurance assets in table 9 are shown before taking into account collateral such as cash or bank letters of credit and deposits received under ceded reinsurance contracts. Unsecured reinsurance assets shown are after deducting collateral. Except for an immaterial amount, letters of credit are from banks rated 'A–' or better. Collateral increased by USD 0.2 billion to USD 9.6 billion per December 31, 2018, compared to previous year.

Table 9 shows reinsurance assets and unsecured reinsurance assets split by rating.

Table 9

Reinsurance assets and unsecured reinsurance assets by rating of reinsurer and captive

as of December 31	2018				2017			
	Reinsurance assets		Unsecured reinsurance assets		Reinsurance assets		Unsecured reinsurance assets	
	USD millions	% of total	USD millions	% of total	USD millions	% of total	USD millions	% of total
Rating								
AAA	9	0.0%	9	0.1%	–	0.0%	–	0.0%
AA	5,633	25.3%	5,173	40.8%	5,939	26.9%	5,378	42.5%
A	10,882	48.9%	4,740	37.4%	10,562	47.9%	4,619	36.5%
BBB	1,572	7.1%	983	7.8%	1,634	7.4%	974	7.7%
BB	447	2.0%	232	1.8%	247	1.1%	57	0.5%
B and below	645	2.9%	37	0.3%	638	2.9%	168	1.3%
Unrated	3,085	13.9%	1,510	11.9%	3,036	13.8%	1,446	11.4%
Total[1]	**22,273**	**100.0%**	**12,685**	**100.0%**	**22,056**	**100.0%**	**12,642**	**100.0%**

[1] The value of the collateral received amounts to USD 9.6 billion and USD 9.4 billion as of December 31, 2018 and 2017, respectively.

Credit risk related to receivables

The Group's largest credit-risk exposure to receivables is related to third-party agents, brokers and other intermediaries. It arises where premiums are collected from customers to be paid to the Group, or to pay claims to customers on behalf of the Group. The Group has policies and standards to manage and monitor credit risk related to intermediaries. The Group requires intermediaries to maintain segregated cash accounts for policyholder money. The Group also requires that intermediaries satisfy minimum requirements of capitalization, reputation and experience, and provide short-dated business credit terms.

Receivables that are past due but not impaired should be regarded as unsecured, but some of these receivable positions may be offset by collateral. The Group reports internally on Group past-due receivable balances and strives to keep the balance of past-due positions as low as possible, while taking into account customer satisfaction.

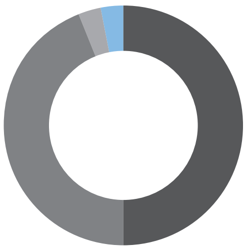
Receivables from ceded reinsurance are part of reinsurance assets and are managed accordingly. See notes 15 and 24 of the consolidated financial statements for additional information on receivables.

Risk review (continued)

Operational risk

Section highlights

Total Z-ECM capital required: USD 30.7 billion
%, as of July 1, 2018



Insurance risk	50%
Market risk, including investment credit risk	44%
Other credit risk	3%
Operational risk	3%

Key risk and capital indicators
Z-ECM, in USD billions

	Q2 2018	Q2 2017
Operational risk	1.0	0.9

Audited

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, systems or from external events such as external fraud, catastrophes, or failure in outsourcing arrangements. Zurich has a framework to identify, assess, quantify, mitigate, monitor and report operational risk within the Group. Within this framework, the Group:

- Uses a scenario-based approach to assess, model and quantify the capital required for operational risk for business units under extreme circumstances. This approach allows information to be compared across the Group and highlights the main scenarios contributing to the Z-ECM capital required.
- Documents and reviews loss events exceeding a threshold determined per Zurich's risk policy manuals. Remedial action is taken to avoid a recurrence of such operational loss events.
- Conducts risk assessments where operational risks are identified for key business areas. Risks identified and assessed above a certain threshold must be mitigated. Risk mitigation plans are documented and tracked on an ongoing basis. In the assessments, the Group uses such sources of information as the Total Risk Profiling™ process, internal control assessments, and audit findings, as well as scenario modeling and loss event data.

The Group has specific processes and systems in place to focus on high-priority operational matters such as managing information security and third-party suppliers, as well as combating fraud.

Managing information security, including cyber risk, remains a key focus for Zurich. To measure the global exposure to this risk, a dedicated framework has been established, resulting in substantial improvements achieved throughout the year. As part of the introduction of this framework, capability upgrading took place across the risk function and increased emphasis on risk types resulting from the digital transformation the Group is progressing, notably focusing on information security, emerging technologies, innovation, and third party management.

Our customer focused organization, with enhanced capabilities and increased attention to operational resilience, maintains our core business services by upgrading our continuous reviews and assurance around our existing business continuity program. Zurich pays increasing attention to the protection and privacy of data for all of our stakeholders. We have done this by revising corresponding risk policies and governance, which has led to a more precise alignment to new legal and regulatory requirements and the changing operating environments.

With the increased use of third parties and suppliers and in conjunction with continual upgrades to regulatory requirements, we provide greater support to the organization in supporting third party and supplier risk management practices. This is in conjunction with a continued focus on critical suppliers, identifying the risks and obtaining assurance over key controls to confirm that they are able to deliver services as required throughout the lifecycle of the sourcing arrangements. Assessments include ensuring that suppliers remain financially viable, comply with our security and resilience requirements, and limit the Group's exposure to geographic and supplier concentration risks.

Preventing, detecting and responding to fraud are embedded in Zurich's business. Both claims and non-claims fraud are included in the common framework for assessing and managing operational risks. For Z-ECM calculations, claims fraud is part of insurance risk and non-claims fraud is part of operational risk.

Risk management and internal controls

The Group considers internal control to be key for managing operational risk. The Board has overall responsibility for the Group's risk management and internal control frameworks. The objectives of the Group's internal control system are to provide reasonable assurance that Zurich's financial statements and disclosures are materially correct, support reliable operations, and to ensure legal and regulatory compliance. The internal control system is designed to mitigate rather than eliminate the material risk that business objectives might not be met. Key controls are assessed for their design and operating effectiveness.

The Group promotes risk awareness and understanding of controls with communication and training. Key risk management and internal control systems are designed at Group level and implemented Group-wide.

Management, as the first line of defense, is responsible for identifying, evaluating and addressing significant risks, and designing, implementing and maintaining internal control. Key processes and controls in the organization are subject to review and challenge by management, Group Risk Management, Group Compliance and Group Audit. Control issues of Group-level significance and associated mitigation actions are reported regularly to the Audit Committee of the Board. The Risk and Investment Committee of the Board reviews the effectiveness of the Group's risk management system, including the Group's risk tolerance and enterprise-wide risk governance framework, in accordance with the charter for each committee.

The Group's Disclosure Committee, chaired by the Head of Group Financial Accounting and Reporting, assesses the content, accuracy and integrity of the disclosures and the effectiveness of the internal controls over financial reporting. The conclusions result in a recommendation to the Group Chief Financial Officer to release the financial disclosures to the Audit Committee of the Board, which may challenge further. The Board reviews and approves the announcement of the results and the annual report before they are made public.

The internal and external auditors also regularly report conclusions, observations and recommendations that arise as a result of their independent reviews and testing of internal controls over financial reporting and operations.

Audited

Liquidity risk

Liquidity risk is the risk that the Group may not have sufficient liquid financial resources to meet its obligations when they fall due, or would have to incur excessive costs to do so. Zurich's policy is to maintain adequate liquidity and contingent liquidity to meet its liquidity needs under normal conditions and in times of stress. To achieve this, the Group assesses, monitors and manages its liquidity needs on an ongoing basis.

Group-wide liquidity management policies and specific guidelines govern how local businesses plan, manage and report their local liquidity and include regular stress tests for all major carriers within the Group. The stress tests use a standardized set of internally defined stress events, and are designed to provide an overview of the potential drain on liquidity if the Group had to recapitalize local balance sheets. Similar guidelines apply at the Group level, and detailed liquidity forecasts are regularly conducted, based on local businesses' input and the Group's forecasts. As part of its liquidity management, the Group maintains sufficient cash and cash equivalents and high-quality, liquid investment portfolios to meet outflows under expected and stressed conditions. The Group also maintains internal liquidity sources that cover the Group's potential liquidity needs, including those that might arise in times of stress. The Group takes into account the amount, availability and speed at which these sources can be accessed. The Group has access to diverse funding sources to cover contingencies, including asset sales, external debt issuance and making use of committed borrowing facilities or letters of credit. The Group maintains a range of maturities for external debt securities. A potential source of liquidity risk is the effect of a downgrade of the Group's credit rating. This could affect the Group's commitments and guarantees, potentially increasing liquidity needs. This risk, and mitigating actions that might be employed, are assessed on an ongoing basis within the Group's liquidity framework.

The Group regularly analyzes the liquidity of the investment assets, and monitors that the liquidity of assets stays in line with the liquidity needs. During 2018, the Group was within its capacity to hold illiquid assets.

For more information on debt obligation maturities, see note 18 of the consolidated financial statements, and for information on commitments and guarantees, see note 22 of the consolidated financial statements.

The Group's ongoing liquidity monitoring includes regular reporting to the executive management and quarterly reporting to the Risk and Investment Committee of the Board, covering aspects such as the Group's actual and forecast liquidity, possible adverse scenarios that could affect the Group's liquidity and possible liquidity needs from the Group's main subsidiaries, including under conditions of stress.

For more information on the Group's other financial liabilities, see note 16 of the consolidated financial statements. See note 6 of the consolidated financial statements for information on the maturity of debt securities.

The Group has committed to contribute capital to subsidiaries and third parties that engage in making investments in direct private equity and private equity funds. Commitments may be called by the counterparty over the term of the investment (generally three to five years) and must be funded by the Group on a timely basis. See note 22 of the consolidated financial statements.

Audited

Strategic risk and risks to the Group’s reputation

Strategic risk

Strategic risk corresponds to the risk that Zurich is unable to achieve its strategic targets.

Strategic risks can arise from:

- Inadequate risk-reward assessment of strategic plans
- Improper implementation of strategic plans
- Unexpected changes to underlying assumptions

Zurich defines the strategy as the long-term plan of action designed to allow the Group to achieve its goals and aspirations based on Zurich’s purpose and values and strategic options.

The Group works to reduce unintended risks of strategic business decisions through its risk assessment processes and tools, including the Total Risk Profiling™ process. As part of the annual assessment of strategic risks, the Executive Committee (ExCo) assessed potential risks from both external and internal factors, looking at 2019 and beyond. These include: macro-economic risks such as financial stress due to geopolitical uncertainties and monetary policy; long-term capital and liquidity impacts of new post-Brexit regulatory regime in the UK; changes affecting competitiveness in markets where Zurich is active; information security including cyber risks and digital transformation. The ExCo defined actions to respond as appropriate and reviews changes to the key risks and their status of actions at least quarterly.

The Group evaluates the risks of M&A transactions both from a quantitative and a qualitative perspective. The Group conducts risk assessments of M&A transactions to evaluate risks specifically related to integrating acquired businesses.

Risks to the Group’s reputation

Risks include acts or omissions by the Group or any of its employees that could damage the Group’s reputation or lead to a loss of trust among its stakeholders. Every risk type has potential consequences for Zurich’s reputation. Effectively managing each type of risk helps reduce such threats.

The Group aims to preserve its reputation by adhering to applicable laws and regulations, and by following the core values and principles of the Group’s code of conduct, which promotes integrity and good business practice. The Group centrally manages certain aspects of reputation risk, for example, communications, through functions with the appropriate expertise.

Climate-change risk

The Total Risk Profiling™ is the Group's primary tool to assess strategic risks throughout the Group and in 2018 was used to update our climate risk assessment. The assessment confirmed that both physical and transition risks remain manageable and foreseeable near-term (less than five years), whereas long-term risks (5–10 years and beyond) remain elevated and highly uncertain. In our current assessment, long-term risks are more likely to be driven by physical effects of climate change, in line with our climate risk score card which suggests that transition to a two-degree scenario became less likely in 2018.

More information can be found in Zurich’s TCFD disclosure and in our report Managing the impacts of climate change: risk management responses.

Financial review

Message from our Group Chief Financial Officer

Well positioned for the next phase

"The results position the Group to deliver fully on the targets for the 2017 to 2019 plan period, with progress across all areas of the business both from a financial, as well as from a strategic perspective."

George Quinn
Group Chief Financial Officer

Full year 2018 results show strong performance in a challenging market and claims environment, with the business operating profit (BOP) up 20 percent. BOPAT ROE was 12.1 percent for the year.

Executing on key strategic priorities

2018 saw the Group continue to make strong progress on key strategic priorities. The Group further strengthened its positioning in the fast developing regions of Southeast Asia and Latin America, as well as the rapidly growing global travel and assistance segment, through a number of targeted acquisitions.

On track to meet our 2017–2019 financial targets

The Group continued to build on the positive performance of 2017, making further progress in terms of profitability across the businesses, while remaining on track to meet the financial targets set out in November 2016.

2017–2019 financial targets

Target: >12.0%
BOPAT ROE[1]
12.1%
FY 2018

Target range: 100–120%
Estimated Z-ECM ratio[2]
125%
FY 2018

Target: >USD 9.5bn
Cumulative cash remittances
USD 7.5 bn
As of FY 2018

Target: USD 1.5bn
Cumulative net expense savings
USD 1.1 bn
As of FY 2018

[1] Business operating profit after tax return on equity, excluding unrealized gains and losses.
[2] Full year 2018 Z-ECM reflects midpoint estimate with an error margin of +/–5 percentage points.

As part of this, the Group achieved a further USD 400 million of cost savings over the course of 2018, with cumulative net savings of approximately USD 1.1 billion achieved to date, and with further savings expected to be delivered over the course of 2019.

A strong capital position and focus on cash generation

During the year, management continued to improve the Group's focus and optimize the use of capital. The Group's internal economic capital model (Z-ECM) remained very strong at an estimated 125 percent,[2] and above the target range.

Conversion of earnings into distributable cash was strong with USD 3.8 billion of cash remittances over the year.

In line with the stated dividend policy, the board proposed a 6 percent increase in the dividend to CHF 19 per share.

Progress made across all businesses

Property & Casualty results demonstrate further strong progress with a business operating profit up 35 percent in another year of elevated natural catastrophe events and with a negative headwind from mark-to-market effects on assets held at fair value. The top line remained stable on a like-for-like basis. The accident year combined ratio excluding catastrophes reduced by a further 0.4 percentage points driven by an improved underwriting performance.

The strength of the Group's reserves was clearly demonstrated, with prior year reserve development of 2.3 percent in line with the upper end of the indicated 1–2 percent range.

In 2019, the Group expects to deliver further improvement in underwriting results as the benefits of portfolio shifts, higher rates in North America and lower expenses continue to earn through.

The Group's Life business delivered an excellent performance, with growth across all regions reflecting the success of the Group's strategy of focusing on protection and unit-linked business. Overall, Life's business operating profit increased 23 percent in the year, driven by continued portfolio growth and further cost improvement. The quality and resilience of the Life performance remains high, with earnings driven largely by loadings and fees and technical margins.

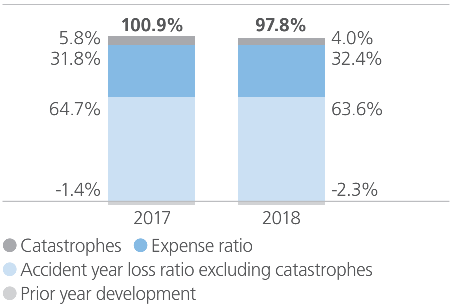
The Farmers Exchanges,[3] which are owned by their policyholders, showed continued progress in both customer metrics and underwriting performance over the year, resulting in gross written premiums growth from continuing operations of 3.7 percent and a 1.7 percentage points reduction in the overall combined ratio to 99.9 percent. Growth was also supported by the continued successful expansion of the Farmers Exchanges into the eastern U.S. and growth in the commercial rideshare. Growth in the Farmers Exchanges continued to drive growth at Farmers Management Services, while Farmers Life showed a strong new business value increase.

George Quinn
Group Chief Financial Officer

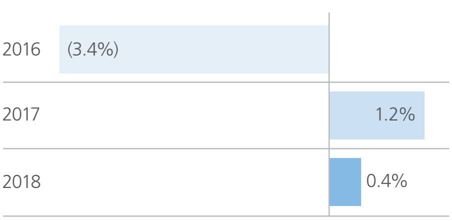
Continued strong performance across all businesses

Property & Casualty (P&C)

Combined ratio (%)

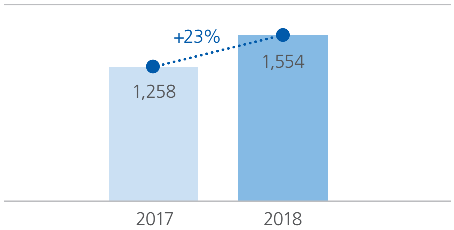


Like-for-like GWP growth (%)[4]

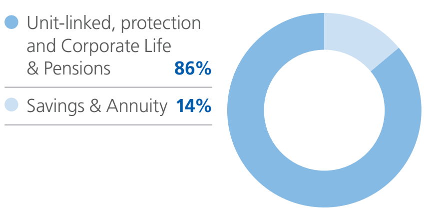


Life

BOP growth (USDm)

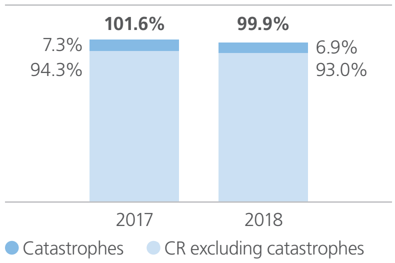


2018 APE share of non-traditional products (%)

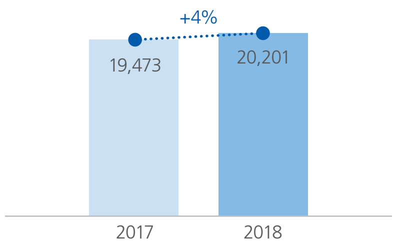


Farmers Exchanges[3]

Combined ratio (CR) (%)



GWP growth (USDm)[5]



[3] Provided for informational purposes only. Zurich Insurance Group has no ownership interest in the Farmers Exchanges. Farmers Group, Inc., a wholly owned subsidiary of the Group, provides certain non-claims administrative, management, and ancillary services to the Farmers Exchanges as its attorney-in-fact and receives fees for its services.

[4] In local currency and adjusted for closed acquisitions and disposals.

[5] Continuing operations only, excludes discontinued operations (21st Century outside of California and Hawaii, Business Insurance Independent Agents, and other businesses).

Financial review

Contents

The information contained within the financial review is unaudited and is based on the consolidated results of the Group for the years ended December 31, 2018 and 2017. All amounts are shown in U.S. dollars and rounded to the nearest million unless otherwise stated, with the consequence that the rounded amounts may not always add up to the rounded total. All ratios and variances are calculated using the underlying amounts rather than the rounded amounts. This document should be read in conjunction with the annual results 2018 of the Group and, in particular, with its consolidated financial statements and embedded value report for the year ended December 31, 2018.

In addition to the figures stated in accordance with International Financial Reporting Standards (IFRS), the Group uses business operating profit (BOP), new business metrics and other performance indicators to enhance the understanding of its results. Details of these additional measures are set out in the separately published glossary. These should be viewed as complementary to, and not as substitutes for the IFRS figures. For a reconciliation of business operating profit to net income attributable to shareholders (NIAS), see note 27 (table 27.4) of the audited consolidated financial statements.

Certain comparatives have been revised as a result of reclassifications and other adjustments.
For details refer to note 1 of the audited consolidated financial statements.

Financial highlights

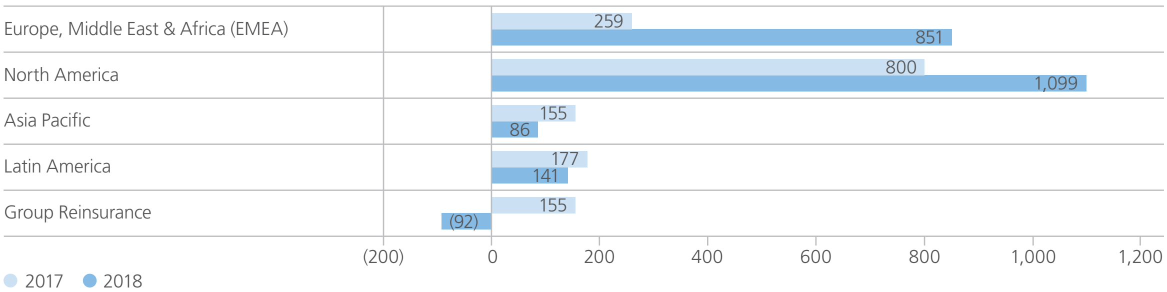
in USD millions, for the years ended December 31, unless otherwise stated	2018	2017	Change[1]
Business operating profit	**4,566**	3,803	20%
Net income attributable to shareholders	**3,716**	3,004	24%
P&C business operating profit	**2,085**	1,546	35%
P&C gross written premiums and policy fees	**33,505**	33,024	1%
P&C combined ratio	**97.8%**	100.9%	3.1 pts
Life business operating profit	**1,554**	1,258	23%
Life gross written premiums, policy fees and insurance deposit	**33,448**	33,242	1%
Life new business annual premium equivalent (APE)[2]	**4,639**	4,868	(5%)
Life new business margin, after tax (as % of APE)[2]	**24.1%**	23.3%	0.8 pts
Life new business value, after tax[2]	**981**	999	(2%)
Farmers business operating profit	**1,643**	1,691	(3%)
Farmers Management Services management fees and other related revenues[3]	**3,204**	2,892	11%
Farmers Management Services managed gross earned premium margin	**7.0%**	7.0%	–
Farmers Re gross written premiums and policy fees	**194**	995	(81%)
Farmers Life new business annual premium equivalent (APE)[2]	**84**	91	(7%)
Average Group investments[4]	**190,235**	189,723	–
Net investment result on Group investments[4]	**6,288**	7,249	(13%)
Net investment return on Group investments[4,5]	**3.3%**	3.8%	(0.5 pts)
Total return on Group investments[4,5]	**0.6%**	4.1%	(3.4 pts)
Shareholders' equity[6]	**30,189**	32,993	(8%)
Z-ECM[7]	**125%**	132%	(7.0 pts)
Return on common shareholders' equity (ROE)[8]	**13.1%**	10.9%	2.1 pts
Business operating profit (after tax) return on common shareholders' equity (BOPAT ROE)[8]	**12.1%**	9.2%	2.8 pts

1 Parentheses around numbers represent an adverse variance.
2 Details of the principles for calculating new business are included in the embedded value report in the annual results 2018. New business value and new business margin are calculated after the effect of non-controlling interests, whereas APE is presented before non-controlling interests.
3 An adjustment made related to the adoption of IFRS 15 'Revenue from Contracts with Customers' resulted in a USD 289 million increase to revenues and a USD 287 million increase to expenses.
4 Including investment cash.
5 Calculated on average Group investments.
6 2017 balance includes adjustment for effect of adoption of IFRS 15 'Revenue from Contracts with Customers'.
7 Ratio as of December 31, 2018 reflects midpoint estimate with an error margin of +/–5 pts.
8 Shareholders' equity used to determine ROE and BOPAT ROE is adjusted for net unrealized gains/(losses) on available-for-sale investments and cash flow hedges.

Property & Casualty (P&C)

in USD millions, for the years ended December 31			Total
	2018	2017	Change
Gross written premiums and policy fees	33,505	33,024	1%
Net earned premiums and policy fees	26,431	26,033	2%
Insurance benefits and losses, net of reinsurance	17,291	17,996	4%
Net underwriting result	574	(231)	nm
Net investment result	1,884	2,038	(8%)
Business operating profit	**2,085**	**1,546**	**35%**
Loss ratio	65.4%	69.1%	3.7 pts
Expense ratio	32.4%	31.8%	(0.6 pts)
Combined ratio	**97.8%**	**100.9%**	**3.1 pts**

P&C business operating profit (BOP)
in USD millions, for the years ended December 31



Gross written premiums in Property & Casualty (P&C) for the full year of 2018 rose 1 percent in U.S. dollars and were flat in local currency and adjusting for the acquisitions, which were closed during the second half of the year.

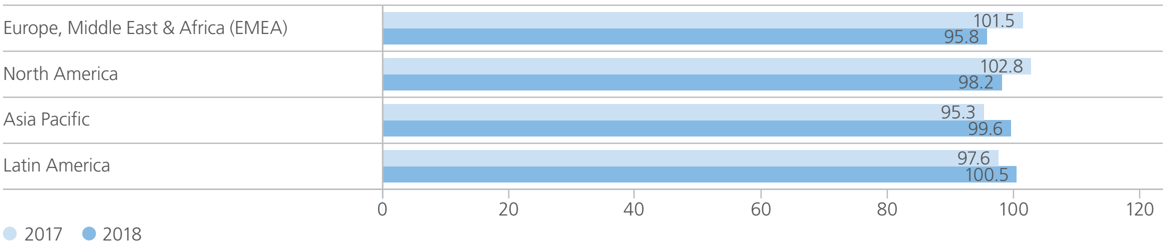
Property & Casualty Business Operating Profit for the year 2018 was USD 2.1 billion, 35 percent higher than in the previous year.

The underwriting result increased strongly by USD 805 million due to a combination of underlying improvement in the combined ratio, lower natural catastrophe losses and more favorable development of reserves established in prior years. The combined ratio for 2018 improved by 3.1 percentage points to 97.8 percent from 100.9 percent for 2017.

Investment income for the full year increased by 5 percent in U.S. dollars and 8 percent in local currency, driven by underlying growth in investment income across North America, Latin America and Asia Pacific, while EMEA saw a decline. This improvement was more than offset by a USD 238 million reduction in the level of fair value gains on the Group's hedge fund portfolio, which affected full year 2018 results with an USD 48 million loss compared to a favorable contribution of USD 191 million in 2017.

By region, growth in EMEA and North America due to improved underwriting results was partly offset by a weaker underwriting performance in Latin America, lower prior year reserve releases in the Asia Pacific region and lower reinsurance recoveries in the Group Reinsurance unit.

P&C combined ratio
%



The Group's **combined ratio** of 97.8 percent was 3.1 percentage points better than in the previous year, mainly due to a lower accident year loss ratio ex-catastrophes and lower claims from catastrophe events. These improvements were partially offset by an increase in the commission ratio as a result of shifts in the mix of business. Development of reserves established in prior years was 2.3 percent, reflecting the general strength of the Group's claims reserves, including the positive development of claims from the 2017 hurricanes Harvey, Irma and Maria.

In **EMEA** the combined ratio benefited from improvements in the underlying loss ratio and a lower level of catastrophes as well as more favorable prior year reserve development.

In **North America** the combined ratio improved largely due to lower levels of natural catastrophe losses with the underlying combined ratio excluding catastrophes at a similar level to the prior year.

The **Asia Pacific region** remained stable on an underlying level, with less favorable prior year reserves development accounting for the increase in the reported combined ratio.

In **Latin America**, the increase in the combined ratio was mainly driven by higher levels of exceptional large losses in Argentina and Mexico, the absence of a one-time benefit to the insurance premium tax in Brazil and very favorable prior year reserve development included in 2017.

Operating review (continued)

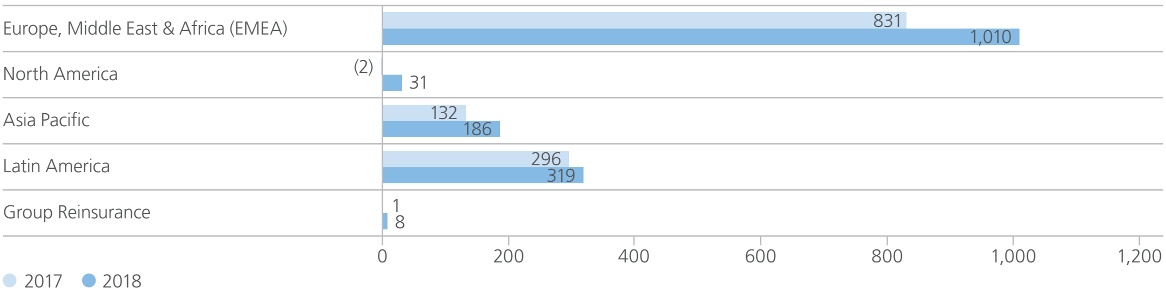
Life

in USD millions, for the years ended December 31	2018	2017	Change
Insurance deposits	18,694	19,172	(2%)
Gross written premiums and policy fees	14,754	14,070	5%
Net investment income on Group investments	3,035	2,925	4%
Insurance benefits and losses, net of reinsurance	(9,702)	(9,259)	(5%)
Business operating profit	**1,554**	**1,258**	**23%**
Net policyholder flows[1]	7,425	7,705	(4%)
Assets under management[2]	254,248	269,836	(6%)
Total reserves for life insurance contracts, net of reinsurance, and liabilities for investment contracts (net reserves)	202,024	215,424	(6%)

[1] Net policyholder flows are defined as the sum of gross written premiums and policy fees and deposits, less policyholder benefits.
[2] Assets under management comprise on balance sheet Group investments and unit-linked investments plus assets that are managed by third parties, on which fees are earned.

Life business operating profit (BOP)

in USD millions, for the years ended December 31



Life Business Operating Profit increased by 23 percent to USD 1.6 billion and included USD 20 million of charges related to the Group's restructuring.

In **EMEA**, the Business Operating Profit increased by 22 percent in U.S. dollars and 17 percent in local currencies, with most countries contributing to the performance. Growth was driven by a combination of portfolio growth, cost reductions and the absence of the impact from the change to UK indexation tax relief in 2017 as well as a number of one-time items relating to market movements and assumption changes.

In **Latin America**, higher business volumes supported earnings growth, with the Business Operating Profit increasing 8 percent in U.S. dollars and 28 percent in local currencies and reflects devaluation in a number of Latin American currencies. The result also includes a foreign exchange benefit of USD 36 million in Argentina, as a result of a portion of the domestic liabilities being backed by U.S. dollar denominated securities as well as integration costs of USD 8 million related to the acquisitions in Chile and Mexico.

Asia Pacific Business Operating Profit increased by USD 53 million, an increase of 40 percent in U.S. dollars and in local currencies. Growth was driven by portfolio growth across the region as well as a first time contribution of USD 27 million from the reinsurance agreement with OnePath Life, partially offset by initial integration costs of USD 16 million relating to the OnePath Life acquisition.

In **North America**, earnings increased by USD 33 million compared to the prior year due to favorable assumption updates and a one-time provision release.

Net inflows decreased by 4 percent compared to the prior year. The decrease was primarily driven by the absence of a single large additional contribution to an existing corporate protection scheme in North America.

Assets under management decreased by 6 percent due to negative foreign exchange effects and adverse market movements in the fourth quarter of 2018.

NBV, APE and NBM by Segment

in USD millions, for the years ended December 31	New business value, after tax (NBV)[1]		New business annual premium equivalent (APE)[2]		New business margin, after tax (as % of APE) (NBM)[3]	
	2018	2017	**2018**	2017	**2018**	2017
Europe, Middle East & Africa (EMEA)	619	605	2,890	3,333	22.8%	19.1%
North America	15	66	82	224	18.3%	29.3%
Asia Pacific	186	165	231	195	82.2%	85.8%
Latin America	161	164	1,437	1,117	15.3%	23.2%
Total	**981**	**999**	**4,639**	**4,868**	**24.1%**	**23.3%**

[1] New business value is calculated on embedded value principles net of non-controlling interests.
[2] APE is shown gross of non-controlling interests.
[3] New business margin is calculated using new business value as a percentage of APE based on figures net of non-controlling interests for both metrics.

Life new business APE increased 11 percent on a like-for-like basis after adjusting for currency, acquisitions and the disposal of the UK workplace savings business, with a reduction of 5 percent on a reported basis.

In **EMEA**, like-for-like growth was 5 percent with underlying growth in most countries. Growth was driven in particular by corporate protection and a large longevity transaction in the UK.

Asia Pacific saw growth of 17 percent on a like-for-like basis driven by growth in protection business across the region.

In **Latin America** APE sales increased by 40 percent on a like-for-like basis including a large corporate protection scheme in Chile as well as positive developments in Brazil, Mexico and Argentina.

New business value (NBV) increased 1 percent on a like-for-like basis after adjusting for currency, acquisitions and the disposal of the UK workplace savings business, and decreased 2 percent in U.S. dollars.

Underlying volume growth in EMEA, Latin America and Asia Pacific was offset by the absence of a large US corporate protection scheme in 2017.

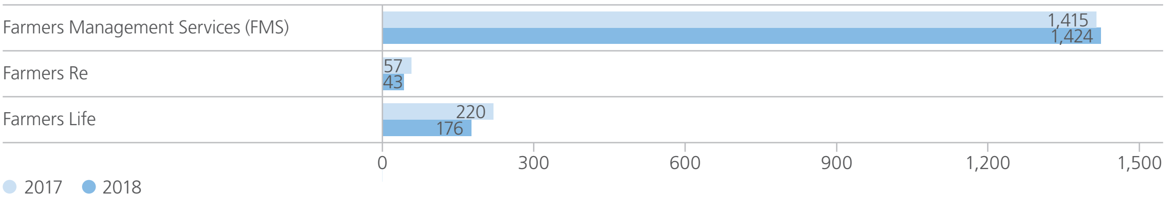
EMEA saw an increase in new business value due to improvements in business mix and favorable currency translation effects.

In **Latin America**, higher corporate business volumes were partially offset by unfavorable operating assumption updates and currency translation effects, while in **Asia Pacific** higher sales volumes and positive assumption updates were partially offset by business mix developments.

The **new-business margin** decreased by 2.9 percent on a like-for-like basis and improved by 0.8 percentage points to 24.1 percent on a headline basis.

Farmers

Farmers business operating profit (BOP)
in USD millions, for the years ended December 31



Farmers Management Services (FMS) Business Operating Profit was broadly stable compared to the prior year, with growth in the gross management result driven by higher gross earned premiums at Farmers Exchanges offsetting USD 23 million of unfavorable mark-to-market impacts on a deferred compensation plan.

The managed gross earned premium margin remained stable at 7.0 percent.

Farmers Re Business Operating Profit was USD 14 million lower than in the prior year, as a consequence of the announced reduction in the all lines quota share participation from 8 percent to 1 percent, effective December 31, 2017. The combined ratio was 1 percentage point lower, driven by improved underwriting results at the Farmers Exchanges.

Farmers Life business operating profit was USD 43 million lower than in the prior year, driven by a USD 6 million negative impact from the annual assumption review compared to a USD 28 million positive benefit in the prior year, and slightly unfavorable mortality experience. New business APE was USD 6 million below prior year, while the new business value increased 13 percent driven by updated operating assumptions and the reduction in U.S. corporate tax rates.

Farmers Exchanges

The Farmers Exchanges are owned by their policyholders. Farmers Group, Inc., a wholly owned subsidiary of the Group, provides certain non-claims administrative, management, and ancillary services to the Farmers Exchanges as attorney-in-fact and receives fees for its services.

Financial information about the Farmers Exchanges is proprietary to the Farmers Exchanges, but is provided to support an understanding of the performance of Farmers Group, Inc. and Farmers Re.

in USD millions, for the years ended December 31	**2018**	2017	Change
Gross written premiums	20,325	19,908	2%
Gross earned premiums	20,171	19,841	2%

The **Farmers Exchanges** showed continued growth in top-line through 2018. Gross written premiums for continuing operations increased by 3.7 percent compared to prior year, with growth coming in all lines of business and driven by a combination of rate increases, improved retention as a result of Farmers' customer focused strategy, further expansion into the eastern United States and the agreement with Uber to provide commercial rideshare insurance in Georgia and Pennsylvania. In the eastern United States, the Farmers Exchanges saw growth in gross written premiums of 33 percent year-on-year including the Uber rideshare business.

Top-line growth in continuing operations was partially offset by the run-off of discontinued operations, consisting primarily of two books of business: 21st Century outside of California and Hawaii and approximately USD 200 million of gross written premiums of business insurance distributed through independent agents, to which renewal rights were sold in February 2018. It is expected that the impact on growth from the run-off of this portfolio will be significantly reduced in 2019.

Group Functions and Operations

in USD millions, for the years ended December 31	2018	2017	Change
Holding and Financing	(443)	(450)	2%
Headquarters	(310)	(281)	(10%)
Total business operating profit	**(753)**	**(731)**	**(3%)**

The business operating loss reported under **Group Functions & Operations** increased by USD 22 million to USD 753 million. Lower recharges to business units more than offset reduced Headquarters expenses, while the Holding and Financing result benefited from gains on currency hedges. The 2018 figure also includes a USD 17 million charge relating to the Group's restructuring charges recognized within the business operating profit, compared with a charge of USD 38 million in 2017.

Non-Core Businesses

in USD millions, for the years ended December 31	2018	2017	Change
Zurich Legacy Solutions	43	(8)	nm
Other run-off	(7)	47	nm
Total business operating profit	**37**	**39**	**(6%)**

Non-Core business operating profit was USD 37 million reflecting the completion of a number of transactions, including the transfer of the German med-mal portfolio to Catalina and the sale of an Australian compulsory third-party liability portfolio to Enstar Group, as well as some expenses related to the reinsurance of the UK employers liability portfolio to Catalina announced in December 2018.

Financial overview

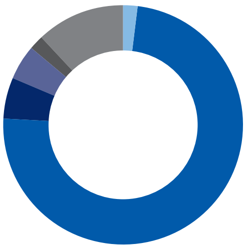
Balance sheet review

The total assets for the Group decreased to USD 395 billion from USD 422 billion in 2017. The decrease was mainly driven by foreign exchange movements, whereby net assets predominantly denominated in the British pound and euro weakened against the U.S. dollar, and declines in market valuations on the Group's investment portfolio. Additionally, assets related to certain UK businesses being held for sale decreased following the lapse of a larger portfolio included in this divestment. The Group's 2018 acquisitions added USD 462 million of goodwill, partly offset by USD 180 million of negative foreign currency translation effect.

These factors also drove a decrease in the total liabilities for the Group to USD 364 billion from USD 387 billion in 2017.

Group assets

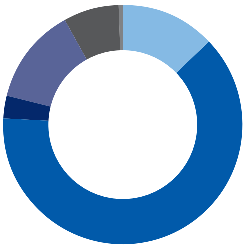
Total assets as of December 31, 2018
(in USD millions)



Cash and cash equivalents	8,649
Total investments	291,940
'Reinsurers' share of liabilities	21,197
Deferred policy acquisition costs	19,541
Intangible assets	7,177
Other assets	46,838

Group liabilities and equity

Total liabilities and equity as of December 31, 2018
(in USD millions)



Liabilities for investment contracts	51,439
Liabilities for insurance contracts	249,208
Debt	12,012
Other liabilities	50,881
Shareholders' equity	30,189
Non-controlling interests	1,613

The Group's shareholder equity decreased from USD 33 billion in 2017 to USD 30 billion in 2018. The decrease primarily resulted from unrealized losses on available-for-sale investments. The Group's 2018 net income attributable to shareholders of USD 3.7 billion was offset by a dividend payment of USD 2.8 billion and a USD 914 million negative development in the cumulative foreign currency translation reserve due to a general strengthening of the U.S. dollar against other key currencies where the Group owns subsidiaries.

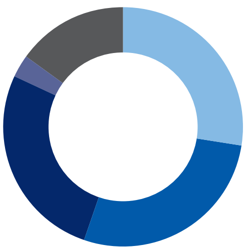
Treasury and capital management

The Group's balance sheet remains very strong, as demonstrated by S&P and Moody's financial strength ratings for the Zurich Insurance Company Ltd of AA- and Aa3, respectively, both with a stable look. In addition, as of December 31, 2018, the Group's estimated Z-ECM ratio remained very strong at 125 percent, with an error margin of +/–5 percentage points.

During the year the Group saw net remittances of USD 3.8 billion, a level consistent with the Group's target for remittances to exceed USD 9.5 billion over the 2017–2019 period. The level of remittances has been driven both by operational earnings and capital released as a result of the Group's efforts to extract capital from non-core businesses.

Net cash remittances by business

for the year ended December 31, 2018 (in USD millions)



Property & Casualty	1,492
Life	1,509
Farmers	1,441
Non-Core Businesses	159
Group Functions and Operations	(807)

Significant transactions in 2018

The Group continued to drive its strategic objectives of investing to improve the quality of service and experience of our customers and becoming a more agile organization.

The Group built on its travel insurance and assistance solutions franchise by acquiring, for approximately USD 82 million, Travel Ace and Universal Assistance, the leading providers of traveler assistance in Latin America. The acquisition comprised entities operating throughout Latin America, most notably in Argentina, Brazil, Chile, Colombia and Mexico. In addition, the Group acquired Blue Insurance Ltd, an Irish-domiciled insurance intermediary, for approximately USD 64 million.

It also continued to focus on growth within the Latin American region with the acquisition of the Latin American operations of the Australian insurer QBE Insurance Group Limited (QBE) with operations in Argentina, Brazil, Ecuador, Mexico, and Colombia. These acquisitions were closed during the second half of 2018, and completed with the acquisition of QBE Colombia on February 1, 2019. In addition, the Group finalized the acquisition of the individual and group life insurance portfolios as well as the long-term savings operations of EuroAmerica in Chile for an estimated aggregate price of USD 144 million.

In September, the Group announced it had entered into agreements to acquire 80 percent of PT Asuransi Adira Dinamika (Adira Insurance) from PT Bank Danamon Indonesia (Bank Danamon) and a minority investor for approximately USD 414 million. The transaction includes two separate long-term strategic cooperation agreements in Indonesia with Bank Danamon and PT Adira Dinamika Multi Finance TbK. The transaction is expected to close in the first half of 2019, subject to regulatory approval.

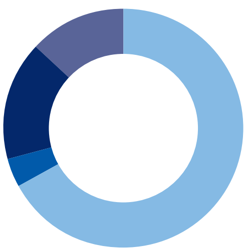
Being a responsible taxpayer

As part of Zurich's tax strategy, the Group strives to manage tax costs- and control-associated risks for the benefit of its customers, employees, shareholders and for society as a whole. The Group employs rigorous tax accounting and reporting oversight. The location of Group subsidiaries and affiliated companies is driven by business reasons and not the avoidance of tax. The Group's consolidated result includes only a very limited number of companies located in low or nil tax rate jurisdictions and in all cases these carry out operative insurance, reinsurance and asset management activities.

Total tax contribution reflects Zurich's economic contribution to the economy in taxes – the direct and indirect taxes paid by Zurich ('tax borne by the shareholders') and those taxes that Zurich is legally obliged to collect on behalf of the tax administrations ('tax collected'):

Taxes borne by Shareholders

Total 2017: USD 2.9bn
(all numbers based on IFRS excluding deferred income tax)



Shareholder income tax	67%
Stamp duty and other taxes	4%
Employer social security	16%
Irrecoverable VAT	13%

Taxes collected

Total 2017: USD 5.7bn
(all numbers based on IFRS excluding deferred income tax)

Employee social security	7%
Other taxes (incl. WHT)	16%
Payroll tax	19%
PH income and other taxes	12%
Premium tax	37%
VAT declared	9%

See more details on our tax strategy in our Sustainability pages at www.zurich.com.

The shareholders' effective tax rate decreased to 24.9 percent for the period ended December 31, 2018 compared with 33.2 percent for the same period of 2017. The decrease was driven primarily by the U.S. corporate tax reform enacted at the end of 2017, under which U.S. profits are now taxed at 21.0 percent, compared with 35.0 percent in previous years. In addition 2018 was impacted by favorable shifts in the geographical profit mix towards lower tax rate jurisdictions, catastrophe events in 2017 (mainly hurricanes Harvey, Irma and Maria) as well as several non-recurring charges in 2017, which did not attract tax relief.

Message from our Group Chief Investment Officer

Strong net investment income despite volatile capital markets

> Although 2018 was challenging for most asset classes, we are pleased with the progress achieved against our investment objectives."

Urban Angehrn
Group Chief Investment Officer

Our disciplined investment approach has again demonstrated its effectiveness, enabling us to achieve our mission of producing consistent, strong, risk-adjusted investment returns relative to liabilities for Zurich's balance sheet and unit-linked customers.

Challenging market environment

2018 was a challenging year for most asset classes. Despite higher U.S. Treasury yields throughout most of the year, other government bond yields remained near historic lows. Credit markets were weak and we saw a notable widening of spreads. Increasing geopolitical tensions and protectionist sentiments put pressure on equity markets. Against this backdrop, Zurich delivered a strong investment income performance.

Investment portfolio[1]

(%)

Government and government guaranteed	34.7%
Credit, private debt	43.5%
Mortgages	2.8%
Real estate	7.5%
Equities	4.8%
Hedge funds, private equity	1.7%
Cash	5.0%

Overview of investment results

The total investment return of 0.65 percent dropped by 3.5 percentage points versus 2017, mainly due to rising bond yields, widening credit spreads and negative returns from equities, offset by positive real estate returns. Gross unrealized gains decreased by USD 5.1 billion, reflecting negative market performance across many asset classes.

Despite these challenges, Group Investment Management delivered USD 5.4 billion of net investment income (NII), which was 3 percent higher than in 2017 in U.S dollar terms. The improvement was driven mainly by rising bond yields in U.S dollars and Latin American currencies.

In 2018, we continued to execute on our strategy, increasing the allocation to less-liquid assets to capture illiquidity risk premia. We further increased our investments in high-quality real estate assets in attractive locations. Our real estate holdings increased to USD 14.6 billion and now constitute 7.5 percent of our investment portfolio. Our allocation to private debt increased to USD 9.2 billion, largely driven by senior corporate loans, AAA-rated tranches of collateralized loan obligations, and infrastructure debt investments.

We also made progress in building capabilities that deliver additional fee income to the Group. In Switzerland, we merged our real estate and mortgage capabilities into Zurich Invest AG to form an integrated asset management platform to serve mainly domestic institutional clients. At the end of 2018, Zurich Invest AG had USD 35 billion of assets under management.

Disciplined investment approach

As a long-term investor, Group Investment Management's mission is to achieve superior risk-adjusted returns relative to our liabilities. We do this through a systematic investment approach, disciplined risk-taking, and a focus on asset-liability management.

During 2018, Zurich's sources of investment risk remained well balanced. Equity, credit and real estate risk contributed approximately 80 percent to the total market risk, keeping unrewarded risk exposure low.

Zurich's interest rate exposure was well matched, limiting the risk from yield curve movements.

The quality of Zurich's debt securities remained high, with approximately 95 percent allocated to investment grade securities. At the same time, the fixed income portfolio remained well diversified with the largest single non-sovereign exposure amounting to less than 0.5 percent of the total investment portfolio.

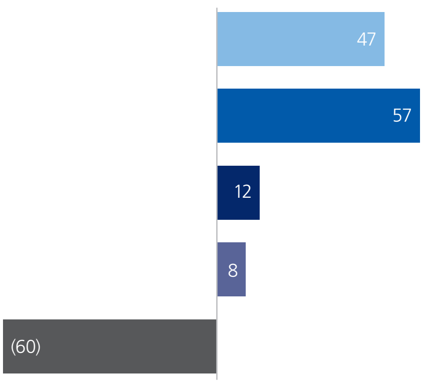
Further progress in delivering our responsible investment strategy

Responsible investment is an integral part of our investment philosophy and approach. In 2018, we took further steps toward achieving our commitments. Our allocation to impact investments increased to USD 3.8 billion (see more details on our responsible investment strategy at www.zurich.com).

Urban Angehrn
Group Chief Investment Officer

Contribution to total investment return by asset class

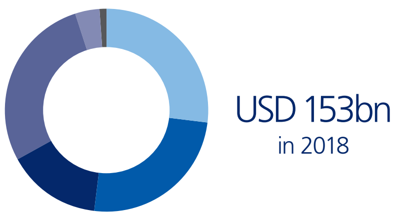
(in basis points)



Real estate	47
Fixed income	57
Other	12
Hedge funds, private equity	8
Equities	(60)

Rating of fixed income securities[1,2]

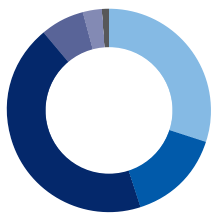
(%)



AAA	27%
AA	25%
A	15%
BBB	28%
Non-investment grade	4%
Unrated	1%

Risk drivers of market risk[3]

(%)



Equity risk	30%
Interest rate risk	15%
Credit risk[4]	44%
Real estate risk	7%
FX risk	3%
Specific risk	1%

Note: Rounded amounts may not always add up to the rounded total.

[1] Market view of the investment portfolio (economic view).

[2] Includes government and government guaranteed, credit and private debt exposure.

[3] Risk drivers of market risk (at expected shortfall 99%) show marginal contribution to the total market risk. Numbers shown net of non-controlling interests.

[4] Includes migration risk on both credit and sovereign positions.

Consolidated financial statements

Contents

Consolidated income statements

in USD millions, for the years ended December 31	Notes	2018	2017
Revenues			
Gross written premiums		47,038	46,685
Policy fees		2,447	2,429
Gross written premiums and policy fees		49,485	49,114
Less premiums ceded to reinsurers		(8,255)	(7,977)
Net written premiums and policy fees		41,230	41,136
Net change in reserves for unearned premiums	10	(224)	(79)
Net earned premiums and policy fees		41,007	41,057
Farmers management fees and other related revenues	26	3,204	2,892
Net investment income on Group investments		5,387	5,215
Net capital gains/(losses) and impairments on Group investments		901	2,034
Net investment result on Group investments	6	6,288	7,249
Net investment result on unit-linked investments		(4,374)	11,664
Net gains/(losses) on divestment of businesses	5	(24)	(84)
Other income		1,080	1,183
Total revenues		47,180	63,961
Benefits, losses and expenses			
Insurance benefits and losses, gross of reinsurance	10	33,483	34,894
Less ceded insurance benefits and losses	10	(5,837)	(6,252)
Insurance benefits and losses, net of reinsurance	10	27,646	28,643
Policyholder dividends and participation in profits, net of reinsurance	10	(2,736)	12,984
Underwriting and policy acquisition costs, net of reinsurance	10	8,565	9,039
Administrative and other operating expense	12	7,761	7,212
Interest expense on debt		402	411
Interest credited to policyholders and other interest		433	546
Total benefits, losses and expenses		42,070	58,835
Net income before income taxes		5,110	5,125
of which: Attributable to non-controlling interests		400	459
Income tax (expense)/benefit	17	(1,134)	(1,816)
attributable to policyholders	17	183	(171)
attributable to shareholders	17	(1,317)	(1,645)
of which: Attributable to non-controlling interests		(139)	(154)
Net income after taxes		**3,977**	**3,309**
attributable to non-controlling interests		261	305
attributable to shareholders		3,716	3,004
in USD			
Basic earnings per share	19	25.10	20.02
Diluted earnings per share	19	24.83	19.90
in CHF			
Basic earnings per share	19	24.55	19.71
Diluted earnings per share	19	24.28	19.58

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Consolidated financial statements (continued)

Consolidated statements of comprehensive income

in USD millions, for the years ended December 31

	Net income attributable to shareholders	Net unrealized gains/(losses) on available-for-sale investments	Cash flow hedges
2017			
Comprehensive income for the period	3,004	269	(9)
Details of movements during the period			
Change (before reclassification, tax and foreign currency translation effects and after allocation to policyholders)		1,484	(23)
Reclassification to income statement (before tax, foreign currency translation effects and allocation to policyholders)		(1,554)	(18)
Reclassification to retained earnings		–	–
Deferred income tax (before foreign currency translation effects)		132	14
Foreign currency translation effects		207	18
2018			
Comprehensive income for the period	3,716	(2,428)	(47)
Details of movements during the period			
Change (before reclassification, tax and foreign currency translation effects and after allocation to policyholders)		(2,049)	(5)
Reclassification to income statement (before tax, foreign currency translation effects and allocation to policyholders)		(733)	(48)
Reclassification to retained earnings		–	–
Deferred income tax (before foreign currency translation effects)		419	11
Foreign currency translation effects		(65)	(5)

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

	Cumulative foreign currency translation adjustment	Total other comprehensive income recycled through profit or loss	Revaluation reserve	Net actuarial gains/(losses) on pension plans	Total other comprehensive income not recycled through profit or loss	Total other comprehensive income attributable to shareholders	Total comprehensive income attributable to shareholders	Total comprehensive income attributable to non-controlling interests	Total comprehensive income
	1,211	1,471	(7)	341	334	1,805	4,809	462	5,271
	1,191	2,651	15	1,018	1,034	3,685			
	20	(1,552)	–	–	–	(1,552)			
	–	–	(22)	–	(22)	(22)			
	–	146	–	(392)	(392)	(245)			
	–	225	–	(286)	(286)	(61)			
	(914)	(3,389)	(17)	582	564	(2,825)	892	137	1,028
	(914)	(2,968)	39	551	591	(2,378)			
	–	(781)	–	–	–	(781)			
	–	–	(66)	–	(66)	(66)			
	–	431	9	(96)	(87)	344			
	–	(70)	–	126	126	56			

Consolidated financial statements (continued)

Consolidated balance sheets

Assets

in USD millions, as of December 31	Notes	2018	2017
Assets:			
Cash and cash equivalents		**8,649**	**8,228**
Total Group investments	6	182,647	194,084
Equity securities		16,220	17,787
Debt securities		139,870	148,261
Investment property		12,351	12,238
Mortgage loans		6,556	7,047
Other loans		7,614	8,730
Investments in associates and joint ventures		36	21
Investments for unit-linked contracts		109,294	120,699
Total investments		**291,940**	**314,782**
Reinsurers' share of liabilities for insurance contracts	8	21,197	20,918
Deposits made under reinsurance contracts		883	1,269
Deferred policy acquisition costs	11	19,541	18,663
Deferred origination costs	11	419	460
Receivables and other assets	15	18,225	18,195
Deferred tax assets	17	1,125	1,076
Assets held for sale[1]	5	24,124	29,371
Property and equipment	13	1,037	961
Attorney-in-fact contracts	14	1,025	1,025
Goodwill	14	2,634	2,353
Other intangible assets	14	4,542	4,762
Total assets		**395,342**	**422,065**

[1] In 2018, the Group reclassified USD 24 billion of assets to held for sale based on agreements signed to sell business in the UK, Venezuela and Germany (see note 5). In addition, assets held for sale include land and buildings formerly classified as investment property and held for own use amounting to USD 29 million. In 2017, the Group reclassified USD 29 billion of assets to held for sale based on agreements signed to sell business in the UK (see note 5). In addition, assets held for sale include land and buildings formerly classified as investment property and held for own use amounting to USD 50 million.

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Liabilities and equity

in USD millions, as of December 31	Notes	2018	2017
Liabilities			
Liabilities for investment contracts	9	51,439	55,627
Deposits received under ceded reinsurance contracts		612	512
Deferred front-end fees		5,177	5,429
Liabilities for insurance contracts	8	249,208	263,805
Obligations to repurchase securities		1,316	1,394
Other liabilities	16	14,321	15,993
Deferred tax liabilities	17	3,915	4,357
Liabilities held for sale[1]	5	25,539	29,271
Senior debt	18	5,237	3,846
Subordinated debt	18	6,775	6,938
Total liabilities		**363,540**	**387,172**
Equity			
Share capital	19	11	11
Additional paid-in capital	19	1,180	1,162
Net unrealized gains/(losses) on available-for-sale investments		649	3,078
Cash flow hedges		363	410
Cumulative foreign currency translation adjustment		(9,676)	(8,762)
Revaluation reserve		211	228
Retained earnings		37,452	36,936
Shareholders' equity		30,189	33,062
Non-controlling interests		1,613	1,831
Total equity		**31,802**	**34,893**
Total liabilities and equity		**395,342**	**422,065**

[1] In 2018, the Group reclassified USD 26 billion of liabilities to held for sale based on agreements to sell certain businesses in the UK, Venezuela and Germany (see note 5). In 2017, the Group reclassified USD 29 billion of liabilities to held for sale based on agreements to sell certain businesses in the UK (see note 5).

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Consolidated statements of cash flows

in USD millions, for the years ended December 31	**2018**	2017
Cash flows from operating activities		
Net income attributable to shareholders	3,716	3,004
Adjustments for:		
Net (gains)/losses on divestment of businesses	24	84
(Income)/expense from equity method accounted investments	(1)	(3)
Depreciation, amortization and impairments of fixed and intangible assets	898	936
Other non-cash items	128	519
Underwriting activities:	(8,726)	14,255
Liabilities for insurance contracts, gross	(1,547)	7,093
Reinsurers' share of liabilities for insurance contracts	(744)	(1,543)
Liabilities for investment contracts	(5,424)	7,760
Deferred policy acquisition costs	(1,506)	308
Deferred origination costs	19	15
Deposits made under assumed reinsurance contracts	365	705
Deposits received under ceded reinsurance contracts	110	(83)
Investments:	9,752	(13,807)
Net capital (gains)/losses on total investments and impairments	5,274	(12,201)
Net change in derivatives	(7)	(229)
Net change in money market investments	563	(1,528)
Sales and maturities		
Debt securities	62,303	71,794
Equity securities	65,915	52,590
Other	7,093	7,502
Purchases		
Debt securities	(61,496)	(71,521)
Equity securities	(64,091)	(53,753)
Other	(5,801)	(6,459)
Net changes in sale and repurchase agreements	(19)	24
Movements in receivables and payables	(1,103)	581
Net changes in other operational assets and liabilities	(294)	(77)
Deferred income tax, net	15	(311)
Net cash provided by/(used in) operating activities	4,388	5,207

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

in USD millions, for the years ended December 31	2018	2017
Cash flows from investing activities		
Additions to tangible and intangible assets	(1,152)	(530)
Disposals of tangible and intangible assets	292	29
(Acquisitions)/disposals of equity method accounted investments, net	(17)	3
Acquisitions of companies, net of cash acquired	(465)	(578)
Divestments of companies, net of cash divested	(13)	220
Dividends from equity method accounted investments	1	1
Net cash provided by/(used in) investing activities	(1,352)	(856)
Cash flows from financing activities		
Dividends paid	(3,015)	(2,891)
Issuance of share capital	2	53
Net movement in treasury shares	(957)	18
Issuance of debt	3,079	–
Repayment of debt	(1,566)	(1,049)
Net cash provided by/(used in) financing activities	(2,457)	(3,868)
Foreign currency translation effects on cash and cash equivalents	(319)	420
Change in cash and cash equivalents	260	902
Cash and cash equivalents as of January 1	8,850	7,948
Total cash and cash equivalents as of December 31	**9,110**	**8,850**
of which: Cash and cash equivalents	8,649	8,228
of which: Unit-linked	461	622
Other supplementary cash flow disclosures		
Other interest income received	4,851	4,783
Dividend income received	1,993	1,710
Other interest expense paid	(883)	(936)
Income taxes paid	(1,598)	(1,589)

Cash and cash equivalents

in USD millions, as of December 31	2018	2017
Cash and cash equivalents comprise the following:		
Cash at bank and in hand	8,535	7,993
Cash equivalents	575	857
Total	**9,110**	**8,850**

For the periods ended December 31, 2018 and 2017, cash and cash equivalents held to meet local regulatory requirements were USD 825 million and USD 652 million, respectively.

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Consolidated statements of changes in equity

in USD millions

	Share capital	Additional paid-in capital
Balance as of December 31, 2016	11	1,348
Issuance of share capital	–	198
Dividends to shareholders	–	(510)
Share-based payment transactions	–	(7)
Treasury share transactions	–	132
of which: share buy-back program	–	–
Reclassification from revaluation reserves	–	–
Total comprehensive income for the period, net of tax	–	–
Net income	–	–
Net unrealized gains/(losses) on available-for-sale investments	–	–
Cash flow hedges	–	–
Cumulative foreign currency translation adjustment	–	–
Revaluation reserve	–	–
Net actuarial gains/(losses) on pension plans	–	–
Net changes in capitalization of non-controlling interests	–	–
Balance as of December 31, 2017	11	1,162
Balance as of December 31, 2017 as previously reported	11	1,162
Effect of adoption IFRS 15[1]	–	–
Balance as of January 1, 2018 after the adoption of IFRS 15	11	1,162
Issuance of share capital	–	2
Dividends to shareholders	–	(14)
Share-based payment transactions	–	30
Treasury share transactions	–	–
of which: share buy-back program[2]	–	–
Reclassification from revaluation reserves	–	–
Total comprehensive income for the period, net of tax	–	–
Net income	–	–
Net unrealized gains/(losses) on available-for-sale investments	–	–
Cash flow hedges	–	–
Cumulative foreign currency translation adjustment	–	–
Revaluation reserve	–	–
Net actuarial gains/(losses) on pension plans	–	–
Net changes in capitalization of non-controlling interests	–	–
Balance as of December 31, 2018	**11**	**1,180**

[1] Effect of adoption of IFRS 15 'Revenue from Contracts with Customers' (see note 2).
[2] Share buy-back program to reflect the purchase value of 1.74 million shares (see note 19).

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

	Net unrealized gains/(losses) on available-for-sale investments	Cash flow hedges	Cumulative foreign currency translation adjustment	Revaluation reserve	Retained earnings	Shareholders' equity	Non-controlling interests	Total equity
–	2,809	418	(9,973)	235	35,812	30,660	1,813	32,473
–	–	–	–	–	–	198	–	198
–	–	–	–	–	(2,129)	(2,639)	(339)	(2,978)
–	–	–	–	–	5	(2)	–	(2)
–	–	–	–	–	(114)	18	–	18
–	–	–	–	–	–	–	–	–
–	–	–	–	–	17	17	–	17
–	269	(9)	1,211	(7)	3,345	4,808	462	5,270
–	–	–	–	–	3,004	3,004		
–	269	–	–	–	–	269		
–	–	(9)	–	–	–	(9)		
–	–	–	1,211	–	–	1,211		
–	–	–	–	(7)	–	(7)		
–	–	–	–	–	341	341		
–	–	–	–	–	–	–	(105)	(105)
–	3,078	410	(8,762)	228	36,936	33,062	1,831	34,893
–	3,078	410	(8,762)	228	36,936	33,062	1,831	34,893
–	–	–	–	–	(70)	(70)	–	(70)
–	3,078	410	(8,762)	228	36,866	32,993	1,831	34,824
–	–	–	–	–	–	2	–	2
–	–	–	–	–	(2,790)	(2,805)	(210)	(3,015)
–	–	–	–	–	(1)	29	–	29
–	–	–	–	–	(956)	(957)	–	(957)
–	–	–	–	–	(555)	(555)	–	(555)
–	–	–	–	–	36	36	–	36
–	(2,429)	(47)	(914)	(17)	4,298	891	137	1,028
–	–	–	–	–	3,716	3,716		
–	(2,428)	–	–	–	–	(2,428)		
–	–	(47)	–	–	–	(47)		
–	–	–	(914)	–	–	(914)		
–	–	–	–	(17)	–	(17)		
–	–	–	–	–	582	582		
–	–	–	–	–	–	–	(145)	(145)
–	**649**	**363**	**(9,676)**	**211**	**37,452**	**30,189**	**1,613**	**31,802**

Zurich Insurance Group Ltd and its subsidiaries (collectively the Group) is a provider of insurance products and related services. The Group operates in Europe, Middle East & Africa (EMEA), North America, Latin America and Asia Pacific through subsidiaries, as well as branch and representative offices.

Zurich Insurance Group Ltd, a Swiss corporation, is the holding company of the Group and its shares are listed on the SIX Swiss Exchange. Zurich Insurance Group Ltd was incorporated on April 26, 2000, in Zurich, Switzerland. It is recorded in the Commercial Register of the Canton of Zurich under its registered address at Mythenquai 2, 8002 Zurich.

On February 6, 2019, the Board of Directors of Zurich Insurance Group Ltd authorized these consolidated financial statements for issue. These financial statements will be submitted for approval to the Annual General Meeting of Shareholders to be held on April 3, 2019.

1. Basis of presentation

General information

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law. Where IFRS does not contain clear guidance governing the accounting treatment of certain transactions, including those that are specific to insurance and reinsurance products, IFRS permits reference to another comprehensive body of accounting principles that uses a similar conceptual framework. The Group's accounting policies for insurance and reinsurance contracts are therefore based on those developed by the Group before the adoption of IFRS 4 in areas where IFRS 4 did not include specific requirements. Before the adoption of IFRS 4, the Group typically applied U.S. GAAP pronouncements issued by the Financial Accounting Standards Board (FASB) on insurance and reinsurance contracts. Any changes to such pronouncements subsequent to this adoption are not reflected in the Group's accounting policies. In case of business combinations, the Group may decide to maintain the local statutory treatment if this does not distort the fair presentation of the financial position of the Group. If significant, the impact of such cases would be described elsewhere in the notes to these consolidated financial statements.

The accounting policies applied by the reportable segments are the same as those applied by the Group. The Group accounts for inter-segment revenues and transfers as if the transactions were with third parties at current market prices. Dividends, realized capital gains and losses as well as gains and losses on the transfer of net assets, are eliminated within the segment, whereas all other intercompany gains and losses are eliminated at Group level. In the consolidated financial statements, inter-segment revenues and transfers are eliminated.

Disclosures under IFRS 4 'Insurance Contracts' and IFRS 7 'Financial Instruments: Disclosures' relating to the nature and extent of risks, and capital disclosures under IAS 1 'Presentation of Financial Statements' have been included in the audited sections of the risk review on pages 5 to 34, and they form an integral part of the consolidated financial statements.

The Group's consolidated balance sheets are not presented using a current/non-current classification. The following balances are generally considered to be current: cash and cash equivalents, deferred policy acquisition costs on property & casualty contracts, receivables, reserve for premium refunds and obligations to repurchase securities.

The following balances are generally considered to be non-current: equity securities, investment property, investments in associates and joint ventures, deferred policy acquisition costs on life insurance contracts, deferred tax assets, property and equipment, goodwill, other intangible assets and deferred tax liabilities.

The following balances are mixed in nature (including both current and non-current portions): debt securities, mortgage loans, other loans, reinsurers' share of liabilities for insurance contracts, deposits made under assumed reinsurance contracts, deferred origination costs, other assets, reserves and investments for unit-linked contracts, liabilities for investment contracts, deposits received under ceded reinsurance contracts, deferred front-end fees, reserves for losses and loss adjustment expenses, reserves for unearned premiums, future life policyholder benefits, policyholder contract deposits and other funds, other liabilities, senior and subordinated debt, and assets and liabilities held for sale.

Maturity tables have been provided for the following balances: debt securities (table 6.4), derivative assets and derivative liabilities (tables 7.1 and 7.2), reserves for insurance contracts (tables 8.9a and 8.9b), liabilities for investment contracts (tables 9.3a and 9.3b), other financial liabilities (table 16.2) and outstanding debt (table 18.2).

All amounts in the consolidated financial statements, unless otherwise stated, are shown in U.S. dollars, rounded to the nearest million with the consequence that the rounded amounts may not add to the rounded total in all cases. All ratios and variances are calculated using the underlying amounts rather than the rounded amounts.

Table 1 summarizes the principal exchange rates used for translation purposes. Net gains/(losses) on foreign currency transactions included in the consolidated income statements were USD 63 million and USD 71 million for the years ended December 31, 2018 and 2017, respectively. Foreign currency exchange forward and swap gains/(losses) included in these amounts were USD 168 million and USD (12) million for the years ended December 31, 2018 and 2017, respectively. The functional currencies of the Group's entities in Venezuela have been changed from Bolivar Fuerte (VEF) to U.S. dollars (USD) as of January 1, 2018, to reflect the currency in which the Venezuela business mainly operates. The cumulative foreign currency translation adjustment loss of USD 258 million is reflected in equity and will be recognized upon closure of the sale of the Group's Venezuelan operations (see note 5).

Principal exchange rates

Table 1

USD per foreign currency unit	Consolidated balance sheets at end-of-period exchange rates		Consolidated income statements and cash flows at average exchange rates	
	12/31/18	12/31/17	**12/31/18**	12/31/17
Euro	1.1451	1.2007	1.1811	1.1292
Swiss franc	1.0163	1.0260	1.0224	1.0159
British pound	1.2746	1.3515	1.3354	1.2882
Brazilian real	0.2581	0.3023	0.2755	0.3134

Changes in presentation

IFRS 9 'Financial Instruments'

The Group has deferred the full implementation of IFRS 9 'Financial Instruments' until IFRS 17 'Insurance Contracts' becomes effective. For details on the implementation of IFRS 9, refer to notes 2 and 24.

Reclassifications

Insurance liabilities towards policyholders and reinsurers in the total amount of USD 2.5 billion at December 31, 2017, have been reclassified from other liabilities to liabilities for insurance contracts. In addition, some revenues related to administrative and other operating services provided between Group entities (inter-segment transactions) have been reclassified from other income to administrative and other operating expenses. Prior year comparative figures have been restated accordingly (see note 8 and 27, respectively).

2. New accounting standards and amendments to published accounting standards

Standards, amendments and interpretations effective or early adopted as of January 1, 2018 and relevant for the Group's operations

Table 2.1 shows new accounting standards or amendments to and interpretations of standards relevant to the Group that have been implemented for the financial year beginning January 1, 2018, with no material impact on the Group's financial position or performance. Amendments resulting from the IASB annual improvements project have no impact on the Group's financials.

Table 2.1

Standard/ Interpretation		Effective date
New standards/interpretations		
IFRS 15	Revenue from Contracts with Customers	January 1, 2018
IFRIC 22	Foreign Currency Transactions and Advance Consideration	January 1, 2018
Amended standards		
IFRS 2	Classification and Measurement of Share-based Payment Transactions	January 1, 2018
IFRS 4	Applying IFRS 9 with IFRS 4	January 1, 2018
IAS 40	Transfers of Investment Property	January 1, 2018

IFRS 15 'Revenue from Contracts with Customers'

IFRS 15 'Revenue from Contracts with Customers' establishes the principles that are applied when reporting information about the nature, amount, timing and uncertainty of revenue and cash flows from a contract with a customer (see note 3, paragraphs d) and g)). IFRS 15 does not apply to revenues relating to insurance contracts, lease contracts and financial instruments. As permitted by the transitional provisions of IFRS 15, the Group elected not to restate comparative figures. The cumulative effect of the application of IFRS 15 of USD 70 million net of tax was recognized in opening retained earnings to reverse income recognized prior to January 1, 2018 in respect of Farmers membership fees. Membership fee revenue that was previously recognized at the time of the policy issuance is recognized over the expected life of the customer relationship, as customer setup activities covered by that fee do not represent a separate performance obligation under IFRS 15. Similarly, the costs directly related to fulfilling the contract that were previously recognized as incurred are recognized as an asset and subsequently amortized using the same pattern as the related revenue.

Additionally, beginning January 1, 2018, certain reimbursements received for ancillary services incurred primarily on behalf of the Farmers Exchanges and the related expenses are presented on a gross basis totaling USD 287 million. Overall, application of IFRS 15 did not result in a material impact on the Group's financial position or performance.

Standards, amendments and interpretations issued that are not yet effective or adopted by the Group

Table 2.2 shows new accounting standards or amendments to and interpretations of standards relevant to the Group, which are not yet effective or adopted by the Group.

Table 2.2

Standard/ Interpretation		Effective date
New standards/interpretations		
IFRS 16	Leases	January 1, 2019
IFRS 9	Financial Instruments	January 1, 2021
IFRS 17	Insurance Contracts	January 1, 2021
IFRIC 23	Uncertainty over Income Tax Treatments	January 1, 2019
Amended standards		
IAS 19	Plan Amendment, Curtailment or Settlement	January 1, 2019
IAS 28	Long-term Interests in Associates and Joint Ventures	January 1, 2019
IFRS 3	Definition of a Business	January 1, 2020
IAS 1/IAS 8	Definition of Material	January 1, 2020
IFRS 9	Prepayment Features with Negative Compensation	January 1, 2022

IFRS 16 'Leases'

IFRS 16 'Leases' introduces new requirements for lease accounting which have an impact on contracts where the Group acts as a lessee (and intermediate lessor). Under IFRS 16, the Group will recognize a right-of-use asset and a lease liability for real estate rental contracts which are mainly classified as operating leases under IAS 17 'Leases'. For the transition to IFRS 16, the Group will apply the modified retrospective approach and not restate the comparative figures for the 2018 financial year. The option of measuring the right-of-use asset retrospectively available on a lease-by-lease asset will result in a negative cumulative effect of initially applying IFRS 16, however, this will not have a significant impact on the opening balance of retained earnings.

Based on the volume of in-force non-cancellable operating leases as of December 31, 2018 (see note 22) recognition of the right-of-use asset and corresponding discounted lease liability will result in an increase of both assets and liabilities of less than USD 2 billion. Going forward, the Group will make use of the optional recognition exemption for short-term leases and leases of low-value assets. Operating leases expenses for leases not covered by the recognition exemption will be replaced by interest expense, which is typically higher in the earlier periods of the lease, and depreciation of the right-of-use asset recognized on a straight-line basis. The resulting difference in the pattern of expense recognition is not expected to materially affect Group's operating performance.

IFRS 17 'Insurance contracts' and IFRS 9 'Financial Instruments'

IFRS 17 'Insurance contracts' was published on May 18, 2017 with an effective date of January 1, 2021 (retrospective application). IFRS 17 provides comprehensive guidance on accounting for insurance contracts and investment contracts with discretionary participation features. For non-life and short-term life insurance contracts IFRS 17 introduces mandatory discounting of loss reserves as well as a risk adjustment for non-financial risk, for which confidence level equivalent disclosure will be required. Further, IFRS 17 will change the presentation of insurance contract revenue, as gross written premium will no longer be presented in the statements of comprehensive income.

For long-duration life insurance contracts, IFRS 17 is expected to have a significant impact on actuarial modeling as granular cash flow projections and regular updates of all assumptions will be required resulting in either profit or loss volatility or affecting 'contractual service margin', a separate component of the insurance liability representing unearned profits from in-force contracts. Further, IFRS 17 introduces different measurement approaches for the insurance contract liabilities reflecting a different extent of policyholder participation in investment or insurance entity performance (non-participating, indirect participating, direct participating).

In September 2016, the IASB issued an amendment to IFRS 4 introducing a temporary exemption from the adoption of IFRS 9 for reporting entities that have not previously applied any version of IFRS 9 and whose activities are predominantly related to insurance. Based on the analysis performed as of December 31, 2015, the Group was eligible to apply the temporary exemption as the predominance ratio reflecting the share of liabilities connected with insurance to total liabilities exceeded 90 percent. No reassessment of eligibility was required during subsequent annual periods up to and including 2018 as there was no significant change in the activities performed by the Group. We refer to the Annual Report 2016 for further details on the eligibility assessment. Due to the strong interaction between underlying assets held and the measurement of participating insurance contracts, the Group decided to use the option to defer the full implementation of IFRS 9 until IFRS 17 becomes effective.

Under IFRS 9, all equity securities and fund investments, and more debt instruments will be measured at fair value through profit or loss because the characteristics of the contractual cash flows from such instruments are not solely payments of principal and interest on the principal amount outstanding. Furthermore, credit allowances for financial assets carried at amortized cost and debt securities measured at fair value, with changes in fair value recognized in other comprehensive income (OCI), are expected to increase due to the introduction of the expected credit loss methodology. Though overall profit or loss volatility is expected to increase under IFRS 9, the measurement approach for direct participating contracts in IFRS 17 allows such volatility to be largely absorbed in the measurement of insurance liabilities with an option to reflect in shareholders' equity (OCI) the effect of any asset-liability mismatch. For further information on effects from IFRS 9 see note 24.

In order to adopt IFRS 17 in the consolidated financial statements, a joint IFRS 17 and IFRS 9 Group Implementation Program (Program) sponsored by the Group Chief Financial Officer has been operating since 2017. A steering committee comprised of senior management from various functions (finance, risk, IT, operations and investment management) oversees the work performed by individual work streams.

A dedicated methodology work stream covers group accounting policies, actuarial methodologies and disclosure requirements to be consistently implemented throughout the Group. This work stream further contributes to the industry wide discussions on standard interpretation and its operational effects and closely monitors the developments in the IASB Transition Resource Group for IFRS 17 to evaluate the effects and align the accounting policies and actuarial methodologies accordingly. The implementation work stream drives the analysis of processes, data and systems implications which have revealed significant implementation challenges. However, considerable progress was made in 2018, finalizing the target solution landscape and developing pilot functionalities at Group and local levels to ensure readiness for the dry-run simulation scheduled for 2019. In 2019, the focus of the Program will be on finalizing the implementation efforts, analyzing the effects from IFRS 17 on the consolidated financial statements and education of key stakeholders.

At its November 2018 meeting the IASB tentatively decided to defer by one year, to January 1, 2022, the effective date of IFRS 17 given its plans to consider whether to explore amendments to IFRS 17, and given the criteria for assessing such potential amendments. The IASB also tentatively decided to defer the fixed expiry date for the temporary exemption in IFRS 4 from applying IFRS 9 to January 1, 2022, so that both standards can be applied simultaneously. The Group is monitoring IASB deliberations while continuing Program delivery according to the current implementation plan.

The Group is currently assessing the impact of the application of both IFRS 17 and IFRS 9. As of December 31, 2018, it was not practicable to quantify what the potential impact would be on the Group's financial position or performance once these standards will be adopted.

Other standards, amendments and interpretations shown in table 2.2 are expected to have no or only an insignificant impact on the Group's financial position or performance.

3. Summary of significant accounting policies

Significant accounting policies applied in these consolidated financial statements are set out below. These policies have been consistently applied to all years presented unless otherwise stated. Other accounting policies are presented as part of the respective note disclosures.

a) Consolidation principles

The Group's consolidated financial statements include the assets, liabilities, equity, revenues, expenses and cash flows of Zurich Insurance Group Ltd and its subsidiaries. A subsidiary is an entity that Zurich Insurance Group Ltd either directly or indirectly controls. The results of subsidiaries acquired are included in the consolidated financial statements from the date of acquisition. The results of subsidiaries that have been divested during the year are included up to the date control ceased. All intra-Group balances, profits and transactions are eliminated.

Changes in ownership interests in a subsidiary that do not result in a change in control are recorded within equity.

Non-controlling interests are shown separately in equity, consolidated income statements, consolidated statements of comprehensive income and consolidated statements of changes in equity.

The consolidated financial statements are prepared as of December 31 based on individual company financial statements at the same date. In some cases information is included with a time lag of up to three months. The consequent effect on the Group's consolidated financial statements is not material.

b) Foreign currency translation and transactions

Foreign currency translation

Due to the Group's economic exposure to the U.S. dollar (USD), the presentation currency of the Group's consolidated financial statements is USD. Many Group companies have a different functional currency, being that of the respective primary economic environment in which these companies operate. Assets and liabilities are translated into the presentation currency at end-of-period exchange rates, while income statements and statements of cash flows are translated at average exchange rates for the period. The resulting foreign currency translation differences are recorded directly in other comprehensive income (OCI) as cumulative translation adjustment (CTA).

Foreign currency transactions and balances

Foreign currency transactions are translated into the functional currency using the spot exchange rate at the date of the transaction or, for practical reasons, a weighted average rate, if exchange rates do not fluctuate significantly. Foreign currency monetary items and foreign currency non-monetary items that are carried at fair value are translated at end-of-period exchange rates. The resulting foreign currency translation differences are recorded in income, except for the following:

- Foreign currency translation differences that are recognized in OCI in conjunction with the recognition of unrealized gains or losses on available-for-sale investments; and
- Foreign currency translation differences arising on monetary items that form part of net investments in foreign operations, as well as foreign currency translation differences arising from monetary items that are designated as hedging instruments in a qualifying net investment hedge relationship, are included directly in OCI as CTA.

c) Insurance contracts and investment contracts with discretionary participating features (DPF)

Classification

Contracts issued that transfer significant insurance risk to the Group and obligations arising from investment contracts with DPF are accounted for as insurance contracts.

The Group also issues products containing embedded options that entitle the policyholder to switch all or part of the current and future invested funds into another product issued by the Group. Where this results in the reclassification of an investment product to a product that meets the definition of an insurance contract, the previously held reserve and the related deferred origination costs are reclassified and are accounted for in accordance with the accounting policy that is to be applied to the new product on a prospective basis. As a consequence, no gain or loss is recognized when a contract is reclassified from an investment to an insurance contract.

Once a contract has been classified as an insurance contract, no reclassification can subsequently be made.

Consolidated financial statements (continued)

Premiums

Property & Casualty

Premiums from the sale of property & casualty products are generally recorded when written and are recognized as revenue in relation to the insurance coverage provided. The unearned premium reserve represents the portion of the premiums written related to the unexpired coverage period.

Life insurance

Premiums from traditional life insurance contracts, including participating contracts and annuity policies with life contingencies, are recognized as revenue when they are due from the policyholder. For single premium and limited pay contracts, premiums are recognized as revenue when due, with any excess profit deferred and recognized in income in a constant relationship to the insurance in-force or, for annuities, the amount of expected benefit payments.

Amounts collected as premiums from investment-type insurance contracts such as universal life, unit-linked and unitized with-profits contracts are generally reported as deposits. Revenue from these contracts consists of policy fees for the cost of insurance, administration and surrenders during the period. Front-end fees charged to the customer at inception, particularly for single premium contracts, are deferred and recognized over the estimated life of the contracts following the same pattern that is applied to deferred acquisition costs and addressed below. Regular fees charged to the customer periodically (monthly, quarterly or annually) either directly or by making a deduction from invested funds are billed in advance and recognized on a straight-line basis over the period in which the service is rendered. Fees charged at the end of the period are accrued over the service period as a receivable and are offset against the financial liability when charged to the customer.

Cash flows from certain universal life-type contracts in the Group's Spanish operations are recognized as gross written premiums and insurance benefits and losses and not as deposits.

Reserves for losses and loss adjustment expenses

Losses and loss adjustment expenses are charged to income as incurred. Reserves for losses and loss adjustment expenses represent estimates of future payments of reported and unreported claims for losses and related expenses, with respect to insured events that have occurred. Any changes in estimates are reflected in the results of operations in the period in which estimates are changed. The Group does not discount its loss reserves, other than for claims with payment patterns which are fixed and reasonably determinable.

Reserves for life benefits

Future life policyholder benefits represent the estimated future benefit liability for traditional life insurance policies and include the value of accumulated declared bonuses or dividends that have vested to policyholders.

The reserves for life benefits for participating traditional life insurance policies are calculated using a net level premium valuation method based on actuarial assumptions taking into account guaranteed mortality benefits and interest rates.

The reserves for life benefits for other traditional life insurance policies are calculated using a net level premium valuation method based on actuarial assumptions including mortality, persistency, expenses and investment return, plus a margin for adverse deviations. These assumptions are locked in at inception and are regularly assessed as part of the liability adequacy testing over the period of the contract.

Policyholder contract deposits represent the estimated policy benefits for investment type insurance contracts invested in non unit-linked funds. This liability comprises the accumulation of premiums received, less charges, plus declared policyholder dividends.

Certain insurance contracts and investment contracts with DPF offered by the Group contain benefit features for which the amount and timing of declaration and payment are at the discretion of the Group. Where that discretion has not been exercised, the total amount expected to be allocated to policyholders as required by local insurance regulation or contractual provisions is included in the policyholder other funds.

Unrealized gains or losses arising on the revaluation of available-for-sale assets are recorded directly in OCI in accordance with the Group's accounting policy for such assets. Where these assets are related to life insurance, corresponding adjustments to the reserves for life benefits and related assets are also recognized directly in OCI.

Reserves for unit-linked contracts are based on the fair value of the financial instruments backing those contracts less any fees and assessments charged to the policyholders. The related assets for unit-linked insurance contracts are designated at fair value through profit or loss in order to reduce measurement inconsistencies.

For products containing guarantees in respect of minimum death benefits (GMDB), retirement income benefits (GRIB) and/or annuitization options (GAO), additional liabilities are recorded in proportion to the receipt of the contracted revenues which are subject to a loss adequacy test taking into account policyholder behavior and current market conditions.

For products managed on a dynamic basis, an option in IFRS 4 is used to measure insurance liabilities using current financial and non-financial assumptions to better reflect the way that these products are managed. Financial assets related to these liabilities are designated at fair value through profit or loss.

Deferred acquisition costs (DAC)

Costs that vary with and are directly related to the acquisition of new and renewal business, including for example commissions and certain underwriting and policy issue expenses, are deferred and subsequently amortized over a defined period. Such costs are presented on balance sheet net of commissions paid to reinsurers in respect of business ceded.

Property & Casualty

DAC for property & casualty contracts is amortized over the period in which the related premiums are earned.

Life insurance

DAC for traditional participating life insurance contracts is amortized based on estimated gross margins expected to be realized over the life of the contract. Estimated gross margins are updated for actual and anticipated future experience and discounted using the latest revised interest rate for the remaining benefit period. Resulting deviations are reflected in income.

DAC for other traditional life insurance and annuity contracts is amortized over the life of the contracts, based on expected premiums. Expected premiums are estimated at the date of policy issue for application throughout the life of the contract unless a premium deficiency subsequently occurs.

DAC for investment type insurance contracts such as universal life, unit-linked and unitized with-profits contracts is amortized based on estimated gross profits expected to be realized over the life of the contract. Estimated gross profits are updated for actual and anticipated future experience and discounted using either the interest rate in effect at the inception of the contracts or the latest revised interest rate for the remaining benefit period, depending on whether crediting is based on the policyholder's or on the reporting entity's investment performance. Resulting deviations are reflected in income.

Unamortized DAC for life insurance contracts accrues interest at a rate consistent with the related assumptions for reserves.

For traditional participating and investment-type life insurance contracts, DAC is adjusted for the impact of unrealized gains/(losses) on allocated investments that are recorded in OCI.

Liability adequacy tests

Liability adequacy tests are performed annually for groupings of contracts determined in accordance with the Group's manner of acquiring, servicing and measuring the profitability of its insurance contracts.

Property & Casualty

For property & casualty contracts, unearned premiums are tested to determine whether they are sufficient to cover related expected losses, loss adjustment expenses, policyholder dividends, unamortized DAC and maintenance expenses, using current assumptions and considering anticipated investment returns. If a premium deficiency is identified, the DAC asset for the respective grouping of contracts is written down by the amount of the deficiency. If, after writing down the DAC asset to nil, a premium deficiency still exists for the respective grouping of contracts, then a premium deficiency reserve is established for the amount of the remaining deficiency.

Life insurance

For life insurance contracts, the carrying amount of the existing reserve for life benefits, including any deferred front-end fees, reduced by the unamortized balance of DAC or present value of future profits of acquired insurance contracts (PVFP), is compared with the reserve for life benefits, calculated using revised assumptions for actual and anticipated experience as of the valuation date. If a deficiency is identified, the DAC or PVFP for the respective grouping of contracts is written down by the amount of the deficiency. If, after writing down the DAC or PVFP to nil, a deficiency still exists for the respective grouping of contracts, the reserve for life benefits is increased by the amount of the remaining deficiency.

Reinsurance

The Group's insurance subsidiaries cede risk in the normal course of business to limit the potential for losses arising from certain exposures. Reinsurance does not relieve the originating insurer of its liability. Certain Group insurance companies assume reinsurance business as part of their normal business.

Reinsurance contracts that do not transfer significant insurance risk are accounted for using the deposit method.

A deposit asset or liability is recognized based on the premium paid, or received less any explicitly identified premiums or fees to be retained by the ceding company. Interest on deposits is accounted for using the effective interest rate method. Future cash flows are estimated to calculate the effective yield, and revenues and expenses are recorded as interest income or expense. Reinsurance deposit assets or liabilities also include funds deposited or held by the Group under assumed or ceded reinsurance contracts, respectively, when funds are retained by the reinsured under the terms of the contract.

Reinsurance is recorded gross in the consolidated balance sheet. Reinsurance assets include balances expected to be recovered from reinsurance companies for ceded paid and unpaid losses and loss adjustment expenses, ceded unearned premiums and ceded future life policy benefits. Amounts recoverable from reinsurers are estimated in a manner consistent with the assumptions used for the liabilities associated with the underlying insurance contracts.

Reinsurance assets are assessed for impairment on a regular basis and impairment losses, if any, are recorded in the same manner as for loans and receivables.

d) Liabilities for investment contracts (without DPF)

Investment contracts are those contracts that do not transfer significant insurance risk. The Group issues investment contracts without fixed terms (unit-linked) and investment contracts with fixed and guaranteed terms (fixed interest rate).

Unit-linked investment contracts

These represent portfolios maintained to meet the specific investment objectives of policyholders who bear the credit, market and liquidity risks related to the investments. The liabilities are carried at fair value, which is determined by reference to the underlying financial assets. Changes in fair value are recorded in income. The related assets for unit-linked investment contracts are designated at fair value through profit or loss in order to reduce measurement inconsistencies.

The services provided by the Group under such contracts are investment management and policy administration services that are provided over time and are not contingent on meeting specified performance criteria. Fees from such services are recognized ratably over the service period as policy fee revenue except where such fees are charged in connection with contract origination in which case such fees are recognized as contract liabilities (included within deferred front-end fees). The costs to fulfill over time services are generally recognized as incurred, except the costs of acquiring new investment contracts with investment management services, such as commissions and other incremental expenses directly related to the issuance of each new contract. Such fees enhance the resources that will be used to satisfy future performance obligations and – to the extent recoverable – are capitalized as contract assets (deferred origination costs; DOC) and amortized in line with the revenue generated by providing investment management services. Refer to note 11 for further information.

Investment contracts at amortized cost

Liabilities for investment contracts with fixed and guaranteed terms are measured at amortized cost using the effective interest rate method. Transaction costs are included in the calculation of the effective yield. As of each reporting date, the Group re-estimates the expected future cash flows and re-calculates the carrying amount of the financial liability by computing the present value of estimated future cash flows using the original effective interest rate for the financial liability. Any adjustment is immediately recognized in income.

e) Group investments excluding derivative financial instruments

Group investments are accounted for at either (a) fair value through OCI; (b) fair value through profit or loss; or (c) amortized cost.

The majority of Group investments are accounted for at fair value through OCI (available-for-sale financial assets) and include debt and equity securities as well as fund investments. Such assets are carried at fair value, with changes in fair value recognized in OCI, until the securities are either sold or impaired. Interest income determined using the effective interest method and dividend income from financial assets at fair value through OCI is included in net investment income. The cumulative unrealized gains or losses recorded in OCI are net of cumulative deferred income taxes, certain related life policyholder liabilities and deferred acquisition costs. When available-for-sale financial assets are sold, impaired or otherwise disposed of, the cumulative gains or losses are reclassified from OCI to income as net capital gains/(losses) on investments and impairments.

Group investments at fair value through profit or loss include debt and equity securities backing certain life insurance contracts with participation features, and financial assets evaluated on a fair value basis. The designation of these assets at fair value through profit or loss eliminates or significantly reduces a measurement inconsistency that would otherwise arise from measuring assets or recognizing the gains and losses on these assets on a different basis to the liabilities.

Group investments at amortized cost include debt securities for which the Group has the positive intention and ability to hold to maturity (held-to-maturity financial assets) as well as mortgage and other loans (loans and receivables). Such investments are carried at amortized cost using the effective interest rate method, less any charges for impairment. When an impairment is determined to have occurred, the carrying amount of held-to-maturity investments and loans and receivables is reduced through the use of an allowance account, and the movement in the impairment allowance is recognized in income as an impairment loss.

The Group recognizes regular purchases and sales of financial assets on the trade date, which is the date on which the Group commits to purchase or sell the asset.

Realized and unrealized gains and losses arising from changes in the fair value are recognized in income, within net capital gains/(losses) on investments and impairments, in the period in which they arise. Interest income determined using the effective interest method and dividend income from financial assets at fair value through profit or loss is included in net investment income.

Group investments include investment property accounted for at fair value through profit or loss. Rental income from investment property is recognized on a straight-line basis over the lease term and included in net investment income along with rental operating expenses for investment property recognized on an accrual basis.

Group investments include the following in cash and cash equivalents: cash on hand, deposits held at call with banks, cash collateral received, and other highly liquid investments with maturities of three months or less from the date of acquisition that are readily convertible into cash and are subject to an insignificant risk of change in fair value. Cash and cash equivalents are stated at current redemption value.

Impairment of financial assets

The Group assesses at each reporting date whether there is objective evidence that loss events have occurred that negatively affect the estimated future cash flows of a financial asset or a group of financial assets. The evaluation of whether a financial asset is impaired requires significant judgment (see note 4).

f) Derivative financial instruments and hedge accounting

Derivative financial instruments, except those designated under a qualifying cash flow or net investment hedge relationship, are carried at fair value on the balance sheet with changes in fair value recognized in income.

Derivative financial instruments that qualify for hedge accounting

Derivative financial instruments are used by the Group to economically hedge risks. In limited circumstances derivative financial instruments are designated as hedging instruments for accounting purposes in:

- Fair value hedges which are hedges of the exposure to changes in the fair value of a recognized asset or liability
- Cash flow hedges, which are hedges of the exposure to variability in cash flows attributable to a particular risk either associated with a recognized asset or liability, or a highly probable forecast transaction that could affect profit or loss
- Net investment hedges, which are hedges of a net investment in a foreign operation

All hedge relationships are formally documented, including the risk management objectives and strategy for undertaking the hedge. At inception of a hedge and on an ongoing basis, the hedge relationship is formally assessed to determine whether the hedging instruments are expected to be (prospective assessment) and have been (retrospective assessment) highly effective in offsetting changes in fair values or cash flows of hedged items attributable to the hedged risk. If the qualifying criteria for the application of hedge accounting are no longer met, the hedge relationship is discontinued prospectively, in which case the hedging instrument and the hedged item are then subsequently reported independently in accordance with the respective accounting policy.

The accounting treatment of a qualifying hedge relationship is further described in note 7.

g) Attorney-in-fact (AIF) contracts

The AIF contracts reflect the ability of the Group to generate future revenues through Farmers Group Inc. (FGI) based on the FGI's relationship with the Farmers Exchanges. The Farmers Exchanges are managed but not owned by FGI, a wholly owned subsidiary of the Group. In determining that these relationships have an indefinite useful life, the Group took into consideration the organizational structure of inter-insurance exchanges, under which subscribers exchange contracts with each other and appoint an attorney-in-fact to provide non-claims management services, and the historical AIF relationship between FGI and the Farmers Exchanges. The value of the AIF contracts is tested for impairment at least annually.

The services provided by FGI under such contracts are non-claims administrative and management services including risk selection, preparation and mailing of policy documents and invoices, premium collection, management of the investment portfolios and certain other administrative and managerial functions. The multiple performance obligations covered by the consideration received are considered to be a series with the same pattern of transfer, therefore, the performance obligations are not separated. Farmers management fees and other related revenues that are primarily determined as a percentage of gross premiums earned by the Farmers Exchanges are recognized ratably over the period the services are provided. Membership fees charged at the time of the policy issuance are recognized as revenue over the expected life of the customer relationship. The incremental costs incurred in connection with the customer setup activity are recognized as an asset and subsequently amortized using the same pattern as the related revenue. Refer to note 26 for further information.

h) Goodwill

Goodwill on the acquisition of subsidiaries is capitalized and tested for impairment annually, or more frequently if there are indications of impairment. For the purpose of impairment testing, goodwill is allocated to cash-generating units (CGUs) based on the level at which management monitors operations and makes decisions related to the continuation or disposal of assets and operations. If goodwill has been allocated to a CGU and an operation within that unit is disposed of, the carrying amount of the operation includes attributable goodwill when determining the gain or loss on disposal.

i) Intangible assets

All intangible assets have finite lives and are carried at cost, less accumulated amortization and impairments. Such assets are generally amortized using the straight-line method over their useful lives and reviewed for impairment at least annually, or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Present value of future profits from acquired insurance contracts (PVFP)

An intangible asset representing the PVFP arises from the acquisition of life insurance businesses. Such an asset is amortized over the expected life of the acquired contracts, following the same principles as for DAC. The carrying value of the PVFP asset is tested periodically for impairment as part of the liability adequacy test for insurance contracts.

Distribution agreements

Distribution agreements may have useful lives extending up to 30 years, estimated based on the period of time over which they are expected to provide economic benefits, but for no longer than the contractual term, after taking into account all economic and legal factors such as stability of the industry, competitive position and the period of control over the assets.

Software

Costs associated with research and maintenance of internally-developed computer software are expensed as incurred. Costs incurred during the development phase are capitalized. Software under development is tested for impairment annually.

Acquired computer software licenses are capitalized on the basis of the costs incurred to acquire and bring the specific software into use.

The useful lives of computer software licenses and capitalized internal software development costs generally range from three to five years. In limited circumstances, capitalized software development costs may be amortized over a period of up to ten years, taking into account the effects of obsolescence, technology, competition and other economic and legal factors.

j) Employee benefits

Share-based compensation and cash incentive plans

The Group operates long-term incentive plans that are accounted for as equity-settled share-based compensation plans. The fair value of these incentive plans is determined at the grant date and is recognized as an expense in income over the vesting period, with a corresponding increase recorded in additional paid-in capital.

Subsequently, depending on the underlying performance metrics, the Group revises its estimates of the number of shares that are expected to be issued and recognizes the impact of the revision, if any, in income with a corresponding adjustment to additional paid-in capital. However, no subsequent adjustment is made after the vesting date.

Retirement benefits

Contributions to defined contribution plans are recorded as an expense in the period in which the economic benefit from the employees' service was received.

Defined benefit plan obligations and contributions are determined annually by qualified actuaries using the projected unit credit method. The Group's expense related to these plans is accrued over the employees' service periods based on the actuarially determined cost for the period. Net interest and service costs are determined using the spot rate approach. Actuarial gains and losses are recognized, in full in the period in which they occur, in OCI. Past service costs, which result from plan amendments and curtailments, are recognized in income when the plan amendment or curtailment occurs (which is the date from which the plan change is irrevocable) and the date on which a constructive obligation arises. Settlement gains or losses are recognized in income when the settlement occurs.

Other post-employment benefits

Other post-employment benefits, such as medical care and life insurance, are also provided for certain employees and are primarily funded internally. Similar to defined benefit plans, the cost of such benefits is accrued over the service period of the employees based on the actuarially determined cost for the period.

4. Critical accounting judgments and estimates

The application of certain accounting policies necessitates critical accounting estimates that involve discretionary judgments and the use of assumptions which are susceptible to change due to inherent uncertainties. Because of the uncertainties involved, actual results could differ significantly from the assumptions and estimates made by management. Such critical accounting estimates are of significance to insurance reserves and deferred acquisition costs, the determination of fair value for financial assets and liabilities, impairment charges, deferred taxes and employee benefits.

a) Reserves for insurance contracts and deferred acquisition costs

Property & Casualty

The Group is required to establish reserves for payment of losses and loss adjustment expenses that arise from the Group's property & casualty products and the run-off of its former third party reinsurance operations. These reserves represent the expected ultimate cost to settle claims occurring prior to, but still outstanding as of, the balance sheet date. The Group establishes its reserves by product line, type and extent of coverage and year of occurrence. There are two categories of loss reserve: reserves for reported losses and reserves for incurred but not reported (IBNR) losses. Additionally, reserves are held for loss adjustment expenses, which contain the estimated legal and other expenses expected to be incurred to finalize the settlement of the losses.

The Group's reserves for reported losses and loss adjustment expenses are based on estimates of future payments to settle reported claims. The Group bases such estimates on the facts available at the time the reserves are established. These reserves are generally established on an undiscounted basis to recognize the estimated costs of bringing pending claims to final settlement. The reserve calculation takes into account inflation, as well as other factors that can influence the amount of reserves required, some of which are subjective and some of which are dependent on future events. In determining the level of reserves, the Group considers historical trends and patterns of loss payments, pending levels of unpaid claims and types of coverage. In addition, court decisions, economic conditions and public attitudes may affect the ultimate cost of settlement and, as a result, the Group's estimation of reserves. Between the reporting and final settlement of a claim circumstances may change, which may result in changes to established reserves. Items such as changes in law and interpretations of relevant case law, results of litigation, changes in medical costs, as well as costs of vehicle and home repair materials and labor rates can substantially impact ultimate settlement costs. Accordingly, the Group reviews and re-evaluates claims and reserves on a regular basis. Amounts ultimately paid for losses and loss adjustment expenses can vary significantly from the level of reserves originally set.

The Group establishes IBNR reserves, to recognize the estimated cost of losses for events which have already occurred but which have not yet been notified. These reserves are established to recognize the estimated costs required to bring such claims to final settlement. As these losses have not yet been reported, the Group relies upon historical information and statistical models, based on product line, type and extent of coverage, to estimate its IBNR liability. The Group also uses reported claim trends, claim severities, exposure growth, and other factors in estimating its IBNR reserves. These reserves are revised as additional information becomes available and as claims are actually reported.

The time required to learn of and settle claims is an important consideration in establishing the Group's reserves. Short-tail claims, such as those for motor and property damage, are normally reported soon after the incident and are generally settled within months. Long-tail claims, such as bodily injury, pollution, asbestos and product liability, can take years to develop and additional time to settle. For these claims, information concerning the event, such as the required medical treatment for bodily injury claims and the required measures to clean up pollution, may not be readily available. Accordingly, the reserving analysis of long-tail lines of business is generally more difficult and subject to greater uncertainties than for short-tail claims.

Since the Group does not establish reserves for catastrophes in advance of the occurrence of such events, these events may cause volatility in the levels of its incurred losses and reserves subject to the effects of reinsurance recoveries. This volatility may also be contingent upon political and legal developments after the occurrence of the event.

The Group uses a number of accepted actuarial methods to estimate and evaluate the amount of reserves recorded. The nature of the claim being reserved for and the geographic location of the claim influence the techniques used by the Group's actuaries. Additionally, the Group's Corporate Center actuaries perform periodic reserve reviews of the Group's businesses throughout the world. Management considers the results of these reviews and adjusts its reserves for losses and loss adjustment expenses, where necessary.

Life insurance

The reserves for future life policyholder benefits and policyholder contract deposits and other funds contain a number of assumptions regarding mortality or longevity, lapses, surrenders, expenses, discount rates and investment returns. These assumptions can vary by country, year of policy issuance and product type and are determined with reference to past experience adjusted for new trends, current market conditions and future expectations. As such the liabilities for future life policyholder benefits and policyholder contract deposits may not represent the ultimate amounts paid out to policyholders. For example:

- The estimated number of deaths determines the value of the benefit payments. The main source of uncertainty arises because of the potential for pandemics and wide-ranging lifestyle changes, such as changes in eating, smoking and exercise habits, which could result in earlier deaths for age groups in which the Group has significant exposure to mortality risk.
- For contracts that insure the risk of longevity, such as annuity contracts, an appropriate allowance is made for people living longer. Continuing improvements in medical care and social conditions could result in further improvements in longevity in excess of those allowed for in the estimates used to determine the liability for contracts where the Group is exposed to longevity risk.
- Under certain contracts, the Group has offered product guarantees (or options to take up product guarantees), including fixed minimum interest rate or mortality rate returns. In determining the value of these options and/or benefits, estimates have been made as to the percentage of contract holders that may exercise them. Changes in investment conditions could result in significantly more contract holders exercising their options and/or benefits than has been assumed.
- Estimates are made as to future investment income arising from the assets backing long-term insurance contracts. These estimates are based on current market returns as well as expectations about future economic and financial developments.
- Assumptions are determined with reference to current and historical customer data, as well as industry data. Interest rate assumptions reflect expected earnings on the assets supporting the future policyholder benefits. The information used by the Group's qualified actuaries in setting such assumptions includes, but is not limited to, pricing assumptions, available experience studies and profitability analysis.

Deferred policy acquisition costs and the present value of future profits (PVFP) are recognized on balance sheet only to the extent that they are recoverable from future policy income which also depends on the above assumptions. Recoverability is tested at contract inception and subsequently on a regular basis with reference to current expectations of future profits or margins.

See note 8 for further information on liabilities for insurance contracts and note 11 for deferred policy acquisition costs. Also refer to the insurance risk section of the risk review.

b) Fair value measurement

In determining the fair values of investments in debt and equity instruments traded on exchanges and in over-the-counter (OTC) markets, the Group makes extensive use of independent, reliable and reputable third party pricing providers and only in rare cases places reliance on valuations that are derived from internal models.

In addition, the Group's policy is to ensure that independently-sourced prices are developed by making maximum use of current observable market inputs derived from orderly transactions and by employing widely-accepted valuation techniques and models. When third party pricing providers are unable to obtain adequate observable information for a particular financial instrument, the fair value is determined either by requesting selective non-binding broker quotes or by using internal valuation models.

Valuations can be subject to significant judgment, especially when the fair value is determined based on at least one significant unobservable input parameter; such items are classified within level 3 of the fair value hierarchy. See notes 6, 7 and 23 for further information regarding the estimate of fair value.

c) Impairment of assets

Financial assets

A financial asset is considered impaired if there is objective evidence of impairment as a result of one or more occurred loss events that have an impact on the estimated future cash flows of the financial asset.

The evaluation of whether an available-for-sale debt security is impaired requires analysis of the credit standing of a particular issuer and involves management judgment. When assessing impairment of available-for-sale debt securities, the Group places emphasis on issuer specific factors, such as significant financial difficulty, default or delinquency on interest or principal payments. A credit rating downgrade, worsened liquidity or decline in fair value below the weighted-average cost is not by itself considered a loss event, but rather incorporated in the impairment analysis along with other available information.

The Group determines that there is objective evidence of impairment of an available-for-sale equity security, if at the reporting date:

- its fair value is below the weighted-average cost by an amount significantly exceeding the volatility threshold determined quarterly for the respective equity market (such as North America, Asia Pacific, UK, Switzerland and other European countries); or
- its fair value has been below the weighted-average cost for a prolonged period of 24 consecutive months or longer

Goodwill and attorney-in-fact (AIF) contracts

Goodwill is allocated to a cash generating unit (CGU) as outlined in note 3. The Group has defined the CGUs according to regions, separating Property & Casualty (P&C), Life businesses and other (see note 27). The CGUs which carry the majority of goodwill and AIF contracts are presented in table 4.

For goodwill impairment testing, the recoverable amount is the higher of its fair value less costs to sell and its value-in-use.

Fair value is determined, considering quoted market prices, current share values in the market place for similar publicly traded entities, and recent sale transactions of similar businesses.

Value-in-use is determined using the present value of estimated future cash flows expected to be generated from the CGU. Cash flow projections are based on financial budgets, which are approved by management, typically covering a three-year period or, if appropriate and adequately justified, a longer period, which may be necessary to more accurately represent the nature of the cash flows used to test the goodwill. Cash flows beyond this period are extrapolated using, among others, estimated perpetual growth rates, which typically do not exceed the expected inflation of the geographical areas in which the cash flows supporting the goodwill are generated. If cash flows are generated in different geographical areas with different expected inflation rates, weighted averages are used. The discount rates applied reflect the respective risk free interest rate adjusted for the relevant risk factors to the extent they have not already been considered in the underlying cash flows.

The discount rates used in the recoverable amount calculations for developed markets are based on the capital asset pricing model and consider government bond rates which are further adjusted for equity risk premium, appropriate beta and leverage ratio. In emerging markets, discount rates are based on the U.S. dollar discount rate taking into account inflation differential expectations and country risks. All input factors to the discount rates are based on observable market data.

The recoverable amounts of AIF contracts and goodwill are determined on the basis of value-in-use calculations further described above. The basis for determining the values assigned to the key assumptions are current market trends and earnings projections.

Table 4 sets out for the major CGUs the applied discount rates and the perpetual nominal growth rates beyond the projection period that depend on expectations about country-specific growth rates and inflation as of the date of valuation, as well as the value of goodwill and AIF contracts as of December 31, 2018. No impairment was identified.

Table 4

Discount and perpetual growth rates for goodwill and AIF contracts for major CGUs

	Business	in USD millions	Discount rates in % 2018	Discount rates in % 2017	Perpetual nominal growth rate in % 2018	Perpetual nominal growth rate in % 2017
Farmers	Farmers	1,845	9.7	10.8	–	–
North America	P&C	350	8.9	9.2	1.6	2.3
Europe, Middle East & Africa	P&C	264	7.4	7.4	1.9	1.9
Asia Pacific	P&C	665	8.2	7.8	2.0	2.3
Asia Pacific	Life	162	8.8	8.8	2.0	2.4
Latin America	P&C	213	16.1	15.6	4.7	4.4
Latin America	Life	103	11.2	–	3.0	–

Sensitivity tests have been performed on goodwill and AIF contracts that typically comprise of an analysis for either a decrease in cash flows of up to 30 percent, a decrease in the perpetual growth rate of up to 1.0 percentage point or an increase in the discount rate of up to 3.5 percentage points, so as to capture potential future variations in market conditions. The recoverability of the Latin America Property & Casualty CGU goodwill is very sensitive to key assumptions such as macroeconomic conditions, industry and market growth considerations, and cost factors in particular in Brazil, Argentina and Mexico.

In addition, the Group has recognized USD 52 million of goodwill relating to the acquisition of mobile solution technology. The recoverability of this goodwill is reliant upon successful achievement of ambitious growth targets.

Distribution agreements

Qualitative analyses have been performed on distribution agreements, typically comprised of an analysis of the current financial performance, any change in the conditions in the agreement and environment that would indicate an impairment. No impairment was identified.

See notes 3, 6, 13, 14 and 15 for further information on impairment of assets.

d) Deferred taxes

Deferred tax assets are recognized if sufficient future taxable income, including income from the reversal of existing taxable temporary differences and available tax planning strategies, is available for realization. The utilization of deferred tax assets arising from temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and their tax bases depends on the generation of sufficient taxable profits in the period in which the underlying asset or liability is recovered or settled. If applicable tax law acknowledges different types of expenses to be tax deductible, deferred tax assets are only recognized if they give rise to deductions against the same type of taxable income. The utilization of deferred tax assets arising from unused tax losses or tax credits depends on the generation of sufficient taxable profits before the unused tax losses or tax credits expire. As of each balance sheet date, management evaluates the recoverability of deferred tax assets and, if it is considered probable that all or a portion of the deferred tax asset will not be utilized, then a valuation allowance is recognized.

See note 17 for further information on deferred taxes.

e) Employee benefits

The Group provides defined benefit plans and other post-employment plans. In assessing the Group’s liability for these plans, critical judgments include estimates of mortality rates, rates of employment turnover, disability, early retirement, discount rates, future salary and pension increases and increases in long-term healthcare costs. Discount rates for significant plans are based on a yield curve approach. The Group sets the discount rate by creating a hypothetical portfolio of high-quality corporate bonds for which the timing and amount of cash flows approximate the estimated payouts of the defined benefit plan. These assumptions may differ from actual results due to changing economic conditions, higher or lower withdrawal rates, or longer or shorter life spans of participants. These differences may result in variability of pension income or expense recorded in future years.

See note 20 for further information on employee benefits.

5. Acquisitions and divestments

Transactions in 2018

Acquisitions

Blue Insurance

On October 3, 2018, Cover-More Australia Pty Ltd, a fully owned subsidiary of Zurich Insurance Company Ltd, completed the acquisition of Blue Insurance Ltd (Blue Insurance), an Irish domiciled insurance intermediary acquired for approximately USD 64 million, subject to performance adjustments. Based on the initial purchase price accounting, goodwill amounted to USD 35 million.

Adira Insurance

On September 27, 2018, Zurich Insurance Group entered into agreements to acquire 80 percent of PT Asuransi Adira Dinamika (Adira Insurance) from PT Bank Danamon Indonesia (Bank Danamon) and a minority investor for approximately USD 414 million, with potential future incremental payments based on business performance. The transaction includes two separate long-term strategic cooperation agreements with Bank Danamon and PT Adira Dinamika Multi Finance TbK. The transaction is expected to close in the first half of 2019, subject to regulatory approval.

EuroAmerica portfolio in Chile

On April 20, 2018, the Group announced it had entered into an agreement to acquire the individual and group life insurance portfolios as well as the long-term savings operations of EuroAmerica in Chile. The Group finalized the acquisition on November 5, 2018, for an estimated aggregate price of USD 144 million, subject to closing adjustments. Based on the initial purchase price accounting, goodwill amounted to USD 102 million.

Travel Ace and Universal Assistance

On March 12, 2018, the Group announced the acquisition of Travel Ace and Universal Assistance, the leading providers of traveler assistance in Latin America for approximately USD 82 million. The transaction encompassed 19 legal entities operating throughout Latin America, most notably in Argentina, Brazil, Chile, Colombia and Mexico. Based on the initial purchase price accounting, goodwill amounted to USD 94 million.

QBE Latin America

On February 24, 2018, the Group entered into an agreement to acquire the Latin American operations of the Australian insurer QBE Insurance Group Limited (QBE) with operations in Argentina, Brazil, Colombia, Ecuador and Mexico, subject to regulatory approvals. On July 2, 2018, the acquisitions of Argentina and Brazil were closed for an amount of USD 196 million and USD 34 million, respectively. The acquisitions of Mexico and Ecuador were closed on August 31, 2018 and October 1, 2018, for an amount of USD 32 million and USD 52 million, respectively. The acquisition of Colombia was completed on February 1, 2019, for an amount of USD 36 million.

Table 5.1 shows the main balance sheet line items as of the acquisition dates, representing the fair value of acquired QBE Latin America's net tangible assets, intangible assets and goodwill, based on initial purchase price accounting.

QBE Latin America balance sheet as of the acquisition dates

Table 5.1

in USD millions	Total
Cash and cash equivalents	87
Total investments	307
Receivables and other assets	349
Deferred tax assets	18
Property and equipment	23
Goodwill	195
Other intangible assets	55
Assets acquired	**1,033**
Liabilities for insurance contracts	602
Other liabilities	118
Liabilities acquired	**720**
Net assets acquired	313
Total acquisition costs	**313**

QBE Latin America's net income after taxes for the months since the acquisition dates, as included in the Group consolidated income statements for the year ended December 31, 2018, amounts to USD 3 million including transaction-related costs. Pro-forma net income after taxes for the full 12 months ended December 31, 2018, amounts to approximately USD 21 million, adjusted for transaction-related costs incurred by QBE Latin America. In addition, the Group incurred transaction-related costs of approximately USD 9 million in non-technical expenses in BOP. The majority has been incurred in 2018.

Divestments

Held for sale

On December 21, 2018, the Group entered into an agreement to sell its 51 percent participation in ADAC Autoversicherung AG and the shares in Bonnfinanz AG. The sale of the shares in ADAC Autoversicherung AG became effective as of January 1, 2019, while the sale of Bonnfinanz AG is expected to close in the first half of 2019. As of December 31, 2018, assets and liabilities of USD 431 million and USD 294 million, respectively, were reclassified to held for sale.

On December 14, 2018, Zurich Insurance plc entered into an agreement with Catalina Holdings (Bermuda) Ltd and certain of its subsidiaries to transfer a portfolio of pre-2007 United Kingdom legacy employers' liability policies to Catalina London Limited, subject to regulatory and court approvals. The sale is expected to close in the second half of 2019. As of December 31, 2018, assets and liabilities reclassified to held for sale were USD 260 million and USD 1.8 billion, respectively.

On November 7, 2018, the Group entered into an agreement to sell its Venezuelan operations, subject to regulatory approval. The Group currently has USD 258 million of negative cumulative translation adjustments which will be recognized in the statement of income upon completion of the sale.

During the 12 months ended December 31, 2017, the Group entered into an agreement to sell a Life business in the UK. As of December 31, 2018, the related assets and liabilities held for sale decreased by USD 6 billion to USD 23 billion since December 31, 2017.

As of December 31, 2018, the total assets and liabilities reclassified to held for sale were USD 24 billion and USD 26 billion, respectively.

UK workplace pensions and savings business

On April 3, 2018, Sterling ISA Managers Limited completed the sale of its Corporate Savings Platform together with the associated infrastructure, assets and business to LBG subsidiary, Scottish Widows Administration Services Limited. The remaining business is to be transferred by Zurich Assurance Ltd to Scottish Widows Limited by a UK court process under Part VII of the Financial Services and Markets Act 2000. The target transfer date is July 1, 2019.

Endsleigh Limited
On March 29, 2018, the Group completed the sale of the Endsleigh Limited group of companies to A-Plan Holdings. A pre-tax loss of USD 116 million has been recorded within net gains/losses on divestment of businesses, of which USD 97 million were recognized in December 2017 at the time the sale was announced.

Transactions in 2017

Acquisitions
Bright Box
On December 22, 2017, the Group announced the acquisition of 100 percent of the shares of Bright Box HK Limited (Bright Box) and its subsidiaries, a provider of telematics solutions linking vehicle drivers, dealers and manufacturers. The purchase price amounted to USD 75 million, of which USD 25 million are dependent on meeting certain criteria. The net tangible assets acquired amounted to minus USD 2 million and intangible assets amounted to USD 25 million. Goodwill amounted to USD 52 million, and mainly reflects business know-how as well as technical capabilities. Bright Box was reported for the first time in 2018.

ANZ's life and consumer credit insurance businesses
On December 11, 2017, the Group announced it had entered into an agreement to acquire 100 percent of the Australian life insurance and consumer credit businesses (OnePath Life) of Australia and New Zealand Banking Group Limited (ANZ) for AUD 2.85 billion (USD 2 billion), subject to a purchase price adjustment. The transaction, which is subject to regulatory approval, is expected to be completed in the first half of 2019.

Cover-More
On April 13, 2017, the Group completed the acquisition of all the shares in Cover-More Group Limited (Cover-More), a travel insurance and assistance solutions provider listed on the Australian Securities Exchange, with main operations in Australia, India and the U.S. In conjunction with this acquisition, the Group also acquired Halo Insurance Services Limited (Halo), a distributor of vehicle-hire-related insurance in the UK.

The final purchase price for Cover-More and Halo amounted to USD 580 million gross of a pre-closing dividend of USD 14 million. Based on the initial purchase accounting, the fair value of net tangible assets acquired amounted to minus USD 99 million and identifiable intangible assets estimated at USD 163 million, gross of related deferred tax liabilities of USD 33 million. Residual goodwill amounted to USD 549 million, including a USD 16 million reduction of Goodwill and deferred tax liability in 2018, which represents the future growth potential of the travel insurance assistance business, the value of the workforce with their distribution capabilities and related know-how and synergies with the Group.

Table 5.2 shows the main balance sheet line items as of the acquisition date, representing the fair value of Cover-More and Halo net tangible assets acquired, intangible assets and goodwill.

Table 5.2
Cover-More balance sheet as of the acquisition date

in USD millions, as of April 13, 2017	**Total**
Cash and cash equivalents	38
Receivables and other assets	34
Property and equipment	4
Goodwill	549
Other intangible assets	163
Assets acquired	**787**
Other liabilities	182
Deferred tax liabilities	24
Liabilities acquired	**206**
Net assets acquired	581
Non-controlling interests	(1)
Total acquisition costs	**580**

Cover-More's net income after taxes for the nine months since the acquisition date, as included in the Group consolidated income statements for the year ended December 31, 2017, amounts to USD 17 million including transaction-related costs. Pro-forma net income after taxes for the full 12 months ended December 31, 2017, amounts to approximately USD 24 million, adjusted for transaction-related costs incurred by Cover-More.

In addition, the Group incurred transaction-related costs of approximately USD 10 million in non-technical expenses in BOP. The majority has been incurred in 2017.

Divestments

Middle East operations

On June 19, 2017, the Group closed the sale of its Property & Casualty insurance operations in the Middle East to Cigna International Corporation for a sales price of approximately USD 48 million subject to a purchase price adjustment. A pre-tax gain of USD 10 million has been recorded within net gains/(losses) on divestment of businesses.

Taiwan operations

On January 17, 2017, the Group closed the sale of its Property & Casualty insurance operations in Taiwan to Hotai Motor Co., Ltd for a sales price of approximately USD 213 million. A pre-tax loss of USD 9 million has been recorded within net gains/(losses) on divestment of businesses.

Consolidated financial statements (continued)

6. Group investments

Group investments are those for which the Group bears part or all of the investment risk. They also include investments related to investment contracts with discretionary participation features. Net investment result on Group investments includes returns on investment-related cash, which is included in cash and cash equivalents on the consolidated balance sheets.

Table 6.1

Net investment result on Group investments

in USD millions, for the years ended December 31	Net investment income		Net capital gains/(losses) and impairments		Net investment result		of which impairments	
	2018	2017	**2018**	2017	**2018**	2017	**2018**	2017
Investment cash	8	11	–	–	8	11	–	–
Equity securities	438	402	355	1,422	794	1,824	(218)	(77)
Debt securities	4,103	3,942	84	558	4,187	4,500	(32)	–
Investment property[1]	487	463	401	355	888	818	–	–
Mortgage loans	186	198	1	–	187	198	1	–
Other loans	382	415	14	9	397	424	12	8
Investments in associates and joint ventures	1	3	–	–	2	3	–	–
Derivative financial instruments	–	–	45	(310)	45	(310)	–	–
Investment result, gross, on Group investments	5,606	5,433	901	2,034	6,507	7,467	(238)	(69)
Investment expenses on Group investments	(219)	(218)	–	–	(219)	(218)	–	–
Investment result, net, on Group investments	**5,387**	**5,215**	**901**	**2,034**	**6,288**	**7,249**	**(238)**	**(69)**

[1] Rental operating expenses for investment property amounted to USD 98 million and USD 91 for the years ended December 31, 2018 and 2017, respectively.

Table 6.2

Details of Group investments by category

as of December 31	**2018**		2017	
	USD millions	**% of total**	USD millions	% of total
Equity securities:				
Fair value through profit or loss	3,633	2.0	3,597	1.9
Available-for-sale	12,587	6.9	14,190	7.3
Total equity securities	16,220	8.9	17,787	9.2
Debt securities:				
Fair value through profit or loss	5,229	2.9	5,699	2.9
Available-for-sale	132,522	72.6	140,240	72.3
Held-to-maturity	2,118	1.2	2,322	1.2
Total debt securities	139,870	76.6	148,261	76.4
Investment property	12,351	6.8	12,238	6.3
Mortgage loans	6,556	3.6	7,047	3.6
Other loans	7,614	4.2	8,730	4.5
Investments in associates and joint ventures	36	0.0	21	0.0
Total Group investments	**182,647**	**100.0**	**194,084**	**100.0**

Investments with a carrying value of USD 6.2 billion and USD 6.4 billion are held to meet local regulatory requirements as of December 31, 2018 and 2017, respectively.

Details of debt securities by category

Table 6.3

in USD millions, as of December 31	Fair value through profit or loss		Available-for-sale		Held-to-maturity		Total	Total
	2018	2017	**2018**	2017	**2018**	2017	**2018**	2017
Debt securities:								
Government and supra-national bonds	2,759	2,982	59,395	64,491	1,917	2,109	64,071	69,581
Corporate securities	2,061	2,320	55,229	58,711	201	214	57,490	61,245
Mortgage and asset-backed securities	409	397	17,899	17,038	–	–	18,308	17,434
Total debt securities	**5,229**	**5,699**	**132,522**	**140,240**	**2,118**	**2,322**	**139,870**	**148,261**

Debt securities maturity schedule

Table 6.4

in USD millions, as of December 31	Fair value through profit or loss		Available-for-sale		Held-to-maturity		Total	Total
	2018	2017	**2018**	2017	**2018**	2017	**2018**	2017
Debt securities:								
< 1 year	564	527	6,438	7,030	7	162	7,009	7,719
1 to 5 years	1,226	1,164	35,933	39,059	816	149	37,975	40,372
5 to 10 years	981	1,184	32,632	36,284	462	900	34,076	38,368
> 10 years	2,049	2,427	39,620	40,830	833	1,110	42,502	44,367
Subtotal	4,820	5,302	114,624	123,202	2,118	2,322	121,562	130,826
Mortgage and asset-backed securities:								
< 1 year	–	1	36	16	–	–	36	17
1 to 5 years	112	105	1,869	1,679	–	–	1,981	1,784
5 to 10 years	63	39	2,265	2,499	–	–	2,328	2,538
> 10 years	235	252	13,728	12,844	–	–	13,963	13,095
Subtotal	409	397	17,899	17,038	–	–	18,308	17,434
Total	**5,229**	**5,699**	**132,522**	**140,240**	**2,118**	**2,322**	**139,870**	**148,261**

The analysis in table 6.4 is provided by contractual maturity. Actual maturities may differ from contractual maturities because certain borrowers have the right to call or prepay certain obligations with or without call or prepayment penalties.

Investment property

Table 6.5

in USD millions	Total	
	2018	2017
As of January 1	12,238	10,562
Additions and improvements	757	1,124
Acquisitions/(divestments)	1	(2)
Disposals	(563)	(418)
Market value revaluation	247	243
Transfer from/to assets held for own use	–	51
Transfer to assets held for sale	(15)	(70)
Foreign currency translation effects	(315)	749
As of December 31	**12,351**	**12,238**

Investment property consists of investments in commercial, residential and mixed-use properties primarily located in Germany, U.S. and Switzerland.

Net unrealized gains/(losses) on Group investments included in equity

Table 6.6

in USD millions, as of December 31	Total	
	2018	2017
Equity securities: available-for-sale	137	1,862
Debt securities: available-for-sale	6,567	9,720
Other	164	350
Gross unrealized gains/(losses) on Group investments	6,868	11,932
Less amount of unrealized gains/(losses) on investments attributable to:		
Life policyholder dividends and other policyholder liabilities	(4,857)	(6,779)
Life deferred acquisition costs and present value of future profits	(490)	(702)
Deferred income taxes	(476)	(928)
Non-controlling interests	(33)	(36)
Total[1]	**1,012**	**3,488**

[1] Net unrealized gains/(losses) on Group investments include net gains arising on cash flow hedges of USD 363 million and USD 398 million as of December 31, 2018 and 2017, respectively.

Securities lending, repurchase and reverse repurchase agreements

Table 6.7

in USD millions, as of December 31	2018	2017
Securities lending agreements		
Securities lent under securities lending agreements[1]	599	970
Collateral received for securities lending	676	1,082
of which: Cash collateral	47	153
of which: Non-cash collateral[2]	629	929
Liabilities for cash collateral received for securities lending	47	153
Repurchase agreements		
Securities sold under repurchase agreements[3]	1,318	1,397
Obligations to repurchase securities	1,316	1,394
Reverse repurchase agreements		
Securities purchased under reverse repurchase agreements[4]	48	156
Receivables under reverse repurchase agreements	47	153

[1] The Group's counterparties had the right to sell or repledge, in the absence of default, assets pledged as collateral with a fair value of USD 599 million and USD 970 million as of December 31, 2018 and 2017, respectively. The majority of these assets were debt securities.
[2] The Group had the right to sell or repledge, in the absence of default by its counterparties, securities received as collateral with a fair value of USD 629 million and USD 818 million as of December 31, 2018 and 2017, respectively.
[3] The Group's counterparties had the right to sell or repledge, in the absence of default, assets pledged as collateral with a fair value of USD 609 million and USD 797 million as of December 31, 2018 and 2017, respectively. The majority of these assets were debt securities.
[4] The Group had the right to sell or repledge, in the absence of default by its counterparties, securities received as collateral with a fair value of nil as of December 31, 2018 and 2017.

Under the terms of securities lending or repurchase agreements, the Group retains substantially all the risks and rewards of ownership of the transferred securities, and also retains contractual rights to the cash flows from these securities. These securities are therefore not derecognized from the Group's consolidated balance sheet. Cash received as collateral is recorded as an asset, and a corresponding liability is established. Interest expense is charged to income using the effective interest rate method over the life of the agreement.

Under a reverse repurchase agreement, the securities received are not recognized on the Group's consolidated balance sheet, as long as the risk and rewards of ownership have not been transferred to the Group. The cash delivered by the Group is derecognized and a corresponding receivable is recorded within receivables and other assets. Interest income is recognized in income using the effective interest rate method over the life of the agreement.

7. Group derivative financial instruments and hedge accounting

The Group uses derivative financial instruments mainly for economic hedging purposes to mitigate risks. Such risks result from changes in interest rates, equity prices and exchange rates. Derivative financial instruments with a positive fair value are reported in receivables and other assets (see note 15) and those with a negative fair value are reported in other liabilities (see note 16).

Table 7.1 shows the fair value and notional amounts for instruments which did not qualify for hedge accounting as of December 31, 2018 and 2017. While these notional amounts express the extent of the Group's involvement in derivative transactions, they do not, however, represent the amounts at risk.

Table 7.1

Maturity profile of notional amounts and fair values of Group derivative financial instruments

in USD millions, as of December 31						2018			2017
	Maturity by notional amount				**Positive**	**Negative**			
		1 to 5		**Notional**	**fair**	**fair**	Notional	Positive	Negative
	< 1 year	years	> 5 years	**amounts**	**values**	**values**	amounts	fair values	fair values
Interest rate contracts:									
OTC									
Swaps	119	587	1,980	2,686	66	(15)	2,622	97	(12)
Swaptions	249	1,040	838	2,127	54	–	2,397	52	(17)
Exchange traded									
Futures	209	–	–	209	3	(2)	136	–	–
Total interest rate contracts	**577**	**1,627**	**2,818**	**5,022**	**123**	**(17)**	**5,155**	**149**	**(30)**
Equity contracts:									
OTC									
Options	2,528	634	200	3,361	67	(35)	4,761	70	(29)
Exchange traded									
Futures	225	–	–	225	7	–	363	–	(2)
Total equity contracts	**2,752**	**634**	**200**	**3,586**	**75**	**(35)**	**5,124**	**71**	**(32)**
Foreign exchange contracts:									
OTC									
Swaps and forwards	19,840	–	–	19,840	129	(155)	16,323	78	(50)
Total foreign exchange contracts	**19,840**	**–**	**–**	**19,840**	**129**	**(155)**	**16,323**	**78**	**(50)**
Credit default swaps	–	4,000	–	4,000	–	(31)	–	–	–
Total credit contracts	**–**	**4,000**	**–**	**4,000**	**–**	**(31)**	**–**	**–**	**–**
Other contracts:									
OTC									
Options	–	–	54	54	–	(4)	11	–	(1)
Swaps	–	–	42	42	–	(4)	46	–	(7)
Total other contracts	**–**	**–**	**95**	**95**	**–**	**(8)**	**58**	**–**	**(8)**
Total Group derivative financial instruments	**23,169**	**6,261**	**3,114**	**32,543**	**327**	**(245)**	**26,659**	**297**	**(119)**

Interest rate contracts

Interest rate contracts are used to hedge risks from changes in interest rates and to manage asset liability mismatches. Whenever possible the Group enters into exchange traded contracts, which are standardized and regulated. Furthermore, because of the structure of the exchanges, exchange traded contracts are not considered to carry counterparty risk. Over-the-counter (OTC) contracts are otherwise entered into and comprised of swaps and swaptions.

Equity contracts

Equity contracts are entered into, either on a portfolio or on a macro level, to protect the fair value of equity investments against a decline in equity market prices or to manage the risk return profile of equity exposures. The majority of positions are for economic hedging purposes. Short positions are always covered and sometimes used to mitigate hedging costs.

Foreign exchange contracts

Swaps and forward contracts are used to hedge the Group's foreign currency exposures and to manage balance sheet mismatches.

Credit contracts

Credit contracts are credit default swaps entered into either on a portfolio or on a macro level to limit market risks arising from the investment portfolios against a change in credit spreads or to manage the risk return profile of the credit exposures.

Other contracts

Other contracts predominantly include stable value products (SVPs) issued to insurance company separate accounts in connection with certain life insurance policies (Bank Owned Life Insurance (BOLI) and Company Owned Life Insurance (COLI)) with an account value of USD 10.8 billion as of December 31, 2018 and 2017, and with a market value of the underlying investments of USD 10.4 billion and USD 10.7 billion as of December 31, 2018 and 2017, respectively (not included in the table above). The Group includes the likelihood of surrender as one of the input parameters to determine the fair value of the SVPs which was nil as of December 31, 2018 and 2017.

In certain circumstances, derivative financial instruments meet the requirements of an effective hedge for accounting purposes. Where this is the case, hedge accounting may be applied. Financial information for these instruments is set out in table 7.2.

Table 7.2

Maturity profile of notional amounts and fair values of Group derivative financial instruments

in USD millions, as of December 31						**2018**			2017
	Maturity by notional amount			**Notional principal amounts**	**Positive fair values**	**Negative fair values**	Notional principal amounts	Positive fair values	Negative fair values
	< 1 year	1 to 5 years	> 5 years						
Fair value hedges:									
Cross currency swaps	–	–	62	62	–	(49)	62	–	(47)
Interest rate swaps	813	559	868	2,240	63	(1)	2,289	75	(8)
Forex swaps and forwards	478	–	–	478	4	(1)	336	1	(1)
Total fair value hedges	**1,291**	**559**	**930**	**2,779**	**67**	**(52)**	**2,687**	**76**	**(56)**
Cash flow hedges:									
Interest rate swaptions	–	859	1,265	2,124	424	–	2,144	450	–
Cross currency swaps	–	212	131	343	21	(4)	334	24	(17)
Interest rate swaps[1]	636	12	150	799	7	(4)	837	14	–
Forex swaps and forwards	31	–	–	31	–	(1)	772	7	–
Forwards bonds	229	57	–	286	20	(20)	300	10	(22)
Total cash flow hedges	**896**	**1,140**	**1,547**	**3,583**	**472**	**(29)**	**4,387**	**505**	**(39)**
Net investment hedges:									
Forex swaps and forwards	1,666	–	–	1,666	32	–	3,164	26	–
Total net investment hedges	**1,666**	**–**	**–**	**1,666**	**32**	**–**	**3,164**	**26**	**–**

[1] Includes USD 636 million and USD 667 million notional related to derivatives centrally cleared as of December 31, 2018 and 2017, respectively.

Fair value hedges

Designated fair value hedges consist of interest rate swaps used to protect the Group against changes in interest rate exposure and foreign currency exposure of debt issued by the Group.

Information on debt issuances designated as hedged items in fair value hedge relationships is set out in note 18.

The Group also has fair value hedge relationships consisting of cross currency swaps and forwards to protect the Group from foreign currency fluctuation of certain fixed income securities and hybrid equity securities denominated in a currency other than the functional currency of the reporting entity.

Changes in the fair value of the derivative financial instruments designated as fair value hedges and changes in the fair value of the hedged item in relation to the risk being hedged are both recognized in income.

Table 7.3 sets out gains and losses arising from fair value hedges:

Table 7.3

Gains/(losses) arising from fair value hedges

in USD millions, for the years ended December 31	2018	2017
Gains/(losses)		
on hedging instruments[1]	(7)	(38)
on hedged items attributable to the hedged risk	(2)	30

[1] Excluding current interest income, which is recognized as an offset on the same line as the interest expense of the hedged debt.

Cash flow hedges

Designated cash flow hedges, such as interest rate swaptions and forwards are used to protect the Group against variability of future cash flows due to changes in interest rates associated with expected future purchases of debt securities required for certain life insurance policies. The effective portion of the gains and losses on these swaptions are initially recognized in OCI. Subsequently the gains or losses will be recycled to profit or loss within net investment income on Group investments over the period to December 31, 2036. The gains and losses related to the ineffective portion of these hedges are recognized immediately in income within net capital gains/(losses) on investments and impairments.

The Group also uses interest rate swaps and cross currency swaps for cash flow hedging to protect against the exposure to variability of cash flows attributable to interest rate and currency risk. The hedging instrument is measured at fair value, with the effective portion of changes in its fair value recognized in OCI. The effective portion, related to spot rate changes in the fair value of the hedging instrument, is reclassified to profit or loss within administrative and other operating expense as an offset to foreign currency revaluation on the underlying hedged debt. The ineffective portion of the change in fair value is recognized directly in income within administrative and other operating expense.

The Group uses foreign exchange swaps and forwards to protect against the exposure of the variability of future cash outflows related to reinsurance transactions. The effective portion of the gains and losses are initially recognized in OCI and will be recycled to profit or loss within underwriting and policy acquisition costs using the same pattern as the hedged item.

As of December 31, 2018, there were no debt issuances designated as hedged items in a cash flow hedge relationship (see note 18).

The net change of gains/(losses) deferred in OCI on derivative financial instruments designated as cash flow hedges were USD (3) million and USD (36) million before tax for the years ended December 31, 2018 and 2017, respectively.

The Group recognized gains of USD 34 million and USD 33 million in the consolidated income statement within net investment income on Group investments for the years ended December 31, 2018 and 2017, respectively. The Group also recognized net gains/(losses) of USD 5 million and USD (15) million within administrative and other operating expense for the years ended December 31, 2018 and 2017, respectively, as an offset to the foreign currency revaluation on the underlying hedged items.

A nil amount for the years ended December 31, 2018 and 2017, respectively, was recognized in net capital gains/(losses) and impairments due to hedge ineffectiveness.

Net investment hedges

The Group applies net investment hedge accounting to protect against the effects of changes in exchange rates in its net investments in foreign operations.

Measurement of hedge effectiveness is based on changes in forward rates. Gains and losses on the designated hedging derivative and non-derivative financial instruments related to the effective portion of the hedge are recognized in OCI together with the translation gains and losses on the hedged net investment. The accumulated gains and losses in OCI are reclassified to income on disposal or partial disposal of the foreign operation.

The net change of gains/(losses) deferred in OCI were USD (114) million and USD 59 million before tax for the years ended December 31, 2018 and 2017, respectively as a result of a hedge relationship through foreign exchange forwards and swaps.

The Group has also designated certain debt issuances as hedging instruments on a non-derivative net investment hedge relationship. The notional amount of these financial instruments was USD 7.5 billion and USD 4.7 billion for the years ended December 31, 2018 and 2017, respectively. The net gains/(losses) deferred in OCI were USD 148 million and USD (168) million before tax for the years ended December 31, 2018 and 2017, respectively.

Information on debt issuances designated as hedging instruments in a net investment hedge relationship is set out in note 18.

No ineffectiveness of net investment hedges was recognized in net capital gains/(losses) and impairments for the years ended December 31, 2018 and 2017.

Derivative financial instruments: offsetting of financial assets and liabilities

Table 7.4 shows the net asset and liability position of Group derivative financial instruments subject to enforceable master netting arrangements and collateral agreements. Master netting arrangements are used by the Group to provide protection against loss in the event of bankruptcy or other circumstances that result in a counterparty being unable to meet its obligations. These arrangements commonly create a right of offset that becomes enforceable and affects the realization or settlement of individual financial assets and financial liabilities only following a specified event of default or other circumstances which would not be expected to arise in the normal course of business.

Table 7.4

Group derivative financial instruments subject to enforceable master netting arrangements and collateral agreements

in USD millions, as of December 31	Derivative assets		Derivative liabilities	
	2018	2017	**2018**	2017
Fair value	899	903	(325)	(214)
Related amounts not offset	(169)	(71)	168	69
Cash collateral (received)/pledged	(666)	(758)	90	69
Non-cash collateral (received)/pledged	(26)	(60)	60	35
Net amount	**38**	**14**	**(7)**	**(41)**

8. Liabilities for insurance contracts and reinsurers' share of liabilities for insurance contracts

Liabilities for insurance contracts

Table 8.1

in USD millions, as of December 31	Gross		Ceded		Net	
	2018	2017	**2018**	2017	**2018**	2017
Reserves for losses and loss adjustment expenses	60,913	65,368	(11,535)	(11,070)	49,378	54,298
Reserves for unearned premiums	16,714	17,060	(3,211)	(3,167)	13,503	13,893
Future life policyholder benefits[1,2,3]	74,950	77,529	(3,110)	(3,201)	71,839	74,328
Policyholder contract deposits and other funds[2]	24,266	24,944	(3,416)	(3,533)	20,850	21,411
Reserves for unit-linked insurance contracts	68,766	75,413	–	–	68,766	75,413
Other insurance liabilities	3,599	3,491	–	–	3,599	3,491
Total liabilities for insurance contracts[4]	**249,208**	**263,805**	**(21,273)**	**(20,971)**	**227,936**	**242,834**

[1] The Group's life operations in the UK finalized the transfer of USD 1.6 billion of insurance assets and liabilities, associated with an annuities portfolio, as of June 30, 2017.
[2] Farmers New World Life Insurance Company entered into a retrospective reinsurance agreement to transfer the risk of certain annuity portfolios with effect from April 1, 2017, which resulted in an initial increase of USD 1.6 billion in ceded policyholder contract deposits and other funds and USD 362 million of ceded future life policyholder benefits. The net gain of the transaction will be amortized over the remaining life of the underlying annuity contracts which is estimated to be between 30 to 50 years.
[3] In July 2017, Bansabadell Vida signed a reinsurance agreement on its individual life risk portfolio which resulted in an initial increase of USD 363 million of ceded future life policyholder benefits.
[4] Total liabilities for insurance contracts ceded are gross of allowances for uncollectible amounts of USD 76 million and USD 53 million as of December 31, 2018 and 2017, respectively.

Discounted reserves for losses and loss adjustment expenses

Table 8.2

in USD millions, as of December 31	Gross		Ceded		Net	
	2018	2017	**2018**	2017	**2018**	2017
Reserves for losses and loss adjustment expenses	60,913	65,368	(11,535)	(11,070)	49,378	54,298
of which: Discounted reserves	2,843	2,887	(33)	(25)	2,810	2,862
Discount effect	1,274	1,347	(26)	(22)	1,248	1,325
Undiscounted reserves for losses and loss adjustment expenses	62,187	66,715	(11,561)	(11,092)	50,627	55,623
of which: Undiscounted amount of discounted reserves	4,117	4,235	(59)	(47)	4,058	4,188
Average discount rate	2.3%	2.2%	2.5%	2.8%	2.3%	2.2%

Development of reserves for losses and loss adjustment expenses

Table 8.3

in USD millions	Gross		Ceded		Net	
	2018	2017	**2018**	2017	**2018**	2017
As of January 1	65,368	61,155	(11,070)	(9,777)	54,298	51,378
Losses and loss adjustment expenses incurred:						
Current year	22,973	24,504	(4,903)	(5,083)	18,071	19,421
Prior years	(726)	(662)	52	335	(674)	(326)
Total incurred	22,248	23,842	(4,851)	(4,748)	17,397	19,094
Losses and loss adjustment expenses paid:						
Current year	(8,533)	(8,504)	1,209	986	(7,324)	(7,517)
Prior years	(14,393)	(13,770)	2,807	2,776	(11,586)	(10,994)
Total paid	(22,926)	(22,274)	4,016	3,763	(18,910)	(18,511)
Interest effects of discounted reserves	64	121	(6)	(1)	59	120
Acquisitions/(divestments) and transfers[1]	(2,354)	18	156	(2)	(2,198)	16
Foreign currency translation effects	(1,486)	2,506	219	(305)	(1,267)	2,201
As of December 31	**60,913**	**65,368**	**(11,535)**	**(11,070)**	**49,378**	**54,298**

[1] In 2018 the Group reclassified USD 1.8 billion to assets and liabilities held for sale in UK and Germany (see note 5). Additional movements mainly related to QBE and Travel Ace and Universal Assistance acquisitions (see note 5) and portfolio transfers in Germany and Australia with retroactive reinsurance agreements signed in 2018. The 2017 net movement is related to the divestment of operations in Middle East and Taiwan and the acquisition of MAA Takaful Berhad.

The Group establishes loss reserves, which are estimates of future payments of reported and unreported claims for losses and related expenses, with respect to insured events that have occurred. Reserving is a complex process dealing with uncertainty, requiring the use of informed estimates and judgments. Any changes in estimates or judgments are reflected in the results of operations in the period in which estimates and judgments are changed.

Significant delays may occur in the notification and settlement of claims, and a substantial measure of experience and judgment is involved in assessing outstanding liabilities, the ultimate cost of which cannot be known with certainty as of the balance sheet date. The reserves for losses and loss adjustment expenses are determined on the basis of the information available. However, it is inherent in the nature of the business written that the ultimate liabilities may vary as a result of subsequent developments.

For the year ended December 31, 2018, the decrease of USD 4.9 billion in net reserves for losses and loss adjustment expenses is mainly driven by reclassification of USD 1.8 billion to assets and liabilities held for sale (see note 5) and decrease of USD 1.3 billion due to foreign currency translation effects. In addition, certain portfolios with retroactive reinsurance agreements signed in 2018 in Germany and Australia were transferred to external parties, resulting in a decrease of net reserves of USD 690 million.

Net favorable reserve development emerged from reserves established in prior years amounting to USD 674 million mainly related to the following:

- In EMEA, favorable prior year development of USD 357 million driven by motor and liability in retail;
- In North America, favorable prior year development of USD 206 million driven by workers' injury.

For the year ended December 31, 2017, the increase of USD 2.9 billion in the net reserves for losses and loss adjustment expenses is driven by an increase of USD 2.2 billion due to foreign currency translation effects.

The increase in prior year incurred losses versus the previous year mainly relates to catastrophe events during 2017, most notably the hurricanes in North America during the third quarter of 2017.

The reserve development in EMEA and Non-Core Businesses was impacted by the February 2017 change in the Ogden rate, the industry-wide discount rate used for calculating personal injury and accident claims in the UK, resulting in an increase in prior year reserves of USD 229 million.

Net favorable reserve development emerged from reserves established in prior years amounting to USD 326 million mainly related to the following:

- In North America, favorable prior year development of USD 344 million driven by workers' injury;
- In EMEA, excluding the Ogden impact mentioned above, favorable prior year development in retail driven by motor, largely offset by the unfavorable prior year development for commercial liability.

Development of insurance losses, net

Table 8.4

in USD millions, as of December 31	2009	2010	2011	2012	2013	2014	2015	2016	2017	**2018**
Gross reserves for losses and loss adjustment expenses (undiscounted)	68,126	68,274	67,762	69,986	68,312	64,472	62,971	62,254	66,715	62,187
Reinsurance recoverable (undiscounted)	(12,182)	(12,093)	(12,421)	(12,601)	(10,993)	(9,770)	(9,231)	(9,796)	(11,092)	(11,561)
Initial net reserves for losses and loss adjustment expenses	55,944	56,180	55,341	57,385	57,319	54,703	53,739	52,458	55,623	50,627
Cumulative paid as of:										
One year later	(12,716)	(13,092)	(13,525)	(13,799)	(13,301)	(12,576)	(11,690)	(10,994)	(11,586)	
Two years later	(19,821)	(21,073)	(21,245)	(21,465)	(21,002)	(19,460)	(18,562)	(17,808)		
Three years later	(25,623)	(27,137)	(26,871)	(27,064)	(26,021)	(24,475)	(23,590)			
Four years later	(30,127)	(31,375)	(31,129)	(30,691)	(29,851)	(28,105)				
Five years later	(33,325)	(34,478)	(33,836)	(33,515)	(32,509)					
Six years later	(35,678)	(36,556)	(35,935)	(35,579)						
Seven years later	(37,324)	(38,192)	(37,625)							
Eight years later	(38,695)	(39,568)								
Nine years later	(39,879)									
Cumulative incurred:										
One year later	(1,378)	(1,302)	(571)	(757)	(59)	149	(479)	(326)	(674)	
Two years later	(2,565)	(1,819)	(891)	(652)	(139)	(25)	(1,106)	(1,043)		
Three years later	(2,700)	(2,028)	(677)	(777)	(72)	(438)	(1,666)			
Four years later	(2,770)	(1,891)	(804)	(709)	(214)	(823)				
Five years later	(2,587)	(2,020)	(826)	(912)	(576)					
Six years later	(2,677)	(2,051)	(1,018)	(1,136)						
Seven years later	(2,629)	(2,107)	(1,112)							
Eight years later	(2,603)	(2,188)								
Nine years later	(2,619)									
Net undiscounted reserves re-estimated[1]:										
One year later	54,565	54,878	54,770	56,628	57,259	54,852	53,260	52,131	54,949	
Two years later	53,379	54,361	54,450	56,734	57,180	54,677	52,633	51,415		
Three years later	53,243	54,152	54,664	56,609	57,246	54,265	52,073			
Four years later	53,173	54,289	54,537	56,676	57,105	53,880				
Five years later	53,357	54,160	54,515	56,474	56,743					
Six years later	53,267	54,129	54,323	56,250						
Seven years later	53,315	54,073	54,229							
Eight years later	53,341	53,992								
Nine years later	53,325									
Cumulative (deficiency)/ redundancy of net reserves	2,619	2,188	1,112	1,136	576	823	1,666	1,043	674	
Cumulative (deficiency)/ redundancy as a percentage of initial net reserves	4.7%	3.9%	2.0%	2.0%	1.0%	1.5%	3.1%	2.0%	1.2%	
Gross reserves re-estimated	63,676	64,642	65,301	67,065	66,488	62,996	60,821	60,477	65,990	
Cumulative (deficiency)/ redundancy of gross reserves	4,450	3,632	2,461	2,921	1,824	1,476	2,150	1,777	726	
Cumulative (deficiency)/ redundancy as a percentage of initial gross reserves	6.5%	5.3%	3.6%	4.2%	2.7%	2.3%	3.4%	2.9%	1.1%	

[1] Undiscounted amounts starting 2016, prior years are shown discounted.

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Table 8.4 presents changes in the historical reserves for losses and loss adjustment expenses, net of reinsurance, that the Group established in 2009 and subsequent years. Reserves are presented by financial year, not by accident year. The reserves (and the development thereon) are for all accident years in that financial year. The top line of the table shows the estimated gross reserves for unpaid losses and loss adjustment expenses as of each balance sheet date, which represents the estimated amount of future payments for losses incurred in that year and in prior years. The cumulative paid portion of the table presents the cumulative amounts paid through each subsequent year in respect of the reserves established at each year end. Similarly, the cumulative incurred losses section details the sum of the cumulative paid amounts shown in the triangle above and the changes in loss reserves since the end of each financial year. The net undiscounted reserves re-estimated portion of the table shows the re-estimation of the initially recorded reserve as of each succeeding year end. Reserve development is shown in each column. Changes to estimates are made as more information becomes known about the actual losses for which the initial reserves were established. The cumulative deficiency or redundancy is equal to the initial net reserves less the liability re-estimated as of December 31, 2018. It is the difference between the initial net reserve estimate and the last entry of the diagonal in the net undiscounted reserves re-estimated portion of the table. Conditions and trends that have affected the development of reserves for losses and loss adjustment expenses in the past may or may not necessarily occur in the future, and accordingly, conclusions about future results cannot be derived from the information presented in table 8.4.

The Group has considered asbestos, including latent injury, claims and claims expenses in establishing the reserves for losses and loss adjustment expenses. The Group continues to be advised of indemnity claims asserting injuries from asbestos. Coverage and claim settlement issues, such as determination that coverage exists and the definition of an occurrence, together with increased medical diagnostic capabilities and awareness have often caused actual loss development to exhibit more variation than in other lines of business. Such claims require specialized reserving techniques and the uncertainty of the ultimate cost of these types of claims has tended to be greater than the uncertainty related to standard lines of business.

Net reserves for losses and loss adjustment expenses for asbestos amounted to USD 384 million and USD 2 billion for the year ended December 31, 2018 and 2017, respectively. The decrease in year 2018 mainly related to the Group reclassification to assets and liabilities held for sale based on agreements signed to sell businesses in the UK (see note 5).

Development of future life policyholder benefits

Table 8.5

in USD millions	Gross		Ceded		Net	
	2018	2017	**2018**	2017	**2018**	2017
As of January 1	77,529	72,440	(3,201)	(3,766)	74,328	68,674
Premiums[1,2]	13,270	12,593	(1,222)	(1,609)	12,048	10,984
Claims	(10,360)	(10,899)	952	783	(9,408)	(10,116)
Fee income and other expenses	(4,281)	(3,947)	335	198	(3,945)	(3,749)
Interest and bonuses credited to policyholders	1,951	2,136	(89)	(146)	1,862	1,990
Changes in assumptions	(24)	(133)	2	–	(21)	(133)
Acquisitions/(divestments) and transfers[3,4]	23	(1,561)	12	1,561	35	–
Increase/(decrease) recorded in other comprehensive income	(228)	(65)	–	–	(228)	(65)
Foreign currency translation effects	(2,931)	6,964	101	(222)	(2,830)	6,742
As of December 31	**74,950**	**77,529**	**(3,110)**	**(3,201)**	**71,839**	**74,328**

1 Farmers New World Life Insurance Company entered into a retrospective reinsurance agreement to transfer the risk of certain annuity portfolios with effect from April 1, 2017, which resulted in an initial increase of USD 362 million of ceded future life policyholder benefits.
2 In July 2017, Bansabadell Vida signed a reinsurance agreement on its individual life risk portfolio which resulted in an initial increase of USD 363 million of ceded future life policyholder benefits.
3 The Group's life operations in the UK finalized the transfer of USD 1.6 billion of insurance assets and liabilities, associated with an annuities portfolio, as of June 30, 2017.
4 The 2018 net movement mainly relates to the EuroAmerica acquisition in Chile (see note 5) and sale of a portfolio in Singapore.

Long-duration contract liabilities included in future life policyholder benefits result primarily from traditional participating and non-participating life insurance products. Short-duration contract liabilities are primarily accident and health insurance products.

Future life policyholder benefits are generally calculated by a net premium valuation. In terms of U.S. dollars, the weighted average discount rate used in the calculation of future life policyholder benefits is 2.4 percent and 2.5 percent as of December 31, 2018 and 2017, respectively.

The amount of policyholder dividends to be paid is determined annually by each life insurance subsidiary. Policyholder dividends include life policyholder share of net income and unrealized appreciation of investments that are required to be allocated by the insurance contract or by local insurance regulations. Experience adjustments related to future policyholder benefits and policyholder contract deposits vary according to the type of contract and the country. Investment, mortality and morbidity results may be passed through by experience credits or as an adjustment to the premium mechanism, subject to local regulatory provisions.

The net impact of changes in assumptions on future life policyholder benefits by type of assumption is shown in table 8.6.

Table 8.6

Effect of changes in assumptions for future life policyholder benefits

in USD millions, for the years ended December 31	**2018**	2017
Interest rates	(1)	2
Investment return	(3)	(154)
Expense	(9)	2
Morbidity	(3)	3
Longevity	(6)	(4)
Lapses	5	8
Other	(6)	10
Net impact of changes in assumptions	**(23)**	**(133)**

Table 8.7

Policyholder contract deposits and other funds gross

in USD millions, as of December 31	**2018**	2017
Universal life and other contracts	13,250	12,987
Policyholder dividends	11,016	11,957
Total	**24,266**	**24,944**

Table 8.8

Development of policyholder contract deposits and other funds

in USD millions	**Gross**		**Ceded**		**Net**	
	2018	2017	**2018**	2017	**2018**	2017
As of January 1	24,944	22,785	(3,533)	(1,958)	21,411	20,827
Premiums[1]	1,073	1,086	(73)	(1,719)	999	(632)
Claims	(1,319)	(1,207)	318	272	(1,001)	(935)
Fee income and other expenses	(402)	(401)	(6)	(13)	(407)	(414)
Interest and bonuses credited to policyholders	1,406	1,295	(123)	(114)	1,284	1,181
Acquisitions/(divestments) and transfers[2]	422	–	–	–	422	–
Increase/(decrease) recorded in other comprehensive income	(1,125)	(456)	–	–	(1,125)	(456)
Foreign currency translation effects	(734)	1,842	–	(1)	(734)	1,840
As of December 31	**24,266**	**24,944**	**(3,416)**	**(3,533)**	**20,850**	**21,411**

[1] Farmers New World Life Insurance Company entered into a retrospective reinsurance agreement to transfer the risk of certain annuity portfolios with effect from April 1, 2017, which resulted in an initial increase of USD 1.6 billion in ceded policyholder contract deposits and other funds.
[2] The 2018 net movement is mainly related to the acquisition of EuroAmerica in Chile (see note 5).

Tables 8.9a and 8.9b provide an analysis of the expected maturity profile of reserves for insurance contracts, net of reinsurance, based on expected cash flows without considering the surrender values as of December 31, 2018 and 2017. Reserves for unit-linked insurance contracts amounting to USD 69 billion and USD 75 billion as of December 31, 2018 and 2017, respectively, are not included, as policyholders can generally surrender their contracts at any time, at which point the underlying unit-linked assets would be liquidated. Risks from the liquidation of unit-linked assets are largely borne by the policyholders of unit-linked contracts.

Table 8.9a

Expected maturity profile for reserves for insurance contracts, net of reinsurance – current period

in USD millions, as of December 31, 2018	Reserves for losses and loss adjustment expenses	Future life policyholder benefits	Policyholder contract deposits and other funds	Total
< 1 year	14,128	9,425	1,613	25,167
1 to 5 years	19,969	17,523	1,722	39,215
5 to 10 years	7,353	14,077	2,280	23,710
10 to 20 years	5,437	13,512	2,644	21,593
> 20 years	2,491	17,301	12,591	32,383
Total	**49,378**	**71,839**	**20,850**	**142,068**

Table 8.9b

Expected maturity profile for reserves for insurance contracts, net of reinsurance – prior period

in USD millions, as of December 31, 2017	Reserves for losses and loss adjustment expenses	Future life policyholder benefits	Policyholder contract deposits and other funds	Total
< 1 year	14,757	9,434	1,571	25,762
1 to 5 years	22,440	18,606	1,900	42,945
5 to 10 years	8,434	13,932	2,237	24,603
10 to 20 years	6,239	14,928	2,691	23,858
> 20 years	2,428	17,429	13,012	32,869
Total	**54,298**	**74,328**	**21,411**	**150,037**

9. Liabilities for investment contracts

Liabilities for investment contracts

Table 9.1

in USD millions, as of December 31	2018	2017
Unit-linked investment contracts	41,188	45,484
Investment contracts (amortized cost)	504	510
Investment contracts with DPF	9,746	9,633
Total	**51,439**	**55,627**

Unit-linked investment contracts issued by the Group are recorded at a value reflecting the returns on investment funds which include selected equities, debt securities and derivative financial instruments. Policyholders bear the full risk of the returns on these investments.

The value of financial liabilities at amortized cost is based on a discounted cash flow valuation technique. The initial valuation of the discount rate is determined by the current market assessment of the time value of money and risk specific to the liability.

Development of liabilities for investment contracts

Table 9.2

in USD millions	2018	2017
As of January 1	55,627	69,113
Premiums	13,133	12,460
Claims	(15,353)	(10,727)
Fee income and other expenses	(464)	(564)
Interest and bonuses credited to policyholders	(2,739)	6,591
Acquisitions/(divestments) and transfers[1]	4,139	(29,073)
Increase/(decrease) recorded in other comprehensive income	(302)	5
Foreign currency translation effects	(2,603)	7,823
As of December 31	**51,439**	**55,627**

[1] As of December 31, 2018, the net carrying amount of the liabilities held for sale has decreased by USD 4 billion compared to the amount of USD 29 billion of unit-linked investment contracts that had been reclassified as of December 31, 2017, based on agreements to sell businesses in the UK (see note 5).

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Tables 9.3a and 9.3b provide an analysis of investment contract liabilities according to maturity, based on expected cash flows as of December 31, 2018 and 2017. The undiscounted contractual cash flows for investment contract liabilities are USD 51 billion and USD 56 billion as of December 31, 2018 and 2017, respectively. Liabilities for unit-linked investment contracts amounted to USD 41 billion and USD 45 billion as of December 31, 2018 and 2017, respectively. Policyholders of unit-linked investment contracts can generally surrender their contracts at any time, leading the underlying assets to be liquidated, risks arising from liquidation of unit-linked assets are borne by the policyholders. Certain non-unit-linked contracts also allow for surrender of the contract by the policyholder at any time. Liabilities for such contracts amounted to USD 463 million and USD 558 million as of December 31, 2018 and 2017, respectively. The Group actively manages the Life in-force business to improve persistency and retention.

Table 9.3a

Expected maturity profile for liabilities for investment contracts – current period

in USD millions, as of December 31, 2018	**Liabilities related to unit-linked investment contracts**	**Liabilities related to investment contracts (amortized cost)**	**Liabilities related to investment contracts with discretionary participation features**	**Total**
< 1 year	2,624	227	416	3,267
1 to 5 years	6,364	140	1,477	7,981
5 to 10 years	7,548	74	1,792	9,414
10 to 20 years	6,682	42	1,113	7,837
> 20 years	17,971	22	4,948	22,940
Total	**41,188**	**504**	**9,746**	**51,439**

Table 9.3b

Expected maturity profile for liabilities for investment contracts – prior period

in USD millions, as of December 31, 2017	Liabilities related to unit-linked investment contracts	Liabilities related to investment contracts (amortized cost)	Liabilities related to investment contracts with discretionary participation features	Total
< 1 year	2,608	200	265	3,073
1 to 5 years	7,338	149	1,554	9,042
5 to 10 years	8,280	81	1,792	10,154
10 to 20 years	8,209	47	1,185	9,441
> 20 years	19,049	33	4,836	23,918
Total	**45,484**	**510**	**9,633**	**55,627**

10. Gross and ceded insurance revenues and expenses

Insurance benefits and losses

Table 10.1

in USD millions, for the years ended December 31	Gross		Ceded		Net	
	2018	2017	**2018**	2017	**2018**	2017
Losses and loss adjustment expenses	22,248	23,842	(4,851)	(4,748)	17,397	19,094
Life insurance death and other benefits	11,236	11,053	(986)	(1,504)	10,250	9,548
Total insurance benefits and losses	**33,483**	**34,894**	**(5,837)**	**(6,252)**	**27,646**	**28,643**

Policyholder dividends and participation in profits

Table 10.2

in USD millions, for the years ended December 31	**2018**	2017
Change in policyholder contract deposits and other funds	1,245	1,202
Change in reserves for unit-linked insurance contracts	(1,350)	5,331
Change in liabilities for investment contracts – unit-linked	(2,930)	6,428
Change in liabilities for investment contracts – other	190	175
Change in unit-linked liabilities related to UK capital gains tax	109	(150)
Total policyholder dividends and participation in profits	**(2,736)**	**12,984**

Underwriting and policy acquisition costs

Table 10.3

in USD millions, for the years ended December 31	Gross		Ceded		Net	
	2018	2017	**2018**	2017	**2018**	2017
Amortization of deferred acquisition costs	6,466	6,777	(810)	(583)	5,655	6,193
Amortization of deferred origination costs	74	74	–	–	74	74
Commissions and other underwriting and acquisition expenses[1]	2,882	3,027	(47)	(255)	2,835	2,772
Total underwriting and policy acquisition costs	**9,422**	**9,877**	**(857)**	**(838)**	**8,565**	**9,039**

[1] Net of additions related to deferred acquisition and origination costs.

Change in reserves for unearned premiums

Table 10.4

in USD millions, for the years ended December 31	Gross		Ceded		Net	
	2018	2017	**2018**	2017	**2018**	2017
Change in reserves for unearned premiums	**339**	**295**	**(115)**	**(217)**	**224**	**79**

11. Deferred policy acquisition costs and deferred origination costs

Development of deferred policy acquisition costs

Table 11.1

in USD millions	Property & Casualty		Life		Other businesses[1]		Total	
	2018	2017	**2018**	2017	**2018**	2017	**2018**	2017
As of January 1	5,289	4,830	11,624	11,117	1,751	1,849	18,663	17,796
Acquisition costs deferred[2]	4,449	4,438	2,533	995	179	397	7,161	5,829
Amortization	(4,252)	(4,114)	(1,280)	(1,561)	(123)	(454)	(5,655)	(6,129)
Impairments[3]	–	–	–	(8)	–	(55)	–	(64)
Amortization (charged)/ credited to other comprehensive income	–	–	136	46	29	13	166	59
Acquisitions/(divestments) and transfers[4]	37	(4)	–	–	(11)	–	26	(4)
Foreign currency translation effects	(156)	140	(663)	1,035	–	1	(820)	1,177
As of December 31	**5,367**	**5,289**	**12,350**	**11,624**	**1,824**	**1,751**	**19,541**	**18,663**

[1] Net of eliminations from inter-segment transactions.
[2] In May 2018, the Group entered into a quota share reinsurance agreement with OnePath Life, a part of ANZ Banking Group Limited and made an upfront commission payment of USD 754 million. In July 2017, Bansabadell Vida signed a reinsurance agreement on its individual life risk portfolio which resulted in an initial increase of USD 755 million of reinsurance deferred acquisition costs.
[3] Farmers New World Life Insurance Company entered into a retrospective reinsurance agreement to transfer the risk of certain annuity portfolios with effect from April 1, 2017, which resulted in deferred policy acquisition costs impairment of USD 55 million.
[4] The Property and Casualty movement mainly related to QBE acquisition and sale of Endsleigh Limited (see note 5). The 2018 other businesses movement mainly related to the sale of a portfolio in Singapore.

Development of deferred origination costs

Table 11.2

in USD millions	**2018**	2017
As of January 1	460	426
Origination costs deferred	55	59
Amortization	(74)	(74)
Foreign currency translation effects	(22)	49
As of December 31	**419**	**460**

12. Expenses

Table 12 shows expenses by functional area and by type of expense.

Table 12

Expenses

in USD millions, for the years ended December 31	2018	2017
Administrative and other operating expenses[1]	7,761	7,212
Other underwriting and policy acquisition costs[2]	2,111	2,188
Claims handling expenses[3]	1,126	1,261
Other investment expenses[4]	219	218
Total	**11,216**	**10,879**
of which:		
Personnel and other related costs	5,739	5,448
Amortization and impairments of intangible assets	501	570
Depreciation and impairments of property and equipment	173	152
Building and infrastructure costs	544	539
Brand and marketing expenses	332	344
Life recurring commission	445	431
Asset and other non-income taxes	54	38
IT expenses	1,611	1,394
Restructuring costs (excl. impairments)	297	292
Outsourcing and professional services	887	879
Foreign currency translation	(63)	(71)
Other	695	863
Total	**11,216**	**10,879**

1 Includes in 2018 the gross-up of certain costs following adoption of IFRS 15 (see note 2).
2 Included within commissions and other underwriting and acquisition expenses (see table 10.3).
3 Included within losses and loss adjustment expenses (see table 10.1).
4 Excludes expenses arising from investment property within investment expenses for Group investments (see table 6.1).

13. Property and equipment

Buildings held for own use and equipment are carried at cost less accumulated depreciation and any accumulated impairment loss. Generally, these assets are depreciated on a straight-line basis to income over the following estimated useful lives:

- buildings 25 to 50 years;
- furniture and fixtures 5 to 10 years;
- computer equipment 3 to 6 years;
- other equipment 6 to 10 years (or determined by the term of lease).

Land held for own use is carried at cost less any accumulated impairment loss.

Property and equipment – current period

Table 13.1

in USD millions	Land held for own use	Buildings held for own use	Furniture and fixtures	Computer equipment	Other equipment	Total
Gross carrying value as of January 1, 2018	155	415	380	326	740	2,017
Less: accumulated depreciation/impairments	–	(165)	(233)	(244)	(413)	(1,055)
Net carrying value as of January 1, 2018	155	250	147	82	327	961
Additions and improvements	–	70	42	57	110	279
Acquisitions	5	12	2	1	2	22
Disposals[1]	–	(1)	–	–	(28)	(29)
Transfers	–	(1)	–	–	1	(1)
Depreciation and impairments	(2)	(14)	(41)	(42)	(75)	(173)
Foreign currency translation effects	(3)	(9)	(3)	(2)	(6)	(23)
Net carrying value as of December 31, 2018	**155**	**309**	**147**	**96**	**331**	**1,037**
Plus: accumulated depreciation/impairments	–	165	223	235	401	1,023
Gross carrying value as of December 31, 2018	155	473	370	330	732	2,060

[1] Includes USD 25 million related to the sale of business in the UK (Endsleigh) (see note 5).

Property and equipment – prior period

Table 13.2

in USD millions	Land held for own use	Buildings held for own use	Furniture and fixtures	Computer equipment	Other equipment	Total
Gross carrying value January 1, 2017	168	427	378	313	727	2,013
Less: accumulated depreciation/impairments	(6)	(176)	(225)	(246)	(408)	(1,061)
Net carrying value January 1, 2017	162	251	154	67	319	953
Additions and improvements	1	41	27	44	99	213
Acquisitions	–	–	1	1	2	4
Disposals[1]	(1)	(2)	(5)	(3)	(27)	(39)
Transfers	(17)	(48)	–	1	1	(62)
Depreciation and impairments	–	(10)	(35)	(31)	(76)	(152)
Foreign currency translation effects	10	18	5	2	9	44
Net carrying value as of December 31, 2017	**155**	**250**	**147**	**82**	**327**	**961**
Plus: accumulated depreciation/impairments	–	165	233	244	413	1,055
Gross carrying value as of December 31, 2017	155	415	380	326	740	2,017

[1] Includes USD 1 million related to the sale of businesses in Taiwan and USD 10 million re-measurement losses related to assets held for sale (see note 5).

14. Attorney-in-fact contracts, goodwill and other intangible assets

Intangible assets – current period

Table 14.1

in USD millions	Attorney-in-fact contracts	Goodwill	PVFP	Distribution agreements	Software	Other	Total
Gross carrying value as of January 1, 2018	1,025	2,706	2,619	4,293	4,780	247	15,671
Less: accumulated amortization/impairments	–	(353)	(2,112)	(1,465)	(3,492)	(109)	(7,531)
Net carrying value as of January 1, 2018	1,025	2,353	507	2,828	1,288	139	8,140
Additions and acquisitions	–	462	40	570	348	81	1,501
Divestments and transfers	–	–	–	(262)	(2)	–	(263)
Amortization[1]	–	–	(46)	(220)	(406)	(10)	(681)
Amortization charged to other comprehensive income	–	–	22	–	–	–	22
Impairments	–	–	(2)	–	(37)	(1)	(40)
Foreign currency translation effects	–	(180)	(24)	(228)	(30)	(14)	(476)
Net carrying value as of December 31, 2018	**1,025**	**2,634**	**498**	**2,689**	**1,162**	**194**	**8,202**
Plus: accumulated amortization/impairments	–	276	2,041	1,565	3,678	109	7,669
Gross carrying value as of December 31, 2018	1,025	2,911	2,539	4,254	4,840	303	15,871

[1] Amortization of distribution agreements is included within underwriting and policy acquisition costs.

As of December 31, 2018, intangible assets related to non-controlling interests were USD 63 million for present value of future profits (PVFP) of acquired insurance contracts, USD 1 billion for distribution agreements, USD 10 million for software, USD 9 million for goodwill and USD 3 million for other intangible assets.

As a result of the acquisition of the QBE Latin America operations intangible assets increased by USD 250 million, of which USD 195 million is goodwill and USD 55 million is distribution agreements, software and other intangible assets. As a result of the acquisition of EuroAmerica in Chile, intangible assets increased by USD 143 million, of which USD 102 million is goodwill and USD 40 million is present value of future profits (PVFP). The acquisition of Travel Ace and Universal Assistance increased goodwill by USD 94 million and distribution agreements, software and other intangible assets by USD 19 million. As a result of the acquisition of Bright Box intangible assets increased by USD 77 million, of which USD 52 million related to goodwill and USD 25 million to software. As a result of the acquisition of Blue Insurance intangible assets increased by USD 56 million, of which USD 35 million is goodwill and USD 21 million is distribution agreements, software and other intangible assets. The remaining minus USD 16 million relates to a post-acquisition adjustment of Cover-More (see note 5).

In 2018, a distribution agreement in Brazil was signed replacing the existing distribution agreement. Additional intangible assets of USD 263 million related to this distribution agreement were recorded as at December 31, 2018.

Intangible assets by business – current period

Table 14.2

in USD millions, as of December 31, 2018	Attorney-in-fact contracts	Goodwill	PVFP	Distribution agreements	Software	Other	Total
Property & Casualty	–	1,492	–	941	452	194	3,079
Life	–	271	434	1,748	284	1	2,737
Farmers	1,025	819	63	–	339	–	2,247
Group Functions and Operations	–	52	–	–	88	–	139
Net carrying value	**1,025**	**2,634**	**498**	**2,689**	**1,162**	**194**	**8,202**

Consolidated financial statements (continued)

Intangible assets – prior period

Table 14.3

in USD millions	Attorney-in-fact contracts	Goodwill	PVFP	Distribution agreements	Software	Other	Total
Gross carrying value as of January 1, 2017	1,025	2,110	2,422	3,860	4,652	251	14,321
Less: accumulated amortization/ impairments	–	(315)	(1,918)	(1,147)	(3,201)	(124)	(6,706)
Net carrying value as of January 1, 2017	1,025	1,795	504	2,713	1,450	128	7,615
Additions and acquisitions	–	565	–	119	320	38	1,043
Divestments and transfers	–	(61)	–	(2)	(44)	(23)	(129)
Amortization[1]	–	–	(55)	(213)	(350)	(9)	(626)
Amortization charged to shareholders' equity	–	–	14	–	–	–	14
Impairments	–	–	–	–	(156)	–	(156)
Foreign currency translation effects	–	53	45	210	68	4	380
Net carrying value as of December 31, 2017	**1,025**	**2,353**	**507**	**2,828**	**1,288**	**139**	**8,140**
Plus: accumulated amortization/ impairments	–	353	2,112	1,465	3,492	109	7,531
Gross carrying value as of December 31, 2017	1,025	2,706	2,619	4,293	4,780	247	15,671

[1] Amortization of distribution agreements is included within underwriting and policy acquisition costs.

As of December 31, 2017, intangible assets related to non-controlling interests were USD 76 million for the present value of future profits (PVFP) of acquired insurance contracts, USD 1.2 billion for distribution agreements and USD 15 million for software.

As a result of the acquisition of Cover-More intangible assets increased by USD 728 million of which USD 566 million related to goodwill and USD 163 million to distribution agreements, software and other intangible assets (see note 5).

For the year ended December 31, 2017, divestments and transfers include re-measurements of intangible assets related to assets held for sale of USD 124 million (see note 5).

Following a review, software was identified, which was not utilized as originally expected, resulting in USD 156 million of impairments, primarily in Property & Casualty in the UK and in Group Functions and Operations.

Intangible assets by business – prior period

Table 14.4

in USD millions, as of December 31, 2017	Attorney-in-fact contracts	Goodwill	PVFP	Distribution agreements	Software	Other	Total
Property & Casualty	–	1,350	–	820	524	138	2,833
Life	–	183	434	2,007	324	1	2,950
Farmers	1,025	819	73	–	370	–	2,288
Group Functions and Operations	–	–	–	–	70	–	70
Net carrying value	**1,025**	**2,353**	**507**	**2,828**	**1,288**	**139**	**8,140**

15. Receivables and other assets

Receivables and other assets

Table 15

in USD millions, as of December 31	**2018**	2017
Financial assets		
Group derivative assets	899	903
Unit-linked derivative assets	3	19
Receivables from policyholders	3,281	3,281
Receivables from insurance companies, agents and intermediaries	5,514	5,665
Receivables arising from ceded reinsurance	1,114	1,179
Reverse repurchase agreements	47	153
Amounts due from investment brokers	972	847
Other receivables	2,426	2,312
Allowance for impairments[1]	(243)	(258)
Accrued premiums	849	845
Accrued investment income[2]	1,601	1,695
Assets for defined benefit plans[3]	232	201
Other financial assets	144	187
Non-financial assets		
Current income tax receivables	634	505
Prepaid expenses	391	350
Other non-financial assets	361	313
Total receivables and other assets	**18,225**	**18,195**

[1] Includes receivables arising from ceded reinsurance of USD 38 million and USD 41 million as of December 31, 2018 and 2017, respectively.
[2] Accrued investment income on the unit-linked investments amounts to USD 102 million and USD 107 million as of December 31, 2018 and 2017, respectively.
[3] See note 20.

Receivables are carried at notional amounts, and are generally settled within one year. The notional and fair value amounts are not significantly different.

Consolidated financial statements (continued)

16. Other liabilities

Other liabilities

Table 16.1

in USD millions, as of December 31	2018	2017
Other financial liabilities		
Group derivative liabilities	325	214
Unit-linked derivative liabilities	12	15
Amounts due to agents & intermediaries	870	798
Liabilities for cash collateral received for securities lending	47	153
Amounts due to investment brokers	987	1,096
Bank deposits	1	1
Collateralized bank financing for structured lease vehicles	436	518
Liabilities for defined benefit plans[1]	2,491	3,590
Other liabilities for employee benefit plans	129	141
Accrued liabilities	2,067	2,078
Other financial liabilities	5,273	5,563
Other non-financial liabilities		
Current income tax payables	601	953
Restructuring provisions	258	269
Other non-financial liabilities	824	603
Total other liabilities	**14,321**	**15,993**

[1] See note 20

Table 16.2 shows the maturity schedule of other financial liabilities excluding liabilities for defined benefit plans as of December 31, 2018 and 2017. The allocation to the time bands is based on the expected maturity date for the carrying value and the earliest contractual maturity for the undiscounted cash flows.

Maturity schedule – other financial liabilities

Table 16.2

in USD millions, as of December 31	2018		2017	
	Carrying value	**Undiscounted cash flows**	Carrying value	Undiscounted cash flows
< 1 year	9,458	9,577	9,643	9,691
1 to 2 years	197	247	284	420
2 to 3 years	57	64	183	245
3 to 4 years	133	144	23	39
4 to 5 years	43	51	87	107
> 5 years	259	491	357	593
Total	**10,148**	**10,574**	**10,578**	**11,096**

Table 16.3

Restructuring provisions

in USD millions	2018	2017
As of January 1	269	334
Provisions made during the period	191	192
Increase of provisions set up in prior years	45	56
Provisions used during the period	(226)	(296)
Provisions reversed during the period	(13)	(42)
Foreign currency translation effects	(8)	24
As of December 31	**258**	**269**

During the year ended December 31, 2018 the Group incurred total restructuring costs of USD 350 million, of which USD 223 million is due to net increases in restructuring provisions, affecting mainly Property & Casualty in Europe, Middle East & Africa (EMEA), North America and Farmers.

During the year ended December 31, 2017, the Group incurred total restructuring costs of USD 355 million, of which USD 206 million was due to net increases in restructuring provisions, affecting mainly Property & Casualty in EMEA and North America.

17. Income taxes

Income tax expense – current/deferred split

Table 17.1

in USD millions, for the years ended December 31	2018	2017
Current	1,119	2,128
Deferred	15	(311)
Total income tax expense/(benefit)	**1,134**	**1,816**

Expected and actual income tax expense

Table 17.2

in USD millions, for the years ended December 31	Rate	2018	Rate	2017
Net income before income taxes		5,110		5,125
less: income tax (expense)/benefit attributable to policyholders		183		(171)
Net income before income taxes attributable to shareholders		5,293		4,954
Expected income tax expense attributable to shareholders computed at the Swiss statutory tax rate	22.0%	1,165	22.0%	1,090
Increase/(reduction) in taxes resulting from:				
Tax rate differential in foreign jurisdictions		(27)		331
Tax exempt and lower taxed income		(106)		(124)
Non-deductible expenses		152		133
Tax losses not recognized		98		83
Prior year adjustments and other		34		132
Actual income tax expense attributable to shareholders	**24.9%**	**1,317**	**33.2%**	**1,645**
plus: income tax expense/(benefit) attributable to policyholders		(183)		171
Actual income tax expense	22.2%	1,134	35.4%	1,816

Table 17.2 sets out the factors that cause the actual income tax expense to differ from the expected expense computed by applying the Swiss statutory tax rate of 22.0 percent, which is the rate applicable in the jurisdiction where the ultimate parent company is resident.

The Group is required to record taxes on policyholder earnings for life insurance policyholders in certain jurisdictions. Accordingly, the income tax expense or benefit attributable to these life insurance policyholder earnings is included in income tax expense. In certain jurisdictions an accrual for future policy fees that will cover the tax charge is included in insurance benefits and losses.

Taxes paid by certain of the Group's life insurance businesses are based on the investment result less allowable expenses. To the extent these taxes exceed the amount that would have been payable in relation to the shareholders' share of taxable profits, it is normal practice for certain of the Group's businesses to recover this portion from policyholders. While the relevant company has the contractual right to charge policyholders for the taxes attributable to their share of the investment result less expenses, the obligation to pay the tax authority rests with the company and therefore, the full amount of tax including the portion attributable to policyholders is accounted for as income tax. Income tax expense therefore includes an element attributable to policyholders.

Deferred tax assets/(liabilities) analysis by source

Table 17.3

in USD millions, as of December 31	2018 Assets	2018 Liabilities	2017 Assets	2017 Liabilities
Gross deferred tax				
Deferred acquisition and origination costs	52	(658)	52	(659)
Depreciable and amortizable assets	27	(86)	39	(55)
Life policyholders' benefits and deposits[1]	4	(1)	–	(3)
Unrealized (gains)/losses on available-for-sale investments and cash flow hedges	109	(49)	38	(179)
Accruals and deferred income	92	(16)	96	(22)
Reserves for losses and loss adjustment expenses	295	(116)	210	(238)
Reserves for unearned premiums	722	(66)	691	–
Pensions and other employee benefits	537	(72)	644	(62)
Other assets/liabilities	170	(44)	200	(20)
Tax loss carryforwards	634	–	717	–
Gross deferred tax assets/(liabilities) before valuation allowance	2,643	(1,110)	2,689	(1,239)
Valuation allowance	(408)	–	(374)	–
Gross deferred tax assets/(liabilities) after valuation allowance	2,235	(1,110)	2,314	(1,239)
Deferred tax assets	**1,125**		**1,076**	
Gross deferred tax				
Deferred acquisition and origination costs	25	(2,125)	24	(2,167)
Depreciable and amortizable assets	133	(1,699)	142	(1,798)
Life policyholders' benefits and deposits[1]	1,924	(1,017)	1,816	(949)
Unrealized (gains)/losses on available-for-sale investments and cash flow hedges	288	(860)	226	(1,054)
Accruals and deferred income	76	(122)	81	(87)
Reserves for losses and loss adjustment expenses	57	(90)	97	(118)
Reserves for unearned premiums	18	(6)	20	(64)
Deferred front-end fees	511	–	522	–
Pensions and other employee benefits	340	(325)	352	(278)
Other assets/liabilities	646	(1,732)	677	(1,845)
Tax loss carryforwards	131	–	99	–
Gross deferred tax assets/(liabilities) before valuation allowance	4,149	(7,976)	4,056	(8,361)
Valuation allowance	(89)	–	(52)	–
Gross deferred tax assets/(liabilities) after valuation allowance	4,061	(7,976)	4,005	(8,361)
Deferred tax liabilities		**(3,915)**		**(4,357)**
Net deferred tax liabilities		**(2,790)**		**(3,281)**

[1] Includes reserves for unit-linked contracts

The Group's deferred tax assets and liabilities are recorded by its tax-paying entities throughout the world, which may include several legal entities within each tax jurisdiction. Legal entities are grouped as a single taxpayer only when permitted by local legislation and when deemed appropriate. The first part of table 17.3 includes single taxpayers with a net deferred tax asset position and the second part includes single taxpayers with a net deferred tax liability position.

As of December 31, 2018 and 2017, the aggregate amount of temporary differences associated with investments in subsidiaries, branches and associates and interests in joint ventures, for which deferred tax liabilities have not been recognized amount to approximately USD 19 billion and USD 22 billion, respectively. In the remote likelihood that these temporary differences were to reverse simultaneously, the resulting tax liabilities would be very limited due to participation exemption rules.

Consolidated financial statements (continued)

Development of net deferred tax liabilities

Table 17.4

in USD millions	2018	2017
As of January 1	(3,281)	(3,114)
Net change recognized in the income statement	(15)	311
Net change recognized in equity	344	(245)
Net changes due to acquisitions/(divestments)	75	(60)
Foreign currency translation effects	86	(173)
As of December 31	**(2,790)**	**(3,281)**
attributable to policyholders	(457)	(688)
attributable to shareholders	(2,333)	(2,593)

The net deferred tax liabilities related to non-controlling interests amounted to USD 189 million and USD 239 million as of December 31, 2018 and 2017, respectively.

Development of deferred income taxes included in equity

Table 17.5

in USD millions	2018	2017
As of January 1	73	313
Net unrealized gains/(losses) on available-for-sale investments	419	132
Cash flow hedges	11	14
Revaluation reserve	9	–
Net actuarial gains/(losses) on pension plans	(96)	(392)
Foreign currency translation effects	(10)	5
As of December 31	**406**	**73**

Tax loss carryforwards and tax credits

Table 17.6

in USD millions, as of December 31	2018	2017
For which deferred tax assets have been recognized, expiring		
< 5 years	50	15
5 to 20 years	198	156
> 20 years or with no time limitation	747	1,267
Subtotal	994	1,438
For which deferred tax assets have not been recognized, expiring		
< 5 years	89	64
5 to 20 years	12	33
> 20 years or with no time limitation	2,010	1,731
Subtotal	2,112	1,828
Total	**3,106**	**3,265**

The tax rates applicable to tax losses for which a deferred tax asset has not been recognized are 23.0 percent and 22.8 percent as of December 31, 2018 and 2017, respectively.

The recoverability of the deferred tax asset for each taxpayer is based on the taxpayer's ability to utilize the deferred tax asset. This analysis considers the projected taxable income to be generated by the taxpayer, as well as its ability to offset the deferred tax asset against deferred tax liabilities.

Management assesses the recoverability of the deferred tax-asset carrying values based on future years' taxable income projections and believes the carrying values of the deferred tax assets as of December 31, 2018, to be recoverable.

18. Senior and subordinated debt

Senior and subordinated debt

Table 18.1

in USD millions, as of December 31		2018	2017
Senior debt			
Zurich Insurance Company Ltd	2.375% CHF 525 million notes, due November 2018[1]	–	538
	1.500% CHF 400 million notes, due June 2019[1,2]	409	418
	1.125% CHF 400 million notes, due September 2019[1,2]	411	421
	0.625% CHF 250 million notes, due July 2020[1,2]	258	262
	2.875% CHF 250 million notes, due July 2021[1]	253	255
	3.375% EUR 500 million notes, due June 2022[1,2,3]	598	634
	1.875% CHF 100 million notes, due September 2023[1,2]	110	112
	1.750% EUR 500 million notes, due September 2024[1,2,3]	583	608
	0.500% CHF 350 million notes, due December 2024[1]	356	–
	0.510% CHF 120 million loan, due December 2024	122	–
	1.500% CHF 150 million notes, due July 2026[1,2]	165	167
	1.000% CHF 200 million notes, due October 2028[1]	204	–
	1.500% EUR 500 million notes, due December 2028[1,3]	568	–
Zurich Holding Comp. of America Inc	Euro commercial paper notes, due in less than 12 months	399	399
Zurich Finance (Australia) Limited	Floating rate AUD 241 million loan due July 2019	170	–
	3.271% AUD 200 million loan due May 2023	141	–
	3.477% AUD 350 million notes, due May 2023[1]	246	–
	4.500% AUD 250 million notes, due July 2038[1]	176	–
Other	Various debt instruments	69	31
Senior debt		5,237	3,846
Subordinated debt			
Zurich Insurance Company Ltd	8.250% USD 500 million perpetual capital notes, first callable January 2018[1,3]	–	500
	4.625% CHF 500 million perpetual notes, first callable May 2018[1]	–	513
	7.500% EUR 425 million notes, due July 2039, first callable July 2019[1,3]	486	509
	2.750% CHF 225 million perpetual capital notes, first callable June 2021[1]	228	230
	2.750% CHF 200 million perpetual capital notes, first callable September 2021[1,2]	209	212
	4.750% USD 1 billion perpetual capital notes, first callable January 2022[1,3]	996	994
	4.250% EUR 1 billion notes, due October 2043, first callable October 2023[1,3]	1,138	1,192
	4.250% USD 300 million notes, due October 2045, first callable October 2025[1,3]	299	299
	5.625% USD 1 billion notes, due June 2046, first callable June 2026[1,3]	997	996
	3.500% EUR 750 million notes, due October 2046, first callable October 2026[1,2,3]	855	890
	5.125% USD 500 million notes, due June 2048, first callable June 2028[1,3]	498	–
	4.875% USD 500 million notes, due October 2048, first callable October 2028[1,3]	498	–
Zurich Finance (UK) plc	6.625% GBP 450 million perpetual notes, first callable October 2022[1]	570	604
Subordinated debt		6,775	6,938
Total senior and subordinated debt		**12,012**	**10,784**

[1] Issued under the Group's Euro Medium Term Note Programme (EMTN Programme).
[2] The Group applied the fair value hedge methodology either partially or in full to hedge the interest rate exposure.
[3] These bonds are part of a qualifying net investment hedge to hedge the foreign currency exposure.

None of the debt instruments listed in table 18.1 was in default as of December 31, 2018 and 2017.

To facilitate the issuance of debt, the Group has in place a Euro Medium Term Note Program (EMTN Program) allowing for the issuance of senior and subordinated notes up to a maximum of USD 18 billion. All issuances under this program are either issued or guaranteed by Zurich Insurance Company Ltd. The Group has also issued debt outside this program.

Debt issued is recognized initially at fair value of the consideration received, net of transaction costs incurred, and subsequently carried at amortized cost using the effective interest rate method, unless fair value hedge accounting is applied.

Table 18.2

Maturity schedule of outstanding debt

in USD millions, as of December 31	2018		2017	
	Carrying value	**Undiscounted cash flows**	Carrying value	Undiscounted cash flows
< 1 year	1,894	2,319	1,949	2,345
1 to 2 years	308	676	1,369	1,699
2 to 3 years	690	1,056	262	553
3 to 4 years	2,164	2,473	697	987
4 to 5 years	1,636	1,880	2,232	2,460
5 to 10 years	5,144	5,756	4,264	4,707
> 10 years	176	256	11	18
Total	**12,012**	**14,416**	**10,784**	**12,768**

Debt maturities reflect original contractual dates, taking early redemption options into account. For call/redemption dates, see table 18.1. The total notional amount of debt due in each period is not materially different from the total carrying value disclosed in table 18.2. Undiscounted cash flows include interest and principal cash flows on debt outstanding as of December 31, 2018 and 2017. Floating interest rates are assumed to remain constant as of December 31, 2018 and 2017. The aggregated cash flows are translated into U.S. dollars at end-of-period rates.

Table 18.3

Development of debt arising from financing activities

in USD millions	Total	
	2018	2017
As of January 1	10,784	11,212
Issuance of debt recognized in cash flows	3,079	–
Repayment of debt recognized in cash flows	(1,566)	(1,049)
Acquisitions/(divestments) and transfers[1]	(1)	(18)
Changes in fair value	(7)	(27)
Other changes	(9)	3
Foreign currency translation effects	(269)	664
As of December 31	**12,012**	**10,784**

[1] The 2018 and 2017 movement of USD 1 million and USD 18 million respectively, is related to the sale of Endsleigh Limited (see note 5).

19. Shareholders' equity, dividends and earnings per share

Share capital

Table 19.1

	Share capital in CHF	Number of shares	Par value in CHF
Issued share capital			
As of December 31, 2016	15,060,741	150,607,406	0.10
New shares issued from contingent capital in 2017	73,245	732,445	0.10
As of December 31, 2017	15,133,985	151,339,851	0.10
New shares issued from contingent capital in 2018	818	8,176	0.10
As of December 31, 2018	**15,134,803**	**151,348,027**	**0.10**
Authorized, contingent and issued share capital			
As of December 31, 2017	23,129,526	231,295,259	0.10
As of December 31, 2018	23,129,526	231,295,259	0.10

The following information related to authorized share capital and contingent share capital is specified in article 5 of the Articles of Association.

a) Authorized share capital

Until April 4, 2020, the Board of Zurich Insurance Group Ltd is authorized to increase the share capital by an amount not exceeding CHF 4,500,000 by issuing up to 45,000,000 fully-paid registered shares with a nominal value of CHF 0.10 each. An increase in partial amounts is permitted. The Board would determine the date of issue of any such new shares, the issue price, type of payment, conditions for exercising subscription rights, and the commencement of entitlement to dividends.

The Board may issue such new shares by means of a firm underwriting by a banking institution or syndicate with a subsequent offer of those shares to current shareholders. The Board may allow the expiry of subscription rights which have not been exercised, or it may place these rights as well as shares, the subscription rights of which have not been exercised, at market conditions.

The Board is further authorized to restrict or exclude the subscription rights of shareholders and to allocate them to third parties, the Company or one of its group companies, up to a maximum of 15,000,000 fully-paid registered shares, if the shares are to be used:

- for the take-over of an enterprise, or parts of an enterprise or of participations or for investments by the Company or one of its group companies, or the financing including re-financing of such transactions; or
- for the purpose of expanding the scope of shareholders in connection with the quotation of shares on foreign stock exchanges or issuance of shares on the national or international capital markets (including private placements to one or more selected investors); or
- for the conversion of loans, bonds, similar debt instruments, equity-linked instruments or other financial market instruments (collectively, the 'Financial Instruments') issued by the Company or one of its group companies; or
- for the improvement of the regulatory capital position of the Company or one of its group companies in a fast and expeditious manner.

Up to April 4, 2020, the total of new shares issued from (i) authorized share capital where the subscription rights were restricted or excluded, and (ii) contingent share capital in connection with Financial Instruments where the advance subscription rights were restricted or excluded, may not exceed 30,000,000 new shares.

b) Contingent share capital

Financial Instruments

The share capital of Zurich Insurance Group Ltd may be increased by an amount not exceeding CHF 3,000,000 by issuing of up to 30,000,000 fully-paid registered shares with a nominal value of CHF 0.10 each by the voluntary or mandatory exercise of conversion and/or option rights which are granted in connection with the issuance of loans, bonds, similar debt instruments, equity-linked instruments or other financial market instruments (collectively, the 'Financial Instruments') by the Company or one of its group companies or by mandatory conversion of Financial Instruments issued by the Company or one of its group companies, that allow for contingent mandatory conversion into shares of the Company, or by exercising option rights which are granted to the shareholders. The subscription rights are excluded. The then-current owners of the Financial Instruments shall be entitled to subscribe for the new shares. The conversion and/or option conditions are to be determined by the Board.

The Board is authorized, when issuing Financial Instruments to restrict or exclude the advance subscription rights in cases where they are issued:

- for the financing including re-financing of a take-over of an enterprise, of parts of an enterprise, or of participations or of investments by the Company or one of its group companies; or
- on national or international capital markets (including private placements to one or more selected investors); or
- for the improvement of the regulatory capital position of the Company or one of its group companies in a fast and expeditious manner.

If the advance subscription rights are restricted or excluded by a resolution of the Board, the following applies: the Financial Instruments are to be issued at prevailing market conditions (including standard dilution protection clauses in accordance with market practice) and the setting of the conversion or issue price of the new shares must take due account of the stock market price of the shares and/or comparable instruments priced by the market at the time of issue or time of conversion.

The conversion rights may be exercisable during a maximum of ten years and option rights during a maximum of seven years from the time of the respective issue; contingent conversion features may remain in place indefinitely.

Up to April 4, 2020, the total of new shares issued from (i) authorized share capital where the subscription rights were restricted or excluded, and (ii) contingent share capital in connection with Financial Instruments where the advance subscription rights were restricted or excluded, may not exceed 30,000,000 new shares.

Employee participation

During 2018 and 2017, 8,176 shares and 732,445 shares, respectively, were issued to employees from contingent share capital. The remaining contingent share capital, which can be issued to employees amounted to CHF 494,723 and CHF 495,541 or 4,947,232 and 4,955,408 fully paid registered shares as of December 31, 2018 and 2017, respectively, with a nominal value of CHF 0.10 each. Subscription rights of the shareholders, as well as advance subscription rights, are excluded. The issuance of new shares or respective option rights to employees is subject to one or more regulations to be issued by the Board and takes into account performance, functions, levels of responsibility and criteria of profitability. New shares or option rights may be issued to employees at a price lower than that quoted on the stock exchange.

c) Additional paid-in capital

This reserve is not ordinarily available for distribution. However, as of January 1, 2011, a Swiss tax regulation based on the Swiss Corporate Tax Reform II became effective, allowing for payments free of Swiss withholding tax to shareholders out of the capital contribution reserve, created out of additional paid-in capital. Therefore, amounts qualifying under this regulation can be paid out of additional paid-in capital. As of December 31, 2018, the general capital contribution reserve amounted to CHF 28 million.

d) Treasury shares

Table 19.2

Treasury shares

number of shares, as of December 31	**2018**	2017	2016
Treasury shares	2,342,432	1,156,567	1,203,523
Treasury shares (repurchased under the public share buy-back program for cancellation purposes, see f))	1,740,000	–	–
Total Treasury shares	**4,082,432**	**1,156,567**	**1,203,523**

Treasury shares comprise shares acquired in the market as well as shares repurchased via the 2018 public share buy-back program for cancellation purposes (see f) below).

e) Dividends

The dividend of CHF 18 per share was partially paid out of the capital contribution reserve and partially out of the available earnings on April 10, 2018, as approved at the Annual General Meeting on April 4, 2018. The difference between the respective amounts of the dividend at transaction day exchange rates amounting to USD 2.8 billion and at historical exchange rates are reflected in the cumulative foreign currency translation adjustment.

In 2017, the dividend of CHF 17 per share was partially paid out of the capital contribution reserve and partially out of the available earnings on April 4, 2017, as approved at the Annual General Meeting on March 29, 2017. The difference between the respective amounts of the dividend at transaction day exchange rates amounting to USD 2.6 billion and at historical exchange rates are reflected in the cumulative foreign currency translation adjustment.

f) Share buy-back program

On April 11, 2018, the Group launched a public share buy-back program for up to 1,740,000 shares of Zurich Insurance Group Ltd, which was completed on May 18, 2018. A total of 1,740,000 shares were repurchased on a second trading line on the SIX Swiss Exchange via Zürcher Kantonalbank as agent.

On April 3, 2019 the Board of Directors will propose to the Annual General Meeting 2019 that Zurich Insurance Group Ltd's ordinary share capital be reduced via the cancellation of the 1,740,000 shares with a nominal value of CHF 0.10 repurchased under the public share buy-back program.

g) Earnings per share

Table 19.3

Earnings per share

for the years ended December 31	Net income attributable to common shareholders (in USD millions)	Weighted average number of shares	Per share (USD)	Per share (CHF)[1]
2018				
Basic earnings per share	**3,716**	**148,048,737**	**25.10**	**24.55**
Effect of potentially dilutive shares related to share-based compensation plans		1,620,039	(0.27)	(0.27)
Diluted earnings per share	**3,716**	**149,668,776**	**24.83**	**24.28**
2017				
Basic earnings per share	**3,004**	**150,001,064**	**20.02**	**19.71**
Effect of potentially dilutive shares related to share-based compensation plans		974,049	(0.13)	(0.13)
Diluted earnings per share	**3,004**	**150,975,114**	**19.90**	**19.58**

[1] The translation from U.S dollars to Swiss francs is shown for information purposes only and has been calculated at the Group's average exchange rates for the years ended December 31, 2018 and 2017.

Basic earnings per share is computed by dividing net income attributable to shareholders by the weighted average number of shares outstanding for the year, excluding the weighted average number of shares held as treasury shares. Diluted earnings per share reflects the effect of potentially dilutive shares.

20. Employee benefits

The Group had 52’267 and 51,633 employees (full-time equivalents) as of December 31, 2018 and 2017, respectively. Personnel and other related costs incurred were USD 5.8 billion and 5.6 billion for the years ended December 31, 2018 and 2017, respectively, including wages and salaries of USD 4.8 billion for both years.

The Group operates a number of retirement benefit arrangements for employees. Historically, the majority of employees belonged to defined benefit pension plans and will still have past service benefits accrued in those plans.

However, the majority of employees now going forward accrue benefits for future service under defined contribution plans, which provide benefits equal to the amounts contributed by both the employer and the employee plus investment returns.

Certain of the Group’s operating companies also provide post-employment benefit plans covering medical care and life insurance, mainly in the U.S. Eligibility for these plans is generally based on completion of a specified period of eligible service and reaching a specified age. The plans typically pay a stated percentage of medical expenses subject to deductibles and other factors. The cost of post-employment benefits is accrued during the employees’ service periods.

Governance of the Group’s pension and post-employment benefit plans is the responsibility of the Group Pensions Committee. This committee is responsible for developing, reviewing and advising on the Group governance framework for matters related to pension and post-retirement benefit plans, including the relevant policies and processes. The committee provides oversight and guidance over the Group’s principal pension and post-retirement benefit plans for accounting, benefit design, funding and investment and plan governance purposes. This includes, but is not limited to:

- oversight of the impact of the Group’s principal defined benefit pension and post-retirement benefit plans in terms of cash, expense, and balance sheet accounting impact and capital implications
- development and maintenance of policies on funding, asset allocation, risk assessment and management, and assumption setting

The Group Pensions Committee provides a point of focus and co-ordination on the topic of pensions and post-retirement benefits at Group level for the supervision and exercise of company powers and obligations in relation to pension and post-retirement benefit plans.

The Group’s policy on funding and asset allocation is subject to local legal and regulatory requirements and tax efficiency.

a) Defined benefit pension plans

Employees of the Group’s companies are or have been covered by various pension plans, the largest of which are in Switzerland, the UK, the U.S. and Germany, which together comprise over 90 percent of the Group’s total defined benefit obligation. The remaining plans in other countries are not individually significant, therefore no separate disclosure is provided.

Certain Group companies provide defined benefit pension plans, some of which provide benefits on retirement, death or disability related to employees’ service periods and pensionable earnings. Others provide cash balance plans where the participants receive the benefit of the accumulated employer and employee contributions (where paid) together with additional cash credits in line with the rules of the plan. Eligibility for participation in the various plans is either immediate on commencement of employment or based on completion of a specified period of continuous service.

Most of the Group’s defined benefit pension plans are funded through contributions by the Group and, in some cases also by employees, to investment vehicles managed by trusts or foundations independent of the Group’s finances, or by management committees with fiduciary responsibilities. Where a trust or foundation exists, it is required by law or by articles of association to act in the interests of the fund and of all relevant beneficiaries to the plan, which can also include the sponsoring company, and is responsible for the investment policy with regard to the assets of the fund. The trust/foundation board or committee is usually composed of representatives from both employers and plan members. In these cases, the annual funding requirements are determined in accordance with the Group’s overall funding policy and local regulation. Independent actuarial valuations for the plans are performed as required. It is the Group’s general principle to ensure that the plans are appropriately funded in accordance with local pension regulations in each country.

The pension plans typically expose the company to risks such as interest rate, price inflation, longevity and salary risks. To the extent that pension plans are funded, the assets held mitigate some of the liability risk but introduce investment risk.

The overall investment policy and strategy for the Group's defined benefit pension plans is to achieve an investment return which, together with contributions, targets having sufficient assets to pay pension benefits as they fall due while also mitigating the various risks in the plans. The actual asset allocation is determined by reference to current and expected economic and market conditions and in consideration of specific asset class risk in the risk profile. The Group has a governance framework to ensure the trust/foundation board or committee considers how the asset investment strategy correlates with the maturity profile of the plan liabilities and the potential impact on the funding status of the plans, including short-term liquidity requirements. The investment strategies for each pension plan are independently determined by the governance body in each country, with oversight by the Group Pensions Committee. The pension assets are invested in diversified portfolios across geographical regions and asset classes to ensure diversified returns, also taking into account local pension laws. The investment strategies aim to mitigate asset-liability mismatches in the long run.

For post-employment defined benefit plans, total contributions to funded plans and benefits paid directly by the Group were USD 642 million for 2018 compared with USD 550 million for 2017. The estimated total for 2019 is USD 279 million (actual amount may differ).

Swiss pension plan
The plan provides benefits that exceed the minimum benefit requirements under Swiss pension law. It provides a lifetime pension to members at the normal retirement age of 65 (age 62 for Executive Staff). Participants can draw retirement benefits early from age 60 (age 58 for Executive Staff). Alternatively, the benefit can be taken as a lump sum payment at retirement. Contributions to the plan are paid by the employees and the employer, both for retirement savings and to finance risk benefits paid out in the event of death and disability. The accumulated balance on the pension account is based on the employee and employer pension contributions and interest accrued. The interest rate credited is defined annually by the plan's Board of Trustees which is responsible for the governance of the plans. The amount of pension payable on retirement is a result of the conversion rate applied on the accumulated balance of the individual participant's pension account at the retirement date.

As of December 31, 2017, the technical interest rate was reduced from 2.75 percent to 1.75 percent and the conversion rate at age 65 is being phased down to 5 percent over a six-year period until 2023 to align more closely with the low interest rate environment and increased life expectancy. Both the employer and employee savings contributions were increased. The flexibility of both plans was improved by introducing three levels of savings. Together with other changes the insured salary was increased.

Top-up payments were introduced to those members' pension accounts which had been part of the plan in 2017. This ensures that benefits at normal retirement age will be at least equal to 98.5 percent of their pensions expectations under the previous conversion rates.

Although the Swiss plan operates like a defined contribution plan under local regulations, it is accounted for as a defined benefit pension plan under IAS 19 'Employee Benefits' because of the need to accrue interest on the pension accounts and the payment of a lifetime pension at a fixed conversion rate under the plan rules.

Actuarial valuations are completed annually and if the plan becomes underfunded under local regulations, options for dealing with this include the Group paying additional contributions into the plan and/or reducing future benefits. At present, the plan is sufficiently funded, meaning that no additional contributions into the plans are expected to be required in the next year. The investment strategy of the Swiss plan is constrained by Swiss pension law including regulations related to diversification of plan assets. Under IAS 19, volatility arises in the Swiss pension plan net asset because the fair value of the plan assets is not directly correlated to movements in the value of the plan's defined benefit obligation in the short-term.

UK pension plan

The major UK pension plan is a hybrid arrangement and defined benefits entitlements accrued to December 31, 2015 increase in line with salary increases. Normal retirement age for the plan is 60. The plan is split into distinct sections and the two defined benefit sections are closed to new entrants and, with effect from January 1, 2016, to future benefit accrual. All employees now participate in a defined contribution section within the same trust. The notes that follow consider only the defined benefit sections. The UK Pension Trustee Board is responsible for the governance of the plan. The employer contributions are determined based on regular triennial actuarial valuations which are conducted using assumptions agreed by the Trustee Board and the sponsoring company. A local statutory valuation was carried out at an effective date of June 30, 2016 and was finalized in June 2017. This valuation disclosed a funding surplus of USD 411 million (GBP 304 million) after taking into account the value of the asset-backed funding arrangement established in 2014.

The ongoing funding of the plan is closely monitored by the Trustee Board and a dedicated funding committee is made up of representatives from the Trustee Board and the Group. The plan rules and UK pension legislation set out maximum levels of inflationary increases applied to plan benefits. The plan assets are invested in diversified classes of assets.

U.S. pension plans

There are two major pension plans in the U.S., the Zurich North America (ZNA) plan and the Farmers Group, Inc. (FGI) pension plan. These are both cash balance pension plans funded entirely by the participating employers. The ZNA plan is entirely cash balance and the FGI pension plan provides benefits on a cash balance pension formula for benefits accruing after January 1, 2009, except with respect to certain grandfathered participants. A final average pay defined benefit formula applies for the grandfathered participants. For both cash balance plans, an amount is credited to the cash balance account each quarter, determined by an employee's age, service and their level of earnings up to and above the social security taxable wage base. The minimum annual interest earned on the account balance is 5 percent. The cash balance account is available from age 65, or age 55 with five years of service. The benefit can be taken as a monthly annuity or as a lump sum. Both the ZNA plan and the FGI pension plan have fiduciaries as required under local pension laws. The fiduciaries are responsible for the governance of the plans. Actuarial valuations are completed regularly. The annual employer minimum required contributions are equal to the present value of benefits accrued each year, plus a rolling amortization of any prior underfunding. The FGI plan has been frozen with effect from December 31, 2018 following a Plan amendment decision in late 2016. FGI employees participating in the cash balance component of the FGI pension plan will continue to earn interest credits on their existing cash balance account balance after the freeze date. FGI employees participating in the final average pay formula will continue to earn eligibility service used to determine vesting and the percentage of pension benefit payable for early retirement before normal retirement age of 65. Farmers Group employees will earn only defined contribution retirement benefits starting January 1, 2019.

The ZNA cash balance pension plan was amended effective December 31, 2018 following a decision in November 2017 so that employees will no longer earn pay credits. However, ZNA employees will continue to earn interest credits on their existing account balance. The impact resulted in a past service credit in 2017. In conjunction with the change in the pension plan, ZNA employees will receive an additional company contribution within their defined contribution plan.

German pension plans

There are a number of legacy defined benefit plans in Germany, most of which were set up under works council agreements. In 2007, a contractual trust arrangement was set up to support all pension commitments of the employing companies in Germany. From this time, new contributions to the contractual trust arrangement relate to the pension payment refund of the employer companies.

A separate arrangement was also established in 2010 to provide for retirement obligations that were in payment at that time. Consideration is given from time to time based on the fiscal efficiency of adding recent retirees to this arrangement and to adding assets to the contractual trust.

The defined benefit plans provide benefits on either a final salary, career average salary or a cash balance basis. These plans are now closed to new entrants, who instead participate in a new cash balance arrangement, which has the characteristics of a defined contribution arrangement with a capital guarantee on members' balances, which mirrors the capital guarantee given in a conventional life insurance arrangement in Germany.

Tables 20.1a and 20.1b set out the reconciliation of the defined benefit obligation and plan assets for the Group's post-employment defined benefit plans.

Table 20.1a

Movement in defined benefit obligation and fair value of assets – current period

in USD millions	Defined benefit obligation	Fair value of assets	Asset ceiling	Net defined benefit asset/ (liability)
As of January 1, 2018	(23,227)	19,934	(95)	(3,388)
Net post-employment benefit (expense)/income:				
Current service cost	(252)	–	–	(252)
Interest (expense)/income	(429)	350	–	(78)
Settlements gains/(losses)	169	(149)	–	20
Past service (cost)/credit	(28)	–	–	(28)
Net post-employment benefit (expense)/income	(540)	201	–	(339)
Remeasurement effects included in other comprehensive income:				
Return on plan assets excluding interest income	–	(713)	–	(713)
Experience gains/(losses)	199	–	–	199
Actuarial gains/(losses) arising from changes in demographic assumptions	316	–	–	316
Actuarial gains/(losses) arising from changes in financial assumptions	909	–	–	909
Change in asset ceiling	–	–	(18)	(18)
Remeasurement effects included in other comprehensive income	1,424	(713)	(18)	693
Employer contributions	–	611	–	611
Employer contributions paid to meet benefits directly	34	–	–	34
Plan participants' contributions	(65)	65	–	–
Payments from the plan (incl. settlements)	965	(965)	–	–
Foreign currency translation effects	816	(686)	–	129
As of December 31, 2018	**(20,593)**	**18,447**	**(113)**	**(2,260)**
of which: Assets for defined pension plans				232
of which: Liabilities for defined pension plans				(2,491)

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Movement in defined benefit obligation and fair value of assets – prior period

Table 20.1b

in USD millions	Defined benefit obligation	Fair value of assets	Asset ceiling	Net defined benefit asset/ (liability)
As of January 1, 2017	(22,191)	17,883	(9)	(4,317)
Net post-employment benefit (expense)/income:				
Current service cost	(262)	–	–	(262)
Interest (expense)/income	(444)	349	–	(95)
Settlements gains/(losses)	(2)	–	–	(2)
Past service (cost)/credit	123	–	–	123
Net post-employment benefit (expense)/income	(584)	349	–	(235)
Remeasurement effects included in other comprehensive income:				
Return on plan assets excluding interest income	–	582	–	582
Experience gains/(losses)	(65)	–	–	(65)
Actuarial gains/(losses) arising from changes in demographic assumptions	517	–	–	517
Actuarial gains/(losses) arising from changes in financial assumptions	(41)	–	–	(41)
Change in asset ceiling	–	–	(86)	(86)
Remeasurement effects included in other comprehensive income	411	582	(86)	907
Employer contributions	–	513	–	513
Employer contributions paid to meet benefits directly	37	–	–	37
Plan participants' contributions	(57)	57	–	–
Payments from the plan (incl. settlements)	734	(734)	–	–
Foreign currency translation effects	(1,578)	1,284	–	(294)
As of December 31, 2017	**(23,227)**	**19,934**	**(95)**	**(3,388)**
of which: Assets for defined pension plans				201
of which: Liabilities for defined pension plans				(3,590)

Net post-employment benefit (expense)/income is recognized in other employee benefits, which is included within administrative and other operating expense.

Post-employment benefits are long-term by nature. However, short-term variations between long-term actuarial assumptions and actual experience may be positive or negative, resulting in actuarial gains or losses, which are recognized in full in the period in which they occur, and are included within other comprehensive income.

Table 20.2 provides a breakdown of plan assets by asset class.

Table 20.2

Fair value of assets held in funded defined benefit pension plans

in USD millions, as of December 31	2018				2017			
	Quoted in active markets	**Other**	**Total**	**% of Total**	Quoted in active markets	Other	Total	% of Total
Cash and cash equivalents	(282)	–	(282)	(2%)	88	–	88	–
Equity securities	3,658	132	3,790	21%	4,162	116	4,277	21%
Debt securities	84	13,112	13,196	72%	84	13,691	13,775	69%
Investment property	–	1,443	1,443	8%	–	1,491	1,491	7%
Mortgage loans	–	291	291	2%	–	293	293	1%
Other assets[1]	–	7	7	–	–	8	8	–
Total	**3,461**	**14,986**	**18,447**	**100%**	**4,335**	**15,599**	**19,934**	**100%**

[1] UK annuity policies

For the classification of pension assets the Group follows the same principles as outlined in note 23 (Fair value measurement). Assets meeting the criteria of Level 1 are generally considered quoted in active markets, while assets meeting the criteria of Level 2 or Level 3 are generally considered in other assets.

As a matter of policy, pension plan investment guidelines do not permit investment in any assets in which the Group or its subsidiaries have an interest, including shares or other financial instruments issued and own use property. Exceptions to the policy require approval by the Group Pensions Committee.

Tables 20.3a and 20.3b provide a breakdown of the key information included in tables 20.1a and 20.1b for the main countries for the years ended December 31, 2018 and 2017, respectively.

Table 20.3a

Key information by main country – current period

in USD millions, as of December 31, 2018	**Switzerland**	**United Kingdom**	**United States**	**Germany**	**Other**	**Total**
Defined benefit obligation	(4,590)	(10,140)	(3,387)	(1,316)	(1,160)	(20,593)
Fair value of plan assets	4,881	8,410	3,008	1,181	967	18,447
Impact of asset ceiling	(95)	(18)	–	–	–	(113)
Net defined benefit asset/(liability)	**196**	**(1,748)**	**(380)**	**(135)**	**(193)**	**(2,260)**
Net post-employment benefit (expense)/income	(98)	(95)	(106)	(26)	(13)	(339)

Table 20.3b

Key information by main country – prior period

in USD millions, as of December 31, 2017	Switzerland	United Kingdom	United States	Germany	Other	Total
Defined benefit obligation	(4,793)	(11,952)	(3,644)	(1,424)	(1,414)	(23,227)
Fair value of plan assets	5,081	9,439	3,003	1,275	1,135	19,934
Impact of asset ceiling	(87)	(8)	–	–	–	(95)
Net defined benefit asset/(liability)	**201**	**(2,521)**	**(640)**	**(149)**	**(280)**	**(3,388)**
Net post-employment benefit (expense)/income[1]	(64)	(80)	(39)	(17)	(35)	(235)

[1] Switzerland and the U.S. include a past service credit of USD 35 million and USD 81 million, respectively.

Table 20.4 shows the key financial assumptions used to calculate the Group's post-employment defined benefit obligations and the Group's post-employment benefit expenses.

Table 20.4

Key financial assumptions used for major plans

as of December 31	2018				2017			
	Switzerland	**United Kingdom**	**United States**	**Germany**	Switzerland	United Kingdom	United States	Germany
Discount rate	0.8%	2.7%	4.2%	1.7%	0.6%	2.4%	3.6%	1.7%
Inflation rate (CPI)[1]	1.2%	2.2%	2.0%	1.6%	1.3%	2.2%	2.3%	1.8%
Salary increase rate	1.2%	2.0%	4.5%	2.9%	1.3%	2.1%	4.5%	3.1%
Expected future pension increases	0.1%	3.6%	n/a	1.6%	0.1%	3.5%	n/a	1.8%
Interest crediting rate	0.8%	n/a	5.0%	n/a	0.6%	n/a	5.0%	n/a

[1] In the UK part of the liability is linked to the inflation measure of the Retail Price Index (RPI), which is assumed to be 1.0 percent higher than the Consumer Price Index (CPI) as of both December 31, 2018 and 2017.

Tables 20.5a and 20.5b set out the life expectancies used in the valuation of the Group's major plans. The mortality assumptions in each country have been based on mortality tables in accordance with typical practice in that country.

Table 20.5a

Mortality tables and life expectancies for major plans – current period

in years, as of December 31, 2018		**Life expectancy at age 65 for a male currently**		**Life expectancy at age 65 for a female currently**	
		aged 65	**aged 45**	**aged 65**	**aged 45**
Country	**Mortality table for major plans**				
Switzerland	BVG 2015 Generational	22.50	24.30	24.50	26.40
United Kingdom	PNXA00 with CMI_2017 projection with plan specific adjustments	22.53	23.63	23.25	24.45
	RP 2014 with MP-2018 Generational projection and white collar adjustment	22.19	23.74	23.71	25.23
United States	RP 2014 with plan specific adjustments	21.25	22.22	23.27	24.16
Germany	Heubeck 2018G	20.04	22.83	23.57	25.83

Table 20.5b

Mortality tables and life expectancies for major plans – prior period

in years, as of December 31, 2017		Life expectancy at age 65 for a male currently		Life expectancy at age 65 for a female currently	
		aged 65	aged 45	aged 65	aged 45
Country	**Mortality table for major plans**				
Switzerland	BVG 2015 Generational	22.38	24.26	24.43	26.29
United Kingdom	PNXA00 with CMI_2015 projection	22.92	24.22	23.69	25.19
	RP 2014 with MP-2017 Generational projection and white collar adjustment	22.22	23.76	23.71	25.24
United States	RP 2014 with plan specific adjustments	21.20	22.17	23.22	24.12
Germany	Heubeck 2005G	19.26	21.90	23.32	25.82

Table 20.6 shows the expected benefits to be paid under the Group's major plans in the future. It should be noted that actual amounts may vary from expected amounts. Therefore future benefit payments may differ from the amounts shown.

Table 20.6

Maturity profile of future benefit payments for major plans

as of December 31	2018				2017			
	Switzerland	United Kingdom	United States	Germany	Switzerland	United Kingdom	United States	Germany
Duration of the defined benefit obligation (in years)	14.1	21.0	12.2	14.0	14.5	21.2	12.8	14.7
Maturity analysis of benefits expected to be paid (in USD millions):								
< 1 year	215	479	220	58	215	563	214	54
1 to 5 years	893	1,819	879	254	891	2,067	876	229
5 to 10 years	1,129	2,070	1,069	348	1,143	2,194	1,077	307

Table 20.7 sets out the sensitivity of the defined benefit obligation to changes in key actuarial assumptions. The effect on the defined benefit obligation shown allows for an alternative value for each assumption while the other actuarial assumptions remain unchanged. While this table illustrates the overall impact on the defined benefit obligation of the changes shown, the significance of the impact and the range of reasonably possible alternative assumptions may differ between the different plans that comprise the overall defined benefit obligation. In particular, the plans differ in benefit design, currency and average term, meaning that different assumptions have different levels of significance for different plans. The sensitivity analysis is intended to illustrate the inherent uncertainty in the evaluation of the defined benefit obligation under market conditions at the measurement date. Its results cannot be extrapolated due to non-linear effects that changes in the key actuarial assumptions may have on the overall defined benefit obligation. Furthermore, the analysis does not indicate a probability of such changes occurring and it does not necessarily represent the Group's view of expected future changes in the defined benefit obligation. Any management actions that may be taken to mitigate the inherent risks in the post-employment defined benefit plans are not reflected in this analysis.

Table 20.7

Sensitivity analysis of significant actuarial assumptions

	Defined benefit obligation[1]	
in USD millions, as of December 31	2018	2017
Discount rate +50 bps	1,647	1,927
Discount rate –50 bps	(1,886)	(2,217)
Salary increase rate +50 bps	(71)	(85)
Salary decrease rate –50 bps	65	89
Price inflation increase rate +50 bps	(865)	(1,036)
Price inflation decrease rate –50 bps	763	920
Cash balance interest credit rate +50 bps	(116)	(128)
Cash balance interest credit rate –50 bps	73	78
Mortality 10% increase in life expectancy	(1,841)	(2,020)
Mortality 10% decrease in life expectancy	1,789	1,890

[1] A negative number indicates an increase and a positive number indicates a decrease in the defined benefit obligation.

b) Defined contribution pension plans

Certain of the Group's companies sponsor defined contribution pension plans. Eligibility for participation in such plans is either immediate on commencement of employment or based on completion of a specified period of continuous service. The plans provide for voluntary contributions by employees and contributions by the employer which typically range from 2 percent to 12 percent of annual pensionable salary, depending on a number of factors. The Group's contributions under these plans amounted to USD 184 million and USD 139 million for the years ended December 31, 2018 and 2017, respectively.

21. Share-based compensation and cash incentive plans

The Group has adopted various share-based compensation and cash incentive plans to attract, retain and motivate executives and employees. The plans are designed to reward employees for their contribution to the performance of the Group and to encourage employee share ownership. Share-based compensation plans include plans under which shares and options to purchase shares, based on the performance of the businesses, can be awarded. Share-based compensation plans are based on the provision of Zurich Insurance Group Ltd shares.

a) Cash incentive plans

Various businesses throughout the Group operate short-term incentive programs for executives, management and, in some cases, for employees of that business. Awards are made in cash, based on the accomplishment of both organizational and individual performance objectives. The expense recognized for these cash incentive plans amounted to USD 523 million and USD 485 million for the years ended December 31, 2018 and 2017, respectively.

b) Share-based compensation plans for employees and executives

The Group encourages employees to own shares in Zurich Insurance Group Ltd and has set up a framework based on the implementation of performance share programs. Actual plans are tailored to meet local market requirements.

The cost of share-based payments depend on various factors, including achievement of targets, and are subject to the discretion of the Remuneration Committee. Costs may therefore vary significantly from year to year. The net amounts of USD 215 million and USD 157 million for the years ended December 31, 2018 and 2017, respectively, reflect all aspects of share-based compensation, including adjustments made during the year.

The explanations below provide a more detailed overview of the main plans of the Group.

Employee share plans

Share Incentive Plan for employees in the UK

The Group established an Inland Revenue approved Share Incentive Plan and launched the Partnership Shares element of this plan in 2003, which enabled participating employees to make monthly purchases of Zurich Insurance Group Ltd shares at the prevailing market price from their gross earnings. This plan was terminated in 2007. There were 47 and 55 participants in the plan as of December 31, 2018 and 2017, respectively.

A revised Partnership Share Scheme was launched in March 2013. Participants benefit from purchasing shares by making deductions from gross salary up to a maximum of GBP 1,800 or 10 percent of their year-to-date earnings. There were 688 and 754 active participants in the plan as of December 31, 2018 and 2017, respectively.

The Group also operates a profit-sharing element of the Share Incentive Plan (Reward Shares) which was launched in 2004 with annual share allocations being made in May each year subject to business performance. The awards are based on business operating profit (BOP) after tax for the year achieved by the business unit of each participating employee. Individual awards are subject to a maximum of 5 percent of a participant's base salary (before any flexible benefit adjustments) with an overall maximum of GBP 3,600. The total number of participating employees in Reward Shares as of December 31, 2018 and 2017 was 3,192 and 4,174, respectively.

A Dividend Shares scheme was launched in 2014 which allows employees to reinvest their dividends from Partnership Shares 3 and Reward Shares 3. As of December 31, 2018 and 2017, there were 385 and 313 participants in the scheme, respectively.

Share Incentive Plan for employees in Switzerland

Under this plan, employees have the option to acquire sales-restricted shares at a 30 percent discount to the market value. The maximum permitted investment in shares is equivalent to CHF 3,500 per employee per annum. During 2018, 4,097 employees were eligible to participate in the share incentive plan, compared with 4,161 in 2017. For the years ended December 31, 2018 and 2017, 1,648 and 1,672 employees, respectively, purchased shares under the 2017 and 2018 share plans.

The Group Long-Term Incentive Plan (LTIP)

Participants in this plan are allocated a target number of performance shares as notional shares of Zurich Insurance Group Ltd in April each year (target shares). The number of target shares is calculated as a percentage of annual base salary of each participant.

Target shares allocated in 2018 will vest after a period of three years following the year of allocation (three year cliff vesting), with the actual level of vesting between 0 percent and 200 percent of the target shares allocated, depending on the achievement of pre-defined performance criteria. The performance criteria used to determine the level of vesting are the Group's return on shareholders' equity (ROE), the position of its relative total shareholder return (TSR) measured against an international peer group of insurance companies, and the achievement of cash remittance targets. The three pre-defined performance criteria are each assessed over a period of three consecutive financial years starting in the year of allocation and have an equal weighting. One half of the shares that actually vest are sales-restricted for a further three years. To further align the participants with the interests of the shareholders, effective from January 1, 2014, the target shares are credited with dividend equivalent shares during the vesting period to compensate participants in LTIP for dividends paid to shareholders. As of December 31, 2018 and 2017 there were 1,031 and 1,129 participants in this plan, respectively.

Table 21

Shares allocated during the period

for the years ended December 31	Number		Fair value at the allocation date (in CHF)	
	2018	2017	**2018**	2017
Shares allocated during the period	544,780	592,859	310	264

The shares allocated each year are based on target under the Group's LTIP. The level of vesting will depend on the level of achievements in the performance criteria. If the vesting level is different to target, the actual cost of the share-based payments is adjusted accordingly in the year when the level of vesting is determined.

Prior to 2011, for selected senior executives, options in shares of Zurich Insurance Group Ltd were allocated. For the years ended December 31, 2018 and 2017, nil and 172,978 share options, respectively, were exercised.

22. Commitments and contingencies, legal proceedings and regulatory investigations

The Group has provided contractual commitments and financial guarantees to external parties, associates and joint ventures as well as partnerships. These arrangements include commitments under certain conditions to make liquidity advances to cover default principal and interest payments, make capital contributions or provide equity financing.

Quantifiable commitments and contingencies

Table 22.1

in USD millions, as of December 31	**2018**	2017
Remaining commitments under investment agreements	2,283	1,820
Guarantees and letters of credit[1]	2,083	871
Future operating lease commitments	2,149	2,127
Undrawn loan commitments	2	16
Other commitments and contingent liabilities[2]	2,346	2,625

[1] Guarantee features embedded in life insurance products are not included.
[2] Other commitments include an agreement related to the acquisition of ANZ's life insurance businesses (see note 5).

Commitments under investment agreements

The Group has committed to contribute capital to third parties that engage in making investments in direct private equity, private equity funds and real estate. Commitments may be called by the counterparty over the term of the investment (generally three to five years) and must be funded by the Group on a timely basis.

Guarantees and letters of credit

In 2018 and 2017, USD 605 million and USD 642 million, respectively, related to guarantees in the aggregate amount of GBP 475 million which were provided to the directors of a wholly owned subsidiary in connection with the repatriation of capital. These guarantees have no expiry date.

The Group knows of no event of default that would require it to satisfy financial guarantees. Irrevocable letters of credit have been issued to secure certain reinsurance contracts.

The Group is active in numerous countries where insurance guarantee funds exist. The design of such funds varies from jurisdiction to jurisdiction. In some, funding is based on premiums written, in others the Group may be called upon to contribute to such funds in case of a failure of another market participant. In addition, in some jurisdictions the amount of contribution may be limited, for example, to a percentage of the net underwriting reserve net of payments already made.

The Group carries certain contingencies in the ordinary course of business in connection with the sale of its companies and businesses. These are primarily in the form of indemnification obligations provided to the acquirer in a transaction in which a Group company is the seller. They vary in scope and duration by counterparty and generally are intended to shift the potential risk of certain unquantifiable and unknown loss contingencies from the acquirer to the seller.

Zurich Insurance Group Ltd has provided unlimited guarantees in support of entities belonging to the Zurich Capital Markets group of companies.

Commitments under lease agreements

The Group has entered into various non-cancellable operating leases as lessee for office space and certain computer and other equipment. Lease expenses totaled USD 256 million for both years ended December 31, 2018 and 2017.

Table 22.2

Future payments under non-cancelable operating leases with terms in excess of one year

in USD millions, as of December 31	**2018**	2017
< 1 year	283	285
1 to 2 years	248	249
2 to 3 years	229	202
3 to 4 years	181	188
4 to 5 years	164	148
> 5 years	1,044	1,055
Total	**2,149**	**2,127**

Other contingent liabilities

The Group has received notices from various tax authorities asserting deficiencies in taxes for various years. The Group is of the view that the ultimate outcome of these reviews will not materially affect the Group's consolidated financial position.

The Group has commitments to provide collateral on certain contracts in the event of a financial strength downgrading for Zurich Insurance Company Ltd from the current AA– by Standard & Poor's. Should the rating by Standard & Poor's fall to A+, then the additional collateral based on information available amounts to nil as of both December 31, 2018 and 2017.

In common with other insurance companies, the Group is mindful of the trend toward enhanced consumer protection. There is significant uncertainty about the ultimate cost this trend might have on our business. The main areas of uncertainty concern court decisions as well as the volume of potential customer complaints related to sales activities and withdrawal rights, and their respective individual assessments.

Pledged assets

The majority of assets pledged to secure the Group's liabilities relate to debt securities pledged under short-term sale and repurchase agreements. The total amount of pledged financial assets including the securities under short-term sale and repurchase agreements amounted to USD 2 billion and USD 2.4 billion as of December 31, 2018 and 2017, respectively.

Terms and conditions associated with the financial assets pledged to secure the Group's liabilities are usual and standard in the markets in which the underlying agreements were executed.

Legal, compliance and regulatory developments

In recent years there has been an increase in the number of legislative initiatives that require information gathering and tax reporting regarding the Group's customers and their contracts, including the U.S. Foreign Account Tax Compliance Act (FATCA) and the expected introduction of other automatic tax information exchange regimes based on the Common Reporting Standard (CRS). The Group's compliance activities in this area could result in higher compliance costs, remedial actions and other related expenses for its life insurance, savings and pension business. There has also been increased scrutiny by various tax and law enforcement officials regarding cross-border business activities, including in particular by U.S. government authorities looking into activities of U.S. taxpayers with investments held outside the U.S. and activities of non-U.S. financial institutions that hold such investments.

The Group, on its own initiative, undertook an internal review of the life insurance, savings and pension business sold by its non-U.S. operating companies with relevant cross-border business to customers with a nexus to the U.S. The Group engaged outside counsel and other advisors to assist in this review, which was focused on assessing compliance with relevant U.S. tax laws. The review confirmed that the Group's cross-border business with U.S. persons was very limited and of a legacy nature, with the large majority of sales having occurred more than a decade ago. The review also confirmed that the Group's U.S. operating companies were not involved in or connected to those activities.

The Group has voluntarily disclosed the results of the review and the regulatory issues presented by sales to U.S. residents to the Swiss Financial Market Supervisory Authority (FINMA), the U.S. Department of Justice (DOJ) and other authorities. The Group is cooperating with these authorities.

While the process remains ongoing, the Group does not currently believe this matter will have a material adverse effect on the Group's business or the Group's consolidated financial condition.

Legal proceedings and regulatory investigations

The Group's business is subject to extensive supervision, and the Group is in regular contact with various regulatory authorities. The Group is continuously involved in legal proceedings, claims and regulatory investigations arising, for the most part, in the ordinary course of its business operations.

While the Group believes that it is not a party to, nor are any of its subsidiaries the subject of, any unresolved current legal proceedings, claims, litigation and investigations that will have a material adverse effect on the Group's consolidated financial condition, proceedings are inherently unpredictable, and it is possible that the outcome of any proceeding could have a material impact on results of operations in the particular reporting period in which it is resolved.

23. Fair value measurement

To measure fair value, the Group gives the highest priority to quoted and unadjusted prices in active markets. In the absence of quoted prices, fair values are calculated through valuation techniques, making the maximum use of relevant observable market data inputs. Whenever observable parameters are not available, the inputs used to derive the fair value are based on common market assumptions that market participants would use when pricing assets and liabilities. Depending on the observability of prices and inputs to valuation techniques, the Group classifies instruments measured at fair value within the following three levels (the fair value hierarchy):

Level 1 – includes assets and liabilities for which fair values are determined directly from unadjusted current quoted prices resulting from orderly transactions in active markets for identical assets/liabilities.

Level 2 – includes assets and liabilities for which fair values are determined using significant inputs other than quoted prices included in level 1 that are observable for the asset or liability, either directly or indirectly. These inputs include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and other observable market inputs.

Level 3 – includes assets and liabilities for which fair values are determined using valuation techniques with at least one significant input not being based on observable market data. This approach is used only in circumstances when there is little, if any, market activity for a certain instrument, and the Group is required to rely on third party providers or develop internal valuation inputs based on the best information available about the assumptions that market participants would use when pricing the asset or liability.

The governance framework and oversight of the Group's standards and procedures regarding the valuation of financial instruments measured at fair value lies within the responsibility of Group Risk Management, Group Investment Management, Treasury Capital Management and Group Finance. Specialists from these departments ensure the adequacy of valuation models, approve methodologies and sources to derive model input parameters, provide oversight over the selection of third party pricing providers, and on a semi-annual basis review the classification within the fair value hierarchy of the financial instruments in scope.

The Group makes extensive use of third-party pricing providers to determine the fair values of its available-for-sale and fair value through profit or loss financial instruments, and only in rare cases places reliance on prices that are derived from internal models. Investment accounting, operations and process functions, are independent from those responsible for buying and selling the assets, and are responsible for receiving, challenging and verifying values provided by third party pricing providers to ensure that fair values are reliable, as well as ensuring compliance with applicable accounting and valuation policies. The quality control procedures used depend on the nature and complexity of the invested assets. They include variance and stale price analysis, and comparisons with fair values of similar instruments and with alternative values obtained from asset managers and brokers.

Table 23.1 compares the fair value with the carrying value of financial assets and financial liabilities. Certain financial instruments are not included in this table as their carrying value is a reasonable approximation of their fair value. Such instruments include cash and cash equivalents, obligations to repurchase securities, deposits made under assumed reinsurance contracts, deposits received under ceded reinsurance contracts and other financial assets and liabilities. This table excludes financial assets and financial liabilities related to unit-linked contracts.

Fair value and carrying value of financial assets and financial liabilities

Table 23.1

in USD millions, as of December 31	Total fair value		Total carrying value	
	2018	2017	**2018**	2017
Available-for-sale securities				
Equity securities	12,587	14,190	12,587	14,190
Debt securities	132,522	140,240	132,522	140,240
Total available-for-sale securities	145,110	154,430	145,110	154,430
Fair value through profit or loss securities				
Equity securities	3,633	3,597	3,633	3,597
Debt securities	5,229	5,699	5,229	5,699
Total fair value through profit or loss securities	8,862	9,295	8,862	9,295
Derivative assets	899	903	899	903
Held-to-maturity debt securities	2,655	2,966	2,118	2,322
Mortgage loans	6,935	7,501	6,556	7,047
Other loans	9,123	10,396	7,614	8,730
Total financial assets	**173,583**	**185,492**	**171,158**	**182,728**
Derivative liabilities	(325)	(214)	(325)	(214)
Financial liabilities held at amortized cost				
Liabilities related to investment contracts	(606)	(631)	(504)	(510)
Senior debt	(5,329)	(3,971)	(5,237)	(3,846)
Subordinated debt	(6,722)	(7,594)	(6,775)	(6,938)
Total financial liabilities held at amortized cost	(12,658)	(12,196)	(12,516)	(11,295)
Total financial liabilities	**(12,983)**	**(12,410)**	**(12,842)**	**(11,509)**

All of the Group's financial assets and financial liabilities are initially recorded at fair value. Subsequently, available-for-sale financial assets, fair value through profit or loss financial assets, and derivative financial instruments are carried at fair value as of the balance sheet date. All other financial instruments are carried at amortized cost and the valuation techniques used to determine their fair value measurement are described below.

Fair values of held-to-maturity debt securities and senior and subordinated debt are obtained from third party pricing providers. The fair value received from these pricing providers may be based on quoted prices in an active market for identical assets, alternative pricing methods such as matrix pricing or an income approach employing discounted cash flow models. Such instruments are categorized within level 2.

Discounted cash flow models are used for mortgage loans and other loans. The discount yields in these models use interest rates that reflect the return a market participant would expect to receive on instruments with similar remaining maturities, cash flow patterns, currencies, credit risk and collateral. Such instruments are categorized within level 3.

Fair values of liabilities related to investment contracts and investment contracts with DPF are determined using discounted cash flow models. Such instruments are categorized within level 3 due to the unobservability of certain inputs used in the valuation.

Recurring fair value measurements of assets and liabilities

Fair value hierarchy – non unit-linked – current period

Table 23.2a

in USD millions, as of December 31, 2018	Level 1	Level 2	Level 3	Total
Available-for-sale securities				
Equity securities	8,854	2,515	1,219	12,587
Debt securities	–	124,963	7,559	132,522
Total available-for-sale securities	8,854	127,478	8,778	145,110
Fair value through profit or loss securities				
Equity securities	1,409	25	2,198	3,633
Debt securities	–	5,151	78	5,229
Total fair value through profit or loss securities	1,409	5,176	2,276	8,862
Derivative assets	10	810	79	899
Investment property	–	2,269	10,082	12,351
Reinsurers' share of liabilities for insurance contracts fair value option[1]	–	–	204	204
Total	**10,273**	**135,733**	**21,419**	**167,425**
Derivative liabilities	(2)	(288)	(35)	(325)
Liabilities for insurance contracts fair value option[2]	–	–	(2,203)	(2,203)
Total	**(2)**	**(288)**	**(2,238)**	**(2,528)**

[1] Included within reinsurers' share of liabilities for insurance contracts.
[2] Included within liabilities for insurance contracts.

Fair value hierarchy – non unit-linked – prior period

Table 23.2b

in USD millions, as of December 31, 2017	Level 1	Level 2	Level 3	Total
Available-for-sale securities				
Equity securities	10,859	2,342	988	14,190
Debt securities	–	133,989	6,251	140,240
Total available-for-sale securities	10,859	136,331	7,239	154,430
Fair value through profit or loss securities				
Equity securities	959	71	2,566	3,597
Debt securities	–	5,615	84	5,699
Total fair value through profit or loss securities	959	5,686	2,650	9,295
Derivative assets	–	842	61	903
Investment property	–	2,774	9,464	12,238
Reinsurers' share of liabilities for insurance contracts fair value option[1]	–	–	224	224
Total	**11,819**	**145,634**	**19,638**	**177,091**
Derivative liabilities	(3)	(182)	(30)	(214)
Liabilities for insurance contracts fair value option[2]	–	–	(2,436)	(2,436)
Total	**(3)**	**(182)**	**(2,465)**	**(2,650)**

[1] Included within reinsurers' share of liabilities for insurance contracts.
[2] Included within liabilities for insurance contracts.

Table 23.3a

Fair value hierarchy – unit-linked – current period

in USD millions, as of December 31, 2018	Level 1	Level 2	Level 3	Total
Fair value through profit or loss securities				
Equity securities	76,887	18,985	619	96,490
Debt securities	–	6,431	21	6,452
Other loans	–	2,667	–	2,667
Total fair value through profit or loss securities	**76,887**	**28,083**	**640**	**105,610**
Derivative assets	1	2	–	3
Investment property	–	–	3,222	3,222
Total investments for unit-linked contracts[1]	**76,888**	**28,084**	**3,863**	**108,835**
Financial liabilities at FV through profit or loss				
Liabilities related to unit-linked investment contracts	–	(40,828)	–	(40,828)
Derivative liabilities	(11)	(1)	–	(12)
Total	**(11)**	**(40,829)**	**–**	**(40,840)**

[1] Excluding cash and cash equivalents.

Table 23.3b

Fair value hierarchy – unit-linked – prior period

in USD millions, as of December 31, 2017	Level 1	Level 2	Level 3	Total
Fair value through profit or loss securities				
Equity securities	85,886	20,256	503	106,645
Debt securities	–	7,064	51	7,115
Other loans	288	2,620	–	2,907
Total fair value through profit or loss securities	**86,174**	**29,939**	**554**	**116,667**
Derivative assets	4	15	–	19
Investment property	–	–	3,410	3,410
Total investments for unit-linked contracts[1]	**86,178**	**29,954**	**3,963**	**120,096**
Financial liabilities at FV through profit or loss				
Liabilities related to unit-linked investment contracts	–	(45,484)	–	(45,484)
Derivative liabilities	(3)	(12)	–	(15)
Total	**(3)**	**(45,496)**	**–**	**(45,500)**

[1] Excluding cash and cash equivalents.

Within level 1, the Group has classified common stocks, exchange traded derivative financial instruments, investments in unit trusts that are exchange listed and daily published and other highly liquid financial instruments.

Within level 2, the Group has classified government and corporate bonds, investments in unit trusts, agency mortgage-backed securities (MBS) and 'AAA' rated non-agency MBS and other asset-backed securities (ABS) where valuations are obtained from independent pricing providers. The fair value received from these pricing providers may be based on quoted prices in an active market for similar assets, alternative pricing methods such as matrix pricing or an income approach employing discounted cash flow models. If such quoted prices are not available, then fair values are estimated on the basis of information from external pricing providers or internal pricing models (for example, discounted cash flow models or other recognized valuation techniques).

Where there are active and transparent markets and no significant adjustments to the observable data required, the Group classified also a small portion of its investment property within level 2.

Over the counter derivative financial instruments are valued using internal models. The fair values are determined using dealer price quotations, discounted cash flow models and option pricing models, which use various inputs including current market and contractual prices for underlying instruments, time to expiry, yield curves and volatility of underlying instruments. Such instruments are classified within level 2 as the inputs used in pricing models are generally market observable or derived from market observable data.

Fair values of liabilities related to unit-linked investment contracts are usually determined by reference to the fair value of the underlying assets backing these liabilities. Such instruments are classified within level 2.

Within level 3, the Group has classified:

- Unlisted stocks, private equity funds and hedge funds that are not actively traded. Such instruments are obtained from net asset value information and audited financial statements provided by the issuing company. Quantitative unobservable inputs are not developed by the Group when measuring fair value of these assets.
- Non-agency MBS and ABS rated below 'AAA' that are valued by independent pricing providers using a variety of valuation techniques which may require use of significant unobservable input parameters such as asset prepayment rate, default rates and credit curves. Quantitative unobservable inputs are not developed by the Group when measuring fair value of these assets.
- Options and long-dated derivative financial instruments with fair values determined using counterparty valuations or calculated using significant unobservable inputs such as historical volatilities, historical correlation, implied volatilities from the counterparty or derived using extrapolation techniques. Quantitative information on unobservable inputs are not available when counterparty pricing was used. For internally calculated fair values significant increases/(decreases) in volatilities or correlation, would result in a significantly higher/(lower) fair value measurement.
- Investment properties for which fair value is based on valuations performed annually by internal valuation specialists and generally on a rotation basis at least once every three years by an independent qualified appraiser. In general the portfolio is valued using an internal income capitalization approach. The model is asset specific and capitalizes the sustainable investment income of a property with its risk specific cap rate. This cap rate is an 'all risk yield' with components such as asset class yield for core assets (lowest risk) plus additional premiums for additional risks, for example second tier location or deterioration risk. All cap rate components (risk premiums) are reviewed and, if necessary, adjusted annually before revaluations are performed. The model takes into consideration external factors such as interest rate, market rent and vacancy rate. The significant unobservable inputs which are outside this model, are estimated rental value, rental growth, long term vacancy rate and discount rate. Significant increases/(decreases) in rental value and rental growth, in isolation, would result in a significantly higher/(lower) fair value measurement. Significant increases/(decreases) in the long term vacancy rate and discount rate, in isolation, would result in a significantly lower/(higher) fair value measurement.
- Reinsurers' share of liabilities and liabilities for insurance contracts fair value option. The fair values are determined using discounted cash flow models. The discount factors used are based on derived rates for LIBOR swap forwards, spreads to U.S. Treasuries and spreads to U.S. corporate A or higher rated bond segments for financials, industrials and utilities. The liability-projected cash flows use contractual information for premiums, benefits and agent commissions, administrative expenses under third party administrative service agreements and best estimate parameters for policy decrements. The primary unobservable inputs are the policy decrement assumptions used in projecting cash flows. These include disability claim parameters for incidence and termination (whether for recovery or death) and lapse rates. Significant increases/(decreases) in claim incidence rates and significant decreases/(increases) in claim termination rates would result in a significantly higher/(lower) fair value measurement.
- The Group's private debt holdings comprise certain private placements and other collateralized loan obligations (CLO) which are valued by dedicated external asset managers applying a combination of expert judgment and other specific adjustments for which interest rates as well as credit spreads serve as input parameters. Quantitative unobservable inputs are not developed by the Group when measuring fair value of these assets.

For details on Group investments sensitivities, refer to section analysis by risk type in the risk review.

The fair value hierarchy is reviewed at the end of each reporting period to determine whether significant transfers between levels have occurred. Transfers between levels mainly arise as a result of changes in market activity and observability of the inputs to the valuation techniques used to determine the fair value of certain instruments.

For the year ended December 31, 2018, the Group transferred USD 1.3 billion of fair value UL equity securities out of level 2 into level 1 and 932 million of fair value UL equity securities out of level 1 into level 2 as a result of a review of the classification of certain mutual fund investments.

Consolidated financial statements (continued)

Development of assets and liabilities classified within level 3 – non unit-linked – current period

Table 23.4a

in USD millions	Available-for-sale securities		Fair value through profit or loss securities				
	Equity securities	**Debt securities**	**Equity securities**	**Debt securities**	**Derivative assets**	**Derivative liabilities**	**Investment property**
As of January 1, 2018	988	6,251	2,566	84	61	(30)	9,464
Realized gains/(losses) recognized in income[1]	104	14	38	–	(1)	–	123
Unrealized gains/(losses) recognized in income[1,2]	(9)	(15)	(43)	(2)	(6)	(5)	136
Unrealized gains/(losses) recognized in other comprehensive income	102	(163)	–	–	11	1	–
Purchases	278	2,456	511	–	8	(4)	689
Settlements/sales/redemptions	(212)	(1,181)	(870)	(2)	(6)	–	(668)
Transfer to assets held for sale	–	–	–	–	–	–	(15)
Transfers into level 3	4	352	–	–	17	–	554
Transfers out of level 3	–	(43)	–	–	–	–	–
Foreign currency translation effects	(37)	(111)	(4)	(2)	(3)	2	(201)
As of December 31, 2018	**1,219**	**7,559**	**2,198**	**78**	**79**	**(35)**	**10,082**

[1] Presented as net capital gains/(losses) and impairments on Group investments in the consolidated income statements.
[2] Unrealized gains/(losses) recognized in income for available-for-sale securities relate to impairments.

For the year ended December 31, 2018, the Group transferred USD 352 million of available-for-sale debt securities out of level 2 into level 3. The transfers were mainly due to a review of the classification of certain collateralized loan obligations due to the observability of the inputs used in the valuation techniques to determine its fair value. The Group also transferred USD 554 million of investment property out of level 2 into level 3. The transfer resulted from a review of the classification of the real estate property due to the observability of the inputs used in the valuation techniques to determine its fair value.

Development of assets and liabilities classified within level 3 – non unit-linked – prior period

Table 23.4b

in USD millions	Available-for-sale securities		Fair value through profit or loss securities				
	Equity securities	Debt securities	Equity securities	Debt securities	Derivative assets	Derivative liabilities	Investment property
As of January 1, 2017	917	5,508	2,536	97	424	(63)	8,555
Realized gains/(losses) recognized in income[1]	199	8	6	1	2	(48)	177
Unrealized gains/(losses) recognized in income[1,2]	2	(9)	238	4	(58)	43	129
Unrealized gains/(losses) recognized in other comprehensive income	(40)	34	–	–	(2)	(4)	38
Purchases	212	1,753	206	44	7	(1)	668
Settlements/sales/redemptions	(334)	(1,263)	(455)	(67)	(10)	48	(563)
Transfer from/to assets held for own use	–	–	–	–	–	–	51
Transfer to assets held for sale	–	–	–	–	–	–	(37)
Transfers into level 3	–	121	–	–	–	–	–
Transfers out of level 3	–	(115)	–	–	(316)	–	–
Foreign currency translation effects	32	214	34	4	14	(5)	446
As of December 31, 2017	**988**	**6,251**	**2,566**	**84**	**61**	**(30)**	**9,464**

[1] Presented as net capital gains/(losses) and impairments on Group investments in the consolidated income statements.
[2] Unrealized gains/(losses) recognized in income for available-for-sale securities relate to impairments.

For the year ended December 31, 2017, the Group transferred USD 115 million of available-for-sale debt securities out of level 3 into level 2. The transfers were mainly due to credit rating upgrades of certain asset-backed securities resulting in an increase in market activity of these instruments. The Group also transferred derivatives with a market value of USD 316 million out of level 3 into level 2. The transfers resulted from an increase in significance of certain observable input parameters used to derive the fair value.

Table 23.5a

Development of liabilities for insurance contracts fair value option classified within level 3 – current period

in USD millions	Gross	Ceded	Net
As of January 1, 2018	2,436	(224)	2,212
Premiums	62	(5)	57
Claims	(249)	22	(227)
Fee income and other expenses	(15)	2	(12)
Interest and bonuses credited to policyholders	(26)	1	(24)
Changes in assumptions	(6)	–	(6)
As of December 31, 2018	**2,203**	**(204)**	**1,999**

Table 23.5b

Development of liabilities for insurance contracts fair value option classified within level 3 – prior period

in USD millions	Gross	Ceded	Net
As of January 1, 2017	2,720	(237)	2,483
Premiums	69	(6)	64
Claims	(365)	22	(343)
Fee income and other expenses	(10)	1	(9)
Interest and bonuses credited to policyholders	43	(4)	38
Changes in assumptions	11	–	11
(Decreases)/increases recorded in other comprehensive income	(33)	–	(33)
As of December 31, 2017	**2,436**	**(224)**	**2,212**

Table 23.6a

Development assets and liabilities classified within level 3 – unit-linked – current period

in USD millions	Fair value through profit or loss securities		
	Equity securities	Debt securities	Investment property
As of January 1, 2018	503	51	3,410
Realized gains/(losses) recognized in income[1]	6	–	134
Unrealized gains/(losses) recognized in income[1]	–	1	(18)
Purchases	162	–	232
Sales/redemptions	(84)	(14)	(333)
Transfers into level 3	32	–	–
Transfers out of level 3	–	(16)	–
Acquisitions and divestments	–	–	(9)
Foreign currency translation effects	(1)	(1)	(195)
As of December 31, 2018	**619**	**21**	**3,222**

[1] Presented as net investment result on unit-linked investments in the consolidated income statements.

Development assets and liabilities classified within level 3 – unit-linked – prior period

Table 23.6b

in USD millions	Fair value through profit or loss securities		
	Equity securities	Debt securities	Investment property
As of January 1, 2017	446	30	3,138
Realized gains/(losses) recognized in income[1]	–	(1)	(20)
Unrealized gains/(losses) recognized in income[1]	38	(3)	128
Purchases	89	17	133
Sales/redemptions	(56)	–	(189)
Transfers into level 3	–	8	–
Transfers out of level 3	(16)	(1)	–
Acquisitions and divestments	–	–	(79)
Foreign currency translation effects	1	2	300
As of December 31, 2017	**503**	**51**	**3,410**

[1] Presented as net investment result on unit-linked investments in the consolidated income statements.

Non-recurring fair value measurements of assets and liabilities

Under certain circumstances, the Group may measure certain assets or liabilities at fair value on a non-recurring basis when an impairment charge is recognized.

24. Analysis of financial assets

Tables 24.1a and 24.1b provide an analysis, for non unit-linked businesses, of the age of financial assets that are past due but not impaired, and of financial assets that are individually determined to be impaired.

Table 24.1a

Analysis of financial assets – current period

in USD millions, as of December 31, 2018	Debt securities	Mortgage loans	Other loans	Receivables and other financial assets	Total
Neither past due nor impaired financial assets	139,831	6,475	7,592	12,061	165,959
Past due but not impaired financial assets					
Past due by:					
1 to 90 days	–	58	–	1,425	1,482
91 to 180 days	–	9	–	214	222
181 to 365 days	–	4	–	234	239
> 365 days	–	4	–	208	212
Past due but not impaired financial assets	–	75	–	2,080	2,155
Financial assets impaired	39	12	21	133	204
Gross carrying value	**139,870**	**6,561**	**7,614**	**14,273**	**168,318**
Less: impairment allowance					
Impairment allowances on individually assessed financial assets	–	1	–	74	75
Impairment allowances on collectively assessed financial assets	–	4	–	169	174
Net carrying value	**139,870**	**6,556**	**7,614**	**14,030**	**168,070**

Table 24.1b

Analysis of financial assets – prior period

in USD millions, as of December 31, 2017	Debt securities	Mortgage loans	Other loans	Receivables and other financial assets	Total
Neither past due nor impaired financial assets	148,159	6,943	8,720	12,629	176,450
Past due but not impaired financial assets					
Past due by:					
1 to 90 days	–	69	–	1,393	1,463
91 to 180 days	–	9	–	197	206
181 to 365 days	–	4	–	158	163
> 365 days	–	7	–	182	189
Past due but not impaired financial assets	–	90	–	1,931	2,020
Financial assets impaired	102	22	21	164	308
Gross carrying value	**148,261**	**7,054**	**8,741**	**14,723**	**178,779**
Less: impairment allowance					
Impairment allowances on individually assessed financial assets	–	2	11	92	105
Impairment allowances on collectively assessed financial assets	–	5	–	167	172
Net carrying value	**148,261**	**7,047**	**8,730**	**14,465**	**178,502**

Tables 24.2a and 24.2b show how the allowances for impairments of financial assets in tables 24.1a and 24.1b developed during the periods ended December 31, 2018 and 2017, respectively.

Development of allowance for impairments – current period

Table 24.2a

in USD millions	Mortgage loans	Other loans	Receivables
As of January 1, 2018	7	11	258
Increase/(decrease) in allowance for impairments	(1)	(12)	(10)
Amounts written-off	–	–	–
Acquisitions and divestments	–	–	15
Foreign currency translation effects	–	–	(20)
As of December 31, 2018	**6**	**–**	**243**

Development of allowance for impairments – prior period

Table 24.2b

in USD millions	Mortgage loans	Other loans	Receivables
As of January 1, 2017	51	20	230
Increase/(decrease) in allowance for impairments	–	(8)	70
Amounts written-off	(47)	–	(49)
Acquisitions and divestments	–	–	(1)
Foreign currency translation effects	2	–	8
As of December 31, 2017	**7**	**11**	**258**

The Group has elected to defer the full implementation of IFRS 9 until IFRS 17 becomes effective on January 1, 2021. For further information on the Group's eligibility to the temporary exemption from IFRS 9, please refer to note 2.

Under IFRS 9, the classification and measurement of all debt instruments will be driven by the business model in which these assets are held and by their contractual terms. The combined effect of the application of the business model and contractual cash flows characteristics determine whether the financial assets are measured at amortized cost, fair value with changes recognized in other comprehensive income (OCI) or fair value through profit or loss. The business model will be assessed at the date of the initial application of IFRS 9.

Debt instruments with contractual terms that give rise to cash flows that are solely payment of principal and interest on the principal amount outstanding (SPPI) will be measured at either amortized cost or at fair value with changes recognized in OCI, unless they are managed on a fair value basis. The assessment of the features of the contractual terms is referred to as the SPPI test. Debt instruments that do not pass the SPPI test will always be measured at fair value through profit or loss.

Equity instruments including fund investments will be accounted for at fair value through profit or loss. The Group does not intend to make use of the election to present changes in fair value of certain equity instruments that are not held for trading in OCI with no subsequent reclassification of realized gains or losses to the income statement.

Table 24.3a and Table 24.3b show the fair value and the carrying value at the end of current and previous reporting period for the following two groups of financial assets:

- Financial assets with contractual terms that give rise to cash flows that are SPPI;
- Other financial assets not passing the SPPI test, as well as financial assets managed on a fair value basis for which no SPPI assessment has been performed. Financial assets that have not passed the SPPI test include equities, callable bonds with significant prepayment features, hybrid bonds with certain cash flows at the discretion of the issuer and some ABS/MBS that do not fulfill the SPPI criteria for contractually linked instruments.

Net unrealized gains/(losses) on debt securities available for sale that are not SPPI amounted to USD (143) million and USD 152 million for the years ended December 31, 2018 and 2017, respectively. The carrying value on held-to-maturity debt securities, mortgage loans, other loans, and receivables include impairment allowances of USD 249 million and USD 277 million of the years ended December 31, 2018 and 2017, respectively.

Table 24.3a

Fair value and carrying value of financial assets split by SPPI and other financial assets – current period

in USD millions, as of December 31, 2018	SPPI		Other financial assets		Total	
	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value
Available-for-sale securities						
Equity securities	–	–	12,587	12,587	12,587	12,587
Debt securities	124,829	124,829	7,694	7,694	132,522	132,522
Total available-for-sale securities	124,829	124,829	20,281	20,281	145,110	145,110
Fair value through profit or loss securities						
Equity securities	–	–	3,633	3,633	3,633	3,633
Debt securities	–	–	5,229	5,229	5,229	5,229
Total fair value through profit or loss securities	–	–	8,862	8,862	8,862	8,862
Held-to-maturity debt securities	2,655	2,118	–	–	2,655	2,118
Mortgage loans	6,935	6,556	–	–	6,935	6,556
Other loans[1]	8,295	6,865	86	112	8,381	6,978
Receivables	12,958	12,958	–	–	12,958	12,958
Derivative assets	–	–	899	899	899	899
Total financial assets	**155,672**	**153,326**	**30,127**	**30,154**	**185,799**	**183,480**

[1] Other loans do not include policyholder loans, which will come under IFRS 17 and are therefore not applicable for IFRS 9, of USD 742 million and USD 636 million for fair value and carrying value, respectively.

Table 24.3b

Fair value and carrying value of financial assets split by SPPI and other financial assets – prior period

in USD millions, as of December 31, 2017	SPPI		Other financial assets		Total	
	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value
Available-for-sale securities						
Equity securities	–	–	14,190	14,190	14,190	14,190
Debt securities	132,141	132,141	8,099	8,099	140,240	140,240
Total available-for-sale securities	132,141	132,141	22,289	22,289	154,430	154,430
Fair value through profit or loss securities						
Equity securities	–	–	3,597	3,597	3,597	3,597
Debt securities	–	–	5,699	5,699	5,699	5,699
Total fair value through profit or loss securities	–	–	9,295	9,295	9,295	9,295
Held-to-maturity debt securities	2,966	2,322	–	–	2,966	2,322
Mortgage loans	7,501	7,047	–	–	7,501	7,047
Other loans[1]	8,924	8,021	690	50	9,615	8,071
Receivables	13,090	13,090	–	–	13,090	13,090
Derivative assets	–	–	903	903	903	903
Total financial assets	**164,622**	**162,622**	**33,178**	**32,537**	**197,800**	**195,159**

[1] Other loans do not include policyholder loans, which will come under IFRS 17 and are therefore not applicable for IFRS 9, of USD 782 million and USD 659 million for fair value and carrying value, respectively.

With IFRS 9, the incurred loss impairment approach will be replaced by a forward-looking expected credit loss (ECL) approach that will apply to debt securities, loans and receivables that are not accounted for at fair value through profit or loss. Thus, the same ECL requirements will apply to all financial assets measured at amortized cost and those measured at fair value with changes recognized in OCI.

At initial recognition of a debt instrument, a loss allowance is recognized for expected credit losses resulting from default events within the next 12 months after the reporting date (12-month ECL). Such instruments are classified as Stage 1. The Group does not originate or acquire financial assets that are credit-impaired at initial recognition.

In the event of a significant increase in credit risk (SICR) since initial recognition, IFRS 9 requires the ECL allowance to be measured at an amount equal to lifetime expected credit losses resulting from all possible default events over the expected life of the financial instrument (lifetime ECL). Such instruments are referred to as Stage 2.

The Group applies the 'low credit risk practical expedient', by assuming that no increase in credit risk has occurred since initial recognition for financial assets that have an external or internal rating equivalent to 'investment grade' (i.e., AAA to BBB-) at the reporting date. For the remaining financial assets, the Group considers all relevant reasonable supporting information that is available without undue cost or effort when determining whether a SICR has occurred since initial recognition, or not. An increase in credit risk is assessed using a transition matrix approach that determines SICR thresholds depending on the credit rating at initial recognition and residual time to maturity of the instrument. Where necessary, the quantitative assessment is supplemented by a qualitative assessment of the issuer's credit quality. For certain less material portfolios, including residential mortgage loans, the '30 days past due' criterion is used as a primary indicator of a SICR. Where a SICR is no longer observed, the instrument transitions back to stage 1.

The Group has elected to apply the simplified approach for receivables from policyholders and other receivables that are allocated to 'Stage 2' unless individually impaired. Financial assets that have become credit-impaired are allocated to stage 3 based on similar principles as are applied under IAS 39 to determine whether credit loss has been incurred.

The tables 24.4a and 24.4b show the fair value and the carrying amount (before adjusting for any impairment in case of financial assets measured at amortized cost) of financial assets whose contractual terms give rise to cash flows that are SPPI, by impairment stages:

Financial assets (SPPI) by stages – current period

Table 24.4a

in USD millions, as of December 31, 2018	Stage 1		Stage 2		Stage 3		Total	
	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value
Available-for-sale debt securities	124,194	124,194	502	502	132	132	124,829	124,829
Held-to-maturity debt securities	2,653	2,115	3	3	–	–	2,655	2,118
Mortgage loans	6,870	6,498	36	34	29	29	6,935	6,561
Other loans[1]	8,191	6,762	40	40	64	64	8,295	6,866
Receivables	1,637	1,647	11,229	11,418	92	136	12,958	13,201
Total financial assets	**143,545**	**141,217**	**11,809**	**11,998**	**318**	**362**	**155,672**	**153,576**

[1] Other loans do not include policyholder loans, which will come under IFRS 17 and are therefore not applicable for IFRS 9, of USD 742 million and USD 636 million for fair value and carrying value, respectively.

Financial assets (SPPI) by stages – prior period

Table 24.4b

in USD millions, as of December 31, 2017	Stage 1		Stage 2		Stage 3		Total	
	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value
Available-for-sale debt securities	131,470	131,470	495	495	176	176	132,141	132,141
Held-to-maturity debt securities	2,966	2,322	–	–	–	–	2,966	2,322
Mortgage loans	7,153	6,708	297	297	51	49	7,501	7,054
Other loans[1]	8,731	7,819	85	85	108	108	8,924	8,013
Receivables	1,994	2,020	11,010	11,181	86	148	13,090	13,349
Total financial assets	**152,314**	**150,339**	**11,887**	**12,058**	**421**	**481**	**164,622**	**162,879**

[1] Other loans do not include policyholder loans, which will come under IFRS 17 and are therefore not applicable for IFRS 9, of USD 782 million and USD 659 million for fair value and carrying value, respectively.

25. Related-party transactions

In the normal course of business, the Group enters into various transactions with related companies, including various reinsurance and cost-sharing arrangements. These transactions are not considered material to the Group, either individually or in aggregate. Parties are considered to be related if one party has the ability to control or exercise significant influence over the other party in making financial or operational decisions.

Table 25 summarizes related-party transactions with key personnel reflected in the consolidated financial statements. Key personnel includes members of the Board of Directors of Zurich Insurance Group Ltd and Zurich Insurance Company Ltd and members of the Executive Committee.

Table 25

Related party transactions – key personnel

in USD millions, for the years ended December 31	2018	2017
Remuneration of key personnel of the Group		
Cash compensation, current benefits and fees	30	28
Post-employment benefits	4	4
Share-based compensation	23	22
Other remuneration	3	3
Total remuneration of key personnel	**60**	**56**

As of December 31, 2018 and 2017, there were no loans, advances or credits outstanding from members of the Executive Committee. Outstanding loans and guarantees granted to members of the Board of Directors amounted to nil for the years ended December 31, 2018 and 2017. The terms 'members of the Board of Directors' and 'members of the Executive Committee' in this context include the individual as well as members of their respective households. The figures in table 25 include the fees paid to members of the Board of Directors of Zurich Insurance Group Ltd and Zurich Insurance Company Ltd, which were USD 4 million for both years ended December 31, 2018 and 2017.

Information required by art. 14–16 of the Swiss Ordinance against Excessive Compensation and art. 663c paragraph 3 of the Swiss Code of Obligations is disclosed in the Remuneration report.

The cash compensation, current benefits and fees are short term in nature.

26. Relationship with the Farmers Exchanges

Farmers Group, Inc. and its subsidiaries (FGI) provide certain non-claims administrative, management, and ancillary services to the Farmers Exchanges, which are managed by Farmers Group Inc., a wholly owned subsidiary of the Group. Non-claims and management services primarily include risk selection, preparation and mailing of policy documents and invoices, premium collection, management of the investment portfolios and certain other administrative and managerial functions. Fees for these services are primarily determined as a percentage of gross premiums earned by the Farmers Exchanges. Ancillary services primarily include information technology services that are not covered under the attorney-in-fact contracts. The finances and operations of the Farmers Exchanges are governed by independent Boards of Governors. In addition, the Group has the following relationships with the Farmers Exchanges.

a) Certificates of contribution/surplus notes issued by the Farmers Exchanges

As of December 31, 2018 and 2017, FGI and other Group companies held the following certificates of contribution and surplus note issued by the Farmers Exchanges. Originally these were purchased by FGI in order to supplement the policyholders' surplus of the Farmers Exchanges.

Certificates of contribution/surplus notes

Table 26.1

in USD millions, as of December 31	2018	2017
6.15% certificate of contribution, due June 2021	–	200
3.758% surplus note, due December 2027	100	100
Various other certificates of contribution	23	23
Total	**123**	**323**

In June 2018, the Farmers Exchanges repaid the USD 200 million certificate of contribution at the 6.15 percent rate to Zurich American Insurance Company. The USD 100 million of 10-year, no call five year notes at a 3.758 percent rate that the Farmers Exchanges issued to Farmers New World Life Insurance Company remain unchanged.

Conditions governing payment of interest and repayment of principal are outlined in the certificates of contribution and surplus note. Generally, repayment of principal and payment of interest may be made only when the issuer has an appropriate amount of surplus, and then only after approval is granted by the appropriate state insurance regulatory department in the U.S. Additionally, the approval by the issuer's governing board is needed for repayment of principal.

b) Quota share reinsurance treaties with the Farmers Exchanges

The Farmers Exchanges cede risk through quota share reinsurance treaties to Farmers Reinsurance Company (Farmers Re Co), a wholly owned subsidiary of FGI, and to Zurich Insurance Company Ltd (ZIC). These treaties can be terminated after 90 days' notice by any of the parties.

The Farmers Exchanges participate in an All Lines Quota Share reinsurance agreement (All Lines agreement) with Farmers Re Co and ZIC. The All Lines agreement provides for a cession of a quota share of the premiums written and the ultimate net losses sustained in all lines of business written by the Farmers Exchanges.

Quota share reinsurance treaties

Table 26.2

in USD millions, for the years ended December 31	All Lines agreement	
	2018[1]	2017[2]
Net earned premiums and policy fees	193	1,541
Insurance benefits and losses, net[3]	(129)	(1,049)
Total net technical expenses[4]	(62)	(493)
Net underwriting result	**2**	**(1)**

[1] From January 1, 2018, Farmers Re Co assumed a 1.0 percent quota share. Another 28.0 percent was assumed by third parties. ZIC has no participation in the December 31, 2017 All Lines agreement.
[2] From January 1, 2017, ZIC assumed an 8.0 percent quota share. Another 16.0 percent was assumed by third parties. Farmers Re has no participation in the December 31, 2016 All Lines agreement.
[3] Under the All Lines agreement the Farmers Exchanges catastrophe losses are subject to a provisional maximum of 6.5 percent of net earned premiums dependent on loss experience and recoveries at a specified rate for each year. Based on the results for 2018, the total catastrophe recoveries subject to the All Lines agreement was USD 1.3 billion.
[4] Under the All Lines agreement, the Farmers Exchanges receive a ceding commission of 26.7 percent, 8.1 percent of premiums for unallocated loss adjustment expenses and 5.3 percent of premiums for other expenses

c) Farmers management fees and other related revenues

FGI as the appointed attorney-in-fact of the Farmers Exchanges, which are managed but not owned by FGI, a wholly owned subsidiary of the Group, is permitted by policyholders of the Farmers Exchanges to receive a management fee of up to 20 percent (up to 25 percent in the case of the Fire Insurance Exchange) of the gross premiums earned by the Farmers Exchanges. Other related revenues include reimbursement of certain ancillary service costs incurred by FGI on behalf of primarily the Farmers Exchanges that are not covered under the attorney-in-fact contracts. The amounts incurred for these services are reimbursed to FGI at cost in accordance with allocations that are subject to approval by the Farmers Exchanges Board of Governors.

FGI has historically charged a lower management fee than the amount allowed by policyholders. The range of fees has varied by line of business over time and from year to year. The gross earned premiums of the Farmers Exchanges were USD 20.2 billion and USD 19.8 billion for the years ended December 31, 2018 and 2017, respectively.

27. Segment information

The Group pursues a customer-centric strategy, where the Property & Casualty (P&C) and Life businesses are managed on a regional basis. The Group's reportable segments have been identified on the basis of the businesses operated by the Group and how these are strategically managed to offer different products and services to specific customer groups. The Group has identified 13 reportable segments in accordance with IFRS 8 'Operating Segments' and segment information is presented accordingly as follows:

- Property & Casualty regions
- Life regions
- Farmers
- Group Functions and Operations
- Non-Core Businesses

The Group's reportable segments comprise the following:

Property & Casualty and Life regions

- Europe, Middle East & Africa
- North America
- Asia Pacific
- Latin America
- Group Reinsurance

Property & Casualty regions provide a variety of motor, home and commercial products and services for individuals, as well as small and large businesses on both a local and global basis. Products are sold through multiple distribution channels including agents, brokers and bank distribution.

Life regions provide a comprehensive range of life and health insurance products on both an individual and a group basis, including annuities, endowment and term insurance, unit-linked and investment-oriented products, as well as full private health, supplemental health and long-term care insurance. In addition to the agent distribution channel, certain of these products are offered via bank distribution channels.

Farmers, through Farmers Group, Inc. and its subsidiaries (FGI), provides certain non-claims administrative, management, and ancillary services to the Farmers Exchanges, which are owned by their policyholders. This segment also includes all reinsurance assumed from the Farmers Exchanges by the Group. Farmers Exchanges are prominent writers of personal and small commercial lines of business in the U.S. In addition, this segment includes the activities of Farmers Life, a writer of individual life insurance business in the U.S.

Group Functions and Operations comprise the Group´s Holding and Financing, Headquarter and Zurich Insurance Mobile Solutions (ZIMS) activities. Certain alternative investment positions not allocated to business operating segments are included within Holding and Financing. In addition, this segment includes operational technical governance activities relating to technology, underwriting, claims, actuarial and pricing.

Non-Core Businesses include insurance and reinsurance businesses that the Group does not consider core to its operations and that are therefore mostly managed to achieve a beneficial run-off. Non-core businesses are mainly situated in the U.S., Bermuda, and in Europe.

Aggregations and additional information

Regional Property & Casualty and Life results are further aggregated to show a total Property & Casualty and total Life business view.

- Property & Casualty – Total
- Life – Total

For additional informational purposes, the Group also discloses income statement information for Property & Casualty Commercial Insurance and Property & Casualty Retail and Other Insurance results. Other Insurance includes SME, direct market and other program business.

- Property & Casualty Commercial Insurance
- Property & Casualty Retail and Other Insurance

Business operating profit

The segment information includes the Group's internal performance measure, business operating profit (BOP). This measure is the basis on which the Group manages all of its business units. It indicates the underlying performance of the Group's business units, after non-controlling interests, by eliminating the impact of financial market volatility and other non-operational variables. BOP reflects adjustments for shareholders' taxes, net capital gains/(losses) and impairments on investments (except for certain non-insurance operations included in Non-Core Businesses, investments in hedge funds as at fair value through profit or loss, certain securities held for specific economic hedging purposes and policyholders' share of investment results for the life businesses) and non-operational foreign exchange movements. Significant items arising from special circumstances, including restructuring charges, legal matters or large one-off regulatory projects outside the ordinary course of business, gains and losses on divestment of businesses, certain business combination integration costs and impairments of goodwill are also excluded from BOP.

On 1 July, 2018 the Group amended its BOP policy to exclude certain costs relating to the integration of newly acquired businesses. The policy change was implemented with prospective effect, as the impact on comparable balances was not material to the Group's financial results.

Consolidated financial statements (continued)

Property & Casualty – Overview by segment

Table 27.1

in USD millions, for the year ended December 31	Europe, Middle East & Africa		North America	
	2018	2017	**2018**	2017
Revenues				
Direct written premiums	12,955	12,486	13,912	14,414
Assumed written premiums	1,645	1,589	804	724
Gross written premiums and policy fees	14,600	14,075	14,716	15,137
Less premiums ceded to reinsurers	(2,389)	(2,209)	(4,988)	(4,549)
Net written premiums and policy fees	12,211	11,866	9,728	10,588
Net change in reserves for unearned premiums	(125)	(1)	277	(132)
Net earned premiums and policy fees	12,086	11,865	10,005	10,456
Net investment income on Group investments	621	647	1,026	964
Net capital gains/(losses) and impairments on Group investments	(8)	34	(40)	157
Net investment result on Group investments	613	681	986	1,121
Other income	320	387	50	23
Total BOP revenues	13,019	12,932	11,041	11,600
Benefits, losses and expenses				
Insurance benefits and losses, net	7,884	8,478	7,109	7,917
Policyholder dividends and participation in profits, net	8	(1)	10	8
Underwriting and policy acquisition costs, net	2,315	2,223	2,318	2,461
Administrative and other operating expense (excl. depreciation/amortization)	1,741	1,693	515	356
Interest credited to policyholders and other interest	181	185	(23)	31
Restructuring provisions and other items not included in BOP	(108)	(115)	(110)	(50)
Total BOP benefits, losses and expenses (before interest, depreciation and amortization)	12,022	12,462	9,819	10,722
Business operating profit (before interest, depreciation and amortization)	**998**	**470**	**1,222**	**878**
Depreciation and impairments of property and equipment	36	39	37	26
Amortization and impairments of intangible assets	76	143	84	52
Interest expense on debt	16	15	1	–
Business operating profit before non-controlling interests	869	273	1,099	800
Non-controlling interests	18	14	–	–
Business operating profit	**851**	**259**	**1,099**	**800**

Asia Pacific		Latin America		Group Reinsurance		Eliminations		Total	
2018	2017	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
2,646	2,221	2,627	2,560	–	–	–	–	32,139	31,681
212	184	77	79	364	214	(1,736)	(1,447)	1,366	1,343
2,858	2,405	2,704	2,639	364	214	(1,736)	(1,447)	33,505	33,024
(486)	(392)	(466)	(419)	(447)	(369)	1,736	1,447	(7,041)	(6,492)
2,372	2,013	2,237	2,220	(83)	(155)	–	–	26,465	26,532
(122)	(101)	(93)	(287)	28	22	–	–	(34)	(499)
2,250	1,912	2,145	1,933	(55)	(133)	–	–	26,431	26,033
68	60	204	161	13	15	–	–	1,932	1,847
–	–	–	–	–	–	–	–	(48)	191
68	60	204	161	13	15	–	–	1,884	2,038
137	108	32	66	62	131	–	(2)	601	713
2,454	2,080	2,381	2,160	21	13	–	(2)	28,916	28,783
1,304	1,055	960	805	35	(259)	–	–	17,291	17,996
–	–	1	–	–	–	–	–	19	7
580	452	916	832	7	2	–	–	6,136	5,970
463	392	239	223	33	27	–	(2)	2,992	2,688
1	3	–	2	(4)	(3)	–	–	156	218
(13)	(16)	9	(6)	–	2	–	–	(221)	(185)
2,335	1,886	2,126	1,856	72	(230)	–	(2)	26,373	26,695
120	**194**	**255**	**304**	**(51)**	**243**	**–**	**–**	**2,543**	**2,088**
18	16	6	5	3	4	–	–	101	89
16	23	10	10	–	–	–	–	187	228
–	–	–	–	37	85	–	–	55	100
86	155	238	288	(92)	155	–	–	2,200	1,670
–	–	97	111	–	–	–	–	115	124
86	**155**	**141**	**177**	**(92)**	**155**	**–**	**–**	**2,085**	**1,546**

Consolidated financial statements (continued)

Life – Overview by segment

Table 27.2

in USD millions, for the years ended December 31	Europe, Middle East & Africa		North America	
	2018	2017	**2018**	2017
Revenues				
Life insurance deposits	16,025	15,107	227	1,735
Gross written premiums	8,509	8,364	80	58
Policy fees	1,594	1,605	326	265
Gross written premiums and policy fees	10,103	9,969	407	323
Net earned premiums and policy fees	9,439	9,239	392	301
Net investment income on Group investments	2,474	2,430	22	19
Net capital gains/(losses) and impairments on Group investments	367	572	(11)	14
Net investment result on Group investments	2,840	3,002	11	33
Net investment income on unit-linked investments	1,375	1,301	–	(4)
Net capital gains/(losses) and impairments on unit-linked investments	(6,534)	7,978	(29)	80
Net investment result on unit-linked investments	(5,159)	9,279	(29)	75
Other income	458	432	36	17
Total BOP revenues	7,579	21,952	408	426
Benefits, losses and expenses				
Insurance benefits and losses, net	7,774	7,754	267	131
Policyholder dividends and participation in profits, net	(3,596)	10,423	(29)	117
Income tax expense/(benefit) attributable to policyholders	(171)	157	–	–
Underwriting and policy acquisition costs, net	925	1,173	68	81
Administrative and other operating expense (excl. depreciation/amortization)	1,302	1,293	57	70
Interest credited to policyholders and other interest	218	235	8	28
Restructuring costs and other items not included in BOP	(47)	(104)	–	(1)
Total BOP benefits, losses and expenses	6,404	20,930	372	427
Business operating profit (before interest, depreciation and amortization)	**1,175**	**1,021**	**37**	**–**
Depreciation and impairments of property and equipment	12	10	–	–
Amortization and impairments of intangible assets	103	133	5	1
Interest expense on debt	4	9	–	–
Business operating profit before non-controlling interests	1,056	870	31	(2)
Non-controlling interests	46	40	–	–
Business operating profit	**1,010**	**831**	**31**	**(2)**

Life includes approximately USD 2.3 billion and USD 2.2 billion of gross written premiums and future life policyholder benefits for certain universal life-type contracts in the Group's Spanish operations for the years ended December 31, 2018 and 2017, respectively.

Asia Pacific		Latin America		Group Reinsurance		Eliminations		Total	
2018	2017	**2018**	2017	**2018**	2017	**2018**	2017	**2018**	2017
103	102	2,339	2,228	–	–	–	–	18,694	19,172
1,249	931	2,831	2,690	20	7	(28)	(16)	12,662	12,034
130	117	43	49	–	–	–	–	2,093	2,036
1,379	1,048	2,874	2,739	20	7	(28)	(16)	14,754	14,070
1,199	792	2,473	2,478	12	1	–	–	13,514	12,810
152	118	390	361	–	–	(2)	(2)	3,035	2,925
(35)	56	18	7	–	–	–	–	338	649
117	174	407	368	–	–	(2)	(2)	3,373	3,574
104	92	22	17	–	–	–	–	1,501	1,406
(163)	110	990	1,319	–	–	–	–	(5,737)	9,486
(60)	202	1,012	1,336	–	–	–	–	(4,236)	10,892
25	29	64	74	–	–	(1)	–	582	552
1,281	1,196	3,956	4,256	12	1	(3)	(2)	13,234	27,829
522	286	1,137	1,088	2	–	–	–	9,702	9,259
(21)	229	1,006	1,326	–	–	–	–	(2,640)	12,095
(12)	15	–	–	–	–	–	–	(183)	171
220	163	1,037	1,072	2	–	(1)	–	2,252	2,489
337	310	174	197	–	–	–	–	1,871	1,870
35	40	20	11	–	–	–	–	282	315
(12)	6	10	(4)	–	–	–	–	(50)	(104)
1,070	1,049	3,385	3,690	4	–	(1)	–	11,234	26,096
212	**147**	**571**	**566**	**8**	**1**	**(2)**	**(2)**	**2,000**	**1,733**
3	2	3	3	–	–	–	–	17	15
12	13	12	14	–	–	–	–	133	161
13	2	–	–	–	–	(2)	(2)	15	9
183	129	556	549	8	1	–	–	1,834	1,548
(2)	(3)	237	253	–	–	–	–	281	289
186	**132**	**319**	**296**	**8**	**1**	**–**	**–**	**1,554**	**1,258**

Consolidated financial statements (continued)

Table 27.3

Business operating profit by business

in USD millions, for the year ended December 31

	Property & Casualty		Life	
	2018	2017	**2018**	2017
Revenues				
Direct written premiums	32,139	31,681	12,310	11,857
Assumed written premiums	1,366	1,343	352	177
Gross Written Premiums	33,505	33,024	12,662	12,034
Policy fees	–	–	2,093	2,036
Gross written premiums and policy fees	33,505	33,024	14,754	14,070
Less premiums ceded to reinsurers	(7,041)	(6,492)	(1,038)	(1,128)
Net written premiums and policy fees	26,465	26,532	13,717	12,942
Net change in reserves for unearned premiums	(34)	(499)	(202)	(132)
Net earned premiums and policy fees	26,431	26,033	13,514	12,810
Farmers management fees and other related revenues	–	–	–	–
Net investment income on Group investments	1,932	1,847	3,035	2,925
Net capital gains/(losses) and impairments on Group investments	(48)	191	338	649
Net investment result on Group investments	1,884	2,038	3,373	3,574
Net investment result on unit-linked investments	–	–	(4,236)	10,892
Other income	601	713	582	552
Total BOP revenues	28,916	28,783	13,234	27,829
of which: Inter-segment revenues	(141)	(200)	(141)	(125)
Benefits, losses and expenses				
Losses and loss adjustment expenses, net	17,293	17,997	–	–
Life insurance death and other benefits, net	(2)	(1)	9,702	9,258
Insurance benefits and losses, net	17,291	17,996	9,702	9,259
Policyholder dividends and participation in profits, net	19	7	(2,640)	12,095
Income tax expense/(benefit) attributable to policyholders	–	–	(183)	171
Underwriting and policy acquisition costs, net	6,136	5,970	2,252	2,489
Administrative and other operating expense (excl. depreciation/amortization)	2,992	2,688	1,871	1,870
Interest credited to policyholders and other interest	156	218	282	315
Restructuring provisions and other items not included in BOP	(221)	(185)	(50)	(104)
Total BOP benefits, losses and expenses (before interest, depreciation and amortization)	26,373	26,695	11,234	26,096
Business operating profit (before interest, depreciation and amortization)	**2,543**	**2,088**	**2,000**	**1,733**
Depreciation and impairments of property and equipment	101	89	17	15
Amortization and impairments of intangible assets	187	228	133	161
Interest expense on debt	55	100	15	9
Business operating profit before non-controlling interests	2,200	1,670	1,834	1,548
Non-controlling interests	115	124	281	289
Business operating profit	**2,085**	**1,546**	**1,554**	**1,258**

Life includes approximately USD 2.3 billion and USD 2.2 billion of gross written premiums and future life policyholder benefits for certain universal life-type contracts in the Group's Spanish operations for the years ended December 31, 2018 and 2017, respectively (see note 3).

	Farmers		Group Functions and Operations		Non-Core Businesses		Eliminations		Total	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	580	566	–	–	42	41	–	–	45,071	44,145
	194	995	5	48	64	79	(14)	(102)	1,967	2,539
	774	1,561	5	48	106	120	(14)	(102)	47,038	46,685
	321	310	–	–	34	83	–	–	2,447	2,429
	1,095	1,871	5	48	140	202	(14)	(102)	49,485	49,114
	(179)	(195)	–	(42)	(11)	(222)	14	102	(8,255)	(7,977)
	916	1,676	5	6	129	(19)	–	–	41,230	41,136
	(1)	546	–	–	12	5	–	–	(224)	(79)
	915	2,223	5	6	141	(14)	–	–	41,007	41,057
	3,204	2,892	–	–	–	–	–	–	3,204	2,892
	213	215	198	170	222	233	(212)	(175)	5,387	5,215
	(1)	1	–	–	(109)	(8)	–	–	181	833
	211	216	198	170	113	225	(212)	(175)	5,568	6,048
	(52)	136	–	–	(86)	636	–	–	(4,374)	11,664
	95	153	194	228	34	44	(425)	(507)	1,080	1,183
	4,373	5,619	397	404	201	891	(636)	(682)	46,484	62,844
	(51)	(37)	(282)	(303)	(21)	(17)	636	682	–	–
	129	1,044	1	–	(27)	52	–	–	17,397	19,094
	434	389	–	–	116	(97)	–	–	10,250	9,548
	563	1,434	1	–	89	(45)	–	–	27,646	28,643
	(43)	144	–	–	(72)	737	–	–	(2,736)	12,984
	–	–	–	–	–	–	–	–	(183)	171
	167	582	–	1	10	4	–	(7)	8,565	9,039
	1,800	1,521	342	305	75	90	7	15	7,086	6,490
	95	109	135	119	44	54	(279)	(269)	433	546
	(49)	(22)	(43)	(66)	(1)	(1)	–	–	(364)	(377)
	2,533	3,769	435	359	144	839	(272)	(261)	40,448	57,496
	1,840	**1,850**	**(38)**	**45**	**57**	**52**	**(365)**	**(420)**	**6,037**	**5,348**
	45	34	9	12	–	–	–	–	173	152
	152	125	30	56	–	–	–	–	501	570
	–	–	676	710	20	13	(365)	(420)	402	411
	1,643	1,691	(754)	(733)	37	39	–	–	4,961	4,215
	–	–	(1)	(2)	–	–	–	–	395	411
	1,643	**1,691**	**(753)**	**(731)**	**37**	**39**	**–**	**–**	**4,566**	**3,803**

Consolidated financial statements (continued)

Table 27.4

Reconciliation of BOP to net income after income taxes

in USD millions, for the year ended December 31

	Property & Casualty		Life	
	2018	2017	**2018**	2017
Business operating profit	**2,085**	**1,546**	**1,554**	**1,258**
Revenues/(expenses) not included in BOP:				
Net capital gains/(losses) on investments and impairments, net of policyholder allocation	481	972	197	238
Net gains/(losses) on divestment of businesses[1]	(19)	(96)	(5)	7
Restructuring costs	(212)	(182)	(67)	(86)
Other adjustments	(9)	(3)	18	(18)
Add back:				
Business operating profit attributable to non-controlling interests	115	124	281	289
Net income before shareholders' taxes	2,441	2,361	1,977	1,689
Income tax expense/(benefit) attributable to policyholders	–	–	(183)	171
Net income before income taxes	**2,441**	**2,361**	**1,794**	**1,861**
Income tax (expense)/benefit				
attributable to policyholders				
attributable to shareholders				
Net income after taxes				
attributable to non-controlling interests				
attributable to shareholders				

[1] In 2018, Property & Casualty included losses of USD 19 million related to the sale of Endsleigh Limited companies (see note 5), Group Functions and Operations included provision release gains of USD 16 million related to the sale of insurance operations in Morocco, Middle East and South Africa and Non-Core Businesses included losses of USD 15 million related to a portfolio transfer in Singapore. In 2017, Property & Casualty included losses of USD 97 million for re-measurements of assets held for sale based on agreements to sell businesses in the UK (see note 5).

	Farmers		Group Functions and Operations		Non-Core Businesses		Total	
	2018	2017	**2018**	2017	**2018**	2017	**2018**	2017
	1,643	**1,691**	**(753)**	**(731)**	**37**	**39**	**4,566**	**3,803**
	28	35	(9)	(55)	24	10	720	1,201
	–	–	16	5	(15)	–	(24)	(84)
	(45)	(19)	(25)	(67)	(1)	(1)	(350)	(355)
	(4)	(3)	(18)	2	–	–	(14)	(23)
	–	–	(1)	(2)	–	–	395	411
	1,622	1,705	(790)	(849)	44	48	5,293	4,954
	–	–	–	–	–	–	(183)	171
	1,622	**1,705**	**(790)**	**(849)**	**44**	**48**	**5,110**	**5,125**
							(1,134)	(1,816)
							183	(171)
							(1,317)	(1,645)
							3,977	**3,309**
							261	305
							3,716	3,004

Consolidated financial statements (continued)

Assets and liabilities by business

Table 27.5

in USD millions, as of December 31

	Property & Casualty		Life	
	2018	2017	**2018**	2017
Assets				
Cash and cash equivalents	7,402	9,724	4,575	3,664
Total Group Investments	70,140	74,590	101,285	106,898
Equity securities	8,351	9,434	7,040	7,551
Debt securities	51,773	55,582	74,750	78,537
Investment property	4,884	4,501	7,309	7,481
Mortgage loans	1,236	1,293	4,743	5,175
Other loans	3,894	3,777	7,428	8,137
Investments in associates and joint ventures	2	2	14	15
Investments for unit-linked contracts[1]	–	–	104,695	115,659
Total investments	70,140	74,590	205,980	222,556
Reinsurers' share of liabilities for insurance contracts	14,454	13,414	1,803	1,858
Deposits made under assumed reinsurance contracts	172	158	57	70
Deferred policy acquisition costs	5,367	5,289	12,350	11,624
Deferred origination costs	–	–	419	460
Goodwill	1,492	1,350	271	183
Other intangible assets	1,587	1,483	2,466	2,766
Other assets[2]	15,619	15,152	29,389	35,493
Total assets (after cons. of investments in subsidiaries)	**116,233**	**121,160**	**257,312**	**278,675**
Liabilities				
Liabilities for investment contracts	–	–	51,042	55,227
Liabilities for insurance contracts, gross	78,041	79,521	152,787	162,055
Reserves for losses and loss adjustment expenses, gross	58,835	60,080	–	–
Reserves for unearned premiums, gross	16,620	16,976	1	–
Future life policyholder benefits, gross	32	36	69,420	71,828
Policyholder contract deposits and other funds, gross	30	23	18,284	18,880
Reserves for unit-linked insurance contracts, gross[1]	–	–	64,168	70,371
Other insurance liabilities, gross	2,524	2,406	914	976
Senior debt	719	703	681	–
Subordinated debt	918	973	612	649
Other liabilities[2]	13,691	17,571	36,829	43,730
Total liabilities	**93,369**	**98,768**	**241,951**	**261,661**
Equity				
Shareholders' equity				
Non-controlling interests				
Total equity				
Total liabilities and equity				
Supplementary information				
Additions and capital improvements to property, equipment and intangible assets	816	264	99	185

[1] In 2017, the Group transferred a portfolio of stable value products (SVP) marketed with life insurance policies (Bank Owned Life Insurance, BOLI) from Non-Core Businesses to Life. The change resulted in a transfer of USD 8.3 billion of investments for unit-linked contracts and of reserves for unit-linked contracts.
[2] In 2018, the Group reclassified assets and liabilities of USD 24 billion respectively, to held for sale based on agreements to sell businesses in the UK, Venezuela and Germany. In 2017, the Group reclassified assets and liabilities of USD 29 billion respectively, to held for sale based on agreements to sell businesses in the UK (see note 5).

Farmers 2018	Farmers 2017	Group Functions and Operations 2018	Group Functions and Operations 2017	Non-Core Businesses 2018	Non-Core Businesses 2017	Eliminations 2018	Eliminations 2017	Total 2018	Total 2017
1,428	1,103	10,212	12,015	1,398	1,551	(16,366)	(19,828)	8,649	8,228
5,348	5,939	9,747	10,475	6,172	6,743	(10,045)	(10,562)	182,647	194,084
65	31	638	596	126	174	–	–	16,220	17,787
3,462	3,246	6,030	6,701	4,841	5,389	(987)	(1,196)	139,870	148,261
133	169	–	10	25	78	–	–	12,351	12,238
577	579	–	–	–	–	–	–	6,556	7,047
1,110	1,914	3,063	3,168	1,177	1,099	(9,058)	(9,366)	7,614	8,730
–	–	16	–	3	3	–	–	36	21
746	807	–	–	3,852	4,233	–	–	109,294	120,699
6,094	6,746	9,747	10,475	10,024	10,977	(10,045)	(10,562)	291,940	314,782
2,242	2,319	–	–	2,765	3,389	(67)	(61)	21,197	20,918
400	771	–	–	254	271	–	–	883	1,269
1,818	1,730	–	–	2	15	3	5	19,541	18,663
–	–	–	–	–	–	–	–	419	460
819	819	52	–	–	–	–	–	2,634	2,353
402	443	88	70	–	–	–	–	4,542	4,762
1,657	1,623	908	846	1,679	1,782	(3,716)	(4,268)	45,536	50,629
14,860	**15,554**	**21,007**	**23,406**	**16,122**	**17,984**	**(30,190)**	**(34,713)**	**395,342**	**422,065**
213	204	–	–	184	197	–	–	51,439	55,627
7,311	7,669	27	50	11,139	14,688	(96)	(176)	249,208	263,805
467	809	23	22	1,649	4,508	(61)	(50)	60,913	65,368
79	79	2	3	14	8	(2)	(5)	16,714	17,060
2,151	2,073	2	2	3,348	3,596	(4)	(6)	74,950	77,529
3,882	3,915	–	–	2,071	2,126	–	–	24,266	24,944
746	807	–	–	3,852	4,235	–	–	68,766	75,413
(16)	(13)	–	24	206	214	(29)	(115)	3,599	3,491
–	–	11,157	10,579	273	288	(7,593)	(7,723)	5,237	3,846
–	–	7,579	7,752	–	–	(2,334)	(2,436)	6,775	6,938
1,756	1,790	14,246	15,108	4,529	3,132	(20,169)	(24,378)	50,881	56,955
9,279	**9,663**	**33,009**	**33,489**	**16,124**	**18,305**	**(30,191)**	**(34,713)**	**363,540**	**387,172**
								30,189	33,063
								1,613	1,831
								31,802	34,893
								395,342	**422,065**
181	174	56	31	–	–	–	–	1,152	653

Property & Casualty – Commercial and Retail Insurance overview[1]

Table 27.6

in USD millions, for the year ended December 31	Commercial Insurance		Retail and Other Insurance	
	2018	2017	**2018**	2017
Gross written premiums and policy fees	15,450	15,852	19,443	18,441
Net earned premiums and policy fees	10,425	11,007	16,061	15,159
Insurance benefits and losses, net	8,071	9,213	9,185	9,041
Policyholder dividends and participation in profits, net	14	8	5	–
Total net technical expenses	2,776	3,038	5,872	5,270
Net underwriting result	(437)	(1,252)	1,000	848
Net investment income	1,180	1,122	739	710
Net capital gains/(losses) and impairments on investments	(37)	149	(11)	42
Net non-technical result (excl. items not included in BOP)	(92)	(45)	(51)	(59)
Business operating profit before non-controlling interests	614	(26)	1,677	1,541
Non-controlling interest	9	20	106	104
Business operating profit	**605**	**(45)**	**1,572**	**1,436**

[1] Commercial and Retail Insurance overview exclude Group Reinsurance

Table 27.7

Property & Casualty – Revenues and non-current assets by region

in USD millions	Gross written premiums and policy fees from external customers: Total, for the years ended December 31, 2018	2017	of which Commercial Insurance, for the years ended December 31, 2018	2017	of which Retail and Other Insurance, for the years ended December 31, 2018	2017	Property, equipment and intangible assets, as of December 31, 2018	2017
Europe								
Austria	597	554					40	32
France	302	309					1	1
Germany	2,787	2,656					117	134
Italy	1,501	1,414					30	38
Ireland	369	375					46	51
Portugal	312	267					15	18
Spain	1,188	1,133					300	335
Switzerland	2,905	3,043					507	481
United Kingdom	2,986	2,830					115	114
Rest of Europe	700	643					79	112
Middle East & Africa								
Middle East	97	87					–	–
Europe, Middle East & Africa	13,744	13,311	4,798	4,898	8,946	8,413	1,249	1,316
North America								
Canada	464	458					8	9
United States	13,846	14,299					716	760
North America	14,310	14,756	7,600	8,078	6,710	6,678	724	769
Asia Pacific								
Australia	933	725					748	789
Hong Kong	300	302					26	27
Japan	830	778					21	17
Malaysia	292	219					46	40
Rest of Asia Pacific	323	315					4	3
Asia Pacific	2,678	2,339	887	970	1,791	1,369	844	876
Latin America								
Argentina	615	419					187	4
Brazil	1,117	1,203					549	335
Chile	342	313					19	22
Mexico	605	650					148	147
Venezuela	11	19					–	–
Rest of Latin America	74	24					40	4
Latin America	2,765	2,628	770	662	1,995	1,966	942	512
Group Reinsurance								
Group Reinsurance	9	(13)	–	–	9	(13)	7	9
Total	**33,505**	**33,020**	**14,054**	**14,608**	**19,451**	**18,412**	**3,766**	**3,483**

Consolidated financial statements (continued)

Life – Revenues and non-current assets by region

Table 27.8

in USD millions	Gross written premiums and policy fees from external customers for the years ended December 31		Life insurance deposits for the years ended December 31		Property, equipment and intangible assets as of December 31	
	2018	2017	**2018**	2017	**2018**	2017
Europe, Middle East & Africa						
Austria	136	183	53	49	25	27
Germany	1,811	1,762	2,076	1,885	290	284
Italy	1,010	822	1,834	1,121	45	55
Ireland[1]	625	611	3,389	3,043	5	8
Spain	3,004	3,148	30	31	1,188	1,342
Switzerland	1,217	1,246	201	181	3	3
United Kingdom	1,690	1,560	6,782	7,171	132	148
Zurich International[2]	423	405	1,480	1,447	37	20
Rest of Europe, Middle East & Africa	167	171	179	179	5	4
Europe, Middle East & Africa	10,083	9,909	16,025	15,107	1,731	1,891
North America						
United States	407	323	227	1,735	1	6
North America	407	323	227	1,735	1	6
Asia Pacific						
Australia	515	521	25	39	194	218
Hong Kong	66	54	22	26	–	–
Indonesia	50	33	–	–	1	2
Japan	328	246	–	–	14	15
Malaysia	228	194	55	36	81	82
Rest of Asia Pacific[3]	191	–	–	–	–	–
Asia Pacific	1,379	1,048	103	102	291	317
Latin America						
Argentina	105	134	89	81	9	19
Brazil	1,398	1,455	2,130	2,038	354	450
Chile	965	765	81	109	360	260
Mexico	379	369	39	–	111	119
Uruguay	26	15	–	–	–	–
Venezuela	–	1	–	–	–	–
Latin America	2,874	2,739	2,339	2,228	834	848
Total	**14,742**	**14,019**	**18,694**	**19,172**	**2,857**	**3,061**

[1] Includes business written under freedom of services and freedom of establishment in Europe, and the related assets.
[2] Includes business written through licenses, mainly into Asia Pacific and Middle East, and the related assets.
[3] Primarily relates to the quota share agreement with OnePath Life, a part of ANZ Banking Group Limited.

28. Interest in subsidiaries

Significant subsidiaries are defined as those subsidiaries which either individually or in aggregate, contribute significantly to gross written premiums, shareholder's equity, total assets or net income attributable to shareholders.

Significant subsidiaries – non-listed

Table 28.1

as of December 31, 2018

	Registered office	Voting rights %	Ownership interest %	Nominal value of share capital (in local currency millions)	
Australia					
Cover-More Group Limited	Sydney	100	100	AUD	1,014.2
Zurich Australia Limited	Sydney	100	100	AUD	426.5
Zurich Australian Insurance Limited	Sydney	100	100	AUD	6.6
Zurich Financial Services Australia Limited	Sydney	100	100	AUD	2,198.8
Austria					
Zürich Versicherungs-Aktiengesellschaft	Vienna	99.98	99.98	EUR	12.0
Brazil					
Zurich Santander Brasil Seguros e Previdência S.A.	Sao Paulo	51	51	BRL	2,509.2
Zurich Minas Brasil Seguros S.A.	Belo Horizonte	100	100	BRL	4,726.8
Zurich Resseguradora Brasil S.A.	Sao Paulo	100	100	BRL	204.0
Chile					
Chilena Consolidada Seguros de Vida S.A.	Santiago	98.97	98.97	CLP	177,382.6
Zurich Santander Seguros de Vida Chile S.A.	Santiago	51	51	CLP	24,252.9
Germany					
Deutscher Herold Aktiengesellschaft	Bonn	100	100	EUR	18.4
Zürich Beteiligungs-Aktiengesellschaft (Deutschland)	Frankfurt	100	100	EUR	152.9
Zurich Deutscher Herold Lebensversicherung Aktiengesellschaft	Bonn	100	100	EUR	68.5
Ireland					
Zurich Life Assurance plc	Dublin	100	100	EUR	17.5
Zurich Holding Ireland Limited	Dublin	100	100	EUR	0.1
Zurich Insurance plc	Dublin	100	100	EUR	8.2
Italy					
Zurich Investments Life S.p.A.	Milan	100	100	EUR	199.0
Luxembourg					
REX-ZDHL S.C.S. SICAV-SIF	Leudelange	100	100	EUR	981.0
Malaysia					
Zurich Life Insurance Malaysia Berhad	Kuala Lumpur	100	100	MYR	579.0
Zurich Holdings Malaysia Berhad	Kuala Lumpur	100	100	MYR	515.4
Mexico					
Zurich Santander Seguros México, S.A.[1]	Mexico City	99.99	99.99	MXN	190.0

Significant subsidiaries – non-listed (continued)

Table 28.1

as of December 31, 2018

	Registered office	Voting rights %	Ownership interest %	Nominal value of share capital (in local currency millions)	
Spain					
Bansabadell Pensiones, E.G.F.P, S.A.[2]	Barcelona	50	50	EUR	7.8
Bansabadell Seguros Generales, S.A. de Seguros y Reaseguros[2]	Barcelona	50	50	EUR	10.0
Bansabadell Vida S.A. de Seguros y Reaseguros[2]	Barcelona	50	50	EUR	43.9
Zurich Latin America Holding S.L. - Sociedad Unipersonal	Barcelona	100	100	EUR	43.0
Zurich Santander Holding (Spain), S.L.	Boadilla del Monte	100	100	EUR	94.3
Zurich Santander Holding Dos (Spain), S.L.	Madrid	100	100	EUR	40.0
Zurich Santander Insurance America, S.L.	Madrid	51	51	EUR	177.0
Zurich Vida, Compañía de Seguros y Reaseguros, S.A. - Sociedad Unipersonal	Madrid	100	100	EUR	56.4
Switzerland					
Genevoise Real Estate Company Ltd	Geneva	100	100	CHF	20.4
Zurich Finance Company AG	Zurich	100	100	CHF	0.2
Zurich Insurance Company Ltd	Zurich	100	100	CHF	825.0
Zurich Investment Management AG	Zurich	100	100	CHF	10.0
Zurich Life Insurance Company Ltd	Zurich	100	100	CHF	60.0
Zürich Rückversicherungs-Gesellschaft AG	Zurich	100	100	CHF	11.7
United Kingdom					
Allied Zurich Holdings Limited	St. Hélier	100	100	GBP	90.7
Zurich Assurance Ltd	Cheltenham, England	100	100	GBP	236.1
Zurich Employment Services Limited	Cheltenham, England	100	100	GBP	215.8
Zurich Financial Services (UKISA) Limited	Cheltenham, England	100	100	GBP	1,652.1
Zurich Holdings (UK) Limited	Fareham, England	100	100	GBP	190.2
Zurich International Life Limited	Douglas, Isle of Man	100	100	GBP	123.4
Zurich UK General Services Limited	Fareham, England	100	100	GBP	300.7

Significant subsidiaries – non-listed (continued)

Table 28.1

as of December 31, 2018

	Registered office	Voting rights %	Ownership interest %	Nominal value of share capital (in local currency millions)	
United States of America					
Farmers Group, Inc.[3]	Carson City, NV	100	100	USD	0.001
Farmers Reinsurance Company[3]	Woodland Hills, CA	87.90	95.38	USD	58.8
Farmers New World Life Insurance Company[3]	Bellevue, WA	100	100	USD	6.6
Zurich American Corporation	Wilmington, DE	100	100	USD	0.00001
Zurich American Insurance Company (and subsidiaries)	New York, NY	100	100	USD	5.0
Rural Community Insurance Company	Anoka, MN	100	100	USD	3.0
Zurich American Life Insurance Company	Schaumburg, IL	100	100	USD	2.5
Zurich Holding Company of America, Inc.[4]	Wilmington, DE	100	100	USD	0.0
ZCM Matched Funding Corp.	George Town, Cayman Islands	100	100	USD	0.00100
Centre Group Holdings (U.S.) Limited	Wilmington, DE	100	100	USD	0.000010
ZCM (U.S.) Limited	Wilmington, DE	100	100	USD	0.00001
Zurich Capital Markets Inc.	Wilmington, DE	100	100	USD	0.00001
Zurich Structured Finance, Inc.	Wilmington, DE	100	100	USD	0.012

1 The controlling shareholder of this subsidiary is Zurich Santander Holding Dos (Spain), S.L.
2 Relates to Bansabadell insurance entities which are controlled by the Group.
3 The ownership percentages in Farmers Group, Inc. and its fully owned subsidiaries have been calculated based on the participation rights of Zurich Insurance Group in a situation of liquidation, dissolution or winding up of Farmers Group, Inc.
4 Shares have no nominal value in accordance with the company's articles of incorporation and local legislation.

Due to the nature of the insurance industry, the Group's business is subject to extensive regulatory supervision, and companies in the Group are subject to numerous legal restrictions and regulations. These restrictions may refer to minimum capital requirements or the ability of the Group's subsidiaries to pay dividends imposed by regulators in the countries in which the subsidiaries operate. These are considered industry norms, generally applicable to insurers who operate in the same markets.

For Zurich Santander Insurance America, S.L. and its subsidiaries, and the Bansabadell insurance entities, certain protective rights exist, which, among others, include liquidation, material sale of assets, transactions affecting the legal ownership structure, dividend distribution and capital increase, distribution channel partnerships and governance, which are not quantifiable.

For details on the Group's capital restrictions, see the capital management section in the risk review, which forms an integral part of the consolidated financial statements.

Table 28.2 shows the summarized financial information for each subsidiary that has non-controlling interests that are material to the Group.

Table 28.2

Non-controlling interests

in USD millions, as of December 31	Zurich Santander Insurance America, S.L. and its subsidiaries		Bansabadell insurance entities	
	2018	2017	**2018**	2017
Non-controlling interests percentage	49%	49%	50%	50%
Total Investments	13,284	14,224	10,706	10,368
Other assets	3,165	3,390	1,614	1,927
Insurance and investment contract liabilities[1]	14,093	14,799	10,699	10,451
Other liabilities	882	1,132	318	353
Net assets	**1,474**	**1,684**	**1,302**	**1,491**
Non-controlling interests in net assets	**722**	**825**	**651**	**745**
Total revenues	2,943	3,447	3,039	3,022
Net income after taxes	418	417	73	89
Other comprehensive income	(204)	71	(31)	238
Total comprehensive income	**214**	**488**	**42**	**327**
Non-controlling interests in total comprehensive income	**105**	**239**	**21**	**163**
Dividends paid to non-controlling interests	201	205	–	120

[1] Includes reserves for premium refunds, liabilities for investment contracts, deposits received under ceded reinsurance contracts, deferred front-end fees and liabilities for insurance contracts.

29. Events after the balance sheet date

On January 16, 2019, the Group announced the successful placement of CHF 200 million of senior unsecured notes. The notes will be issued by Zurich Insurance Company Ltd and will mature in October 2027.

Report of the statutory auditor

Report of the statutory auditor

to the General Meeting of Zurich Insurance Group Ltd, Zurich

Report on the audit of the consolidated financial statements

Opinion
We have audited the consolidated financial statements of Zurich Insurance Group Ltd and its subsidiaries (the Group), which comprise the consolidated balance sheet as at December 31, 2018 and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of cash flows and consolidated statement of changes in equity for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements (pages 166 to 275 and the audited sections of the risk review on pages 120 to 149) give a true and fair view of the consolidated financial position of the Group as at December 31, 2018 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRS) and comply with Swiss law.

Basis for opinion
We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements" section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview

Overall Group audit materiality: USD 225 million

We concluded full scope audit work at 19 business units in 8 countries. The full scope audit work addressed 72% and 79% of the Group's gross written premiums and policy fees (GWP) and total assets, respectively. In addition, specific procedures were performed on a further 16 business units in 8 countries representing a further 4% and 6% of the Group's GWP and total assets, respectively.

As key audit matters the following areas of focus have been identified:

– Valuation of actuarially determined life insurance assets and liabilities
– Valuation of property and casualty reserves
– Recoverability of goodwill, distribution agreements and attorney-in-fact contracts

Audit scope

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

In establishing the overall approach to the Group audit, we determined the type of work that needed to be performed at the business units by us, as the Group engagement team, or by component auditors from PwC network firms operating under our instruction. Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work at those business units to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the consolidated financial statements of the Group as a whole.

The Group's business units vary significantly in size and we identified 19 which, in our view, required an audit of their complete financial information, due to their size or risk characteristics. Audits of these business units were performed using materiality levels lower than the materiality level for the Group as a whole, ranging from USD 20 million to USD 150 million, and established by reference to the size of, and risks associated with, the business concerned. Specific audit procedures on certain balances and transactions were performed at a further 16 business units. Together the full scope audits and specific audit procedures accounted for 76% and 85% of Group GWP and total assets, respectively.

Our involvement included various site visits and component auditor working paper reviews across significant business units, together with discussions around audit approach and audit results arising from the work during regular conference calls with the component audit teams.

Audit materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgment, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the consolidated financial statements as a whole.

Overall group audit materiality	USD 225 million
How we determined it	We determined our materiality for the audit of the consolidated financial statements using quantitative and qualitative factors. Based on these factors we have selected a combined 3 year average of net income before income taxes (NIBIT) and business operating profit (BOP) as appropriate benchmarks for measuring audit materiality. We applied a 5% rule of thumb which resulted in a selected overall audit materiality of USD 225 million.
Rationale for the materiality benchmark applied	We chose NIBIT as a benchmark because, in our view, it is the benchmark against which the Group's performance is most commonly measured, and is a generally accepted benchmark. We also consider BOP as a benchmark because, in our view, BOP is a key indicator for analysts and external parties.

We agreed with the Audit Committee that we would report to them misstatements above USD 20 million identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of actuarially determined life insurance assets and liabilities

Key audit matter

The Group's valuation of the actuarially determined life insurance assets (including deferred policy acquisition costs, deferred origination costs, and present value of future profits) and liabilities (reserves for insurance contracts and deferred front-end fees) is based on complex actuarial methodologies and models and involves comprehensive assumption setting processes with regards to future events. Actuarial assumptions selected by the Group with respect to interest rates, investment returns, mortality, morbidity, longevity, persistency, expenses, stock market volatility and future policyholder behaviour and the underlying methodologies and assumptions used may result in material impacts on the valuation of actuarially determined life insurance assets and liabilities.

Specifically, the continued low interest rate environment results in reduced investment returns influences policyholders' behaviours creating a risk of accelerated amortization of deferred policy acquisition costs and a strain on the sufficiency of reserves for traditional life insurance contracts.

Refer to Notes 4, 8 and 11 to the consolidated financial statements.

How our audit addressed the key audit matter

We assessed and tested the design and operating effectiveness of selected key controls over actuarial methodology, integrity of data used in the actuarial valuation, and the assumptions setting processes used by management related to the valuation of actuarially determined life insurance assets and liabilities.

In relation to the particular matters set out opposite, our substantive testing procedures included the following:

- Testing the completeness and accuracy of underlying data to source documentation.
- Involving our life insurance actuarial specialists to independently test and challenge management's methodology and the assumptions used, with particular consideration of industry studies, the Group's experience and management's liability adequacy testing procedures. We focused on the changes to life actuarial methodology and assumptions during the year and assessed whether the methodologies are in compliance with recognized actuarial practices as well as regulatory and reporting requirements.
- Assessing the consistency of the life actuarial methods used across the Group's business units.
- Testing, on a sample basis, the calculation models applied to estimate the actuarially determined life insurance assets and liabilities.

Based on the work performed we determined that the methodologies, assumptions and underlying data used in the valuation of actuarially determined life insurance assets and liabilities are reasonable and in line with financial reporting requirements and industry accepted practice.

Valuation of property and casualty reserves

Key audit matter

The valuation of property and casualty loss reserves involves a high degree of subjectivity and complexity. Reserves for losses and loss adjustment expenses represent estimates of future payments of reported and unreported claims for losses and related expenses at a given date. The Group uses a range of actuarial methodologies to estimate these provisions. Property and casualty loss reserves require significant judgment relating to factors and assumptions such as inflation, claims development patterns and regulatory changes.

Specifically, long-tail lines of business, which often have low frequency, high severity claims settlements, are generally more difficult to project and subject to greater uncertainties than short-tail, high frequency claims. Further, not all natural catastrophes can be modeled using actuarial methodologies, which increases the degree of judgment needed in estimating property and casualty loss reserves.

Refer to Notes 4 and 8 to the consolidated financial statements.

How our audit addressed the key audit matter

We assessed and tested the design and operating effectiveness of selected key controls over actuarial methodology, integrity of data used in the actuarial valuation, and the assumptions setting and governance processes used by management related to the valuation of property and casualty reserves.

In relation to the particular matters set out opposite, our substantive testing procedures included the following:

– Testing the completeness and accuracy of underlying claims data utilized by the Group's actuaries in estimating property and casualty loss reserves.
– Utilizing information technology audit techniques to analyse claims through claims data plausibility checks and recalculation of claims development patterns.
– Involving our actuarial specialists to independently test management's property and casualty loss reserve studies and evaluate the reasonableness of the methodology and assumptions used against recognized actuarial practices and industry standards.
– Performing independent re-projections on selected product lines, particularly focusing on the largest and most uncertain property and casualty reserves. For these product lines our actuarial specialists compared their re-projected reserves to those recorded by the Group, and assessed whether the recorded reserves were within a reasonable range.
– Performing sensitivity testing and evaluated the appropriateness of any significant adjustments made to management's property and casualty reserve estimates.

Based on the work performed we determined the methodology and assumptions used in the valuation of property and casualty reserves are reasonable and in line with financial reporting requirements and industry accepted practice.

Report of the statutory auditor (continued)

Recoverability of goodwill, distribution agreements and attorney-in-fact contracts

Key audit matter

The Group's goodwill is allocated to cash generating units (CGUs) that are identified generally at a segment level. The valuation and recoverability of significant goodwill, distribution agreements and attorney-in-fact contracts involves complex judgments and estimates, including projections of future income, terminal growth rate assumptions, and discount rates. These assumptions and estimates can have a material impact on the valuations and impairment decisions reflected in the consolidated financial statements of the Group.

Refer to Notes 3, 4 and 14 to the consolidated financial statements.

How our audit addressed the key audit matter

We assessed the design effectiveness of selected key controls over terminal growth rate assumptions, and discount rates related to the recoverability of goodwill, distribution agreements and attorney-in-fact contracts. In relation to the particular matters set out opposite, our substantive testing procedures included the following:

- Corroborating the justification of the CGUs defined by management for goodwill allocation.
- Testing the principles and integrity of the Group's discounted cash flow model that supports the value-in-use calculations in order to assess the appropriateness of the methodology applied in the Group's annual impairment assessment.
- Testing the reasonableness of the assumptions used in the impairment assessment including projections of future income (comparing forecast to actual results), terminal growth rate assumptions, discount rates and sensitivity analyses to determine the impact of those assumptions.
- Engaging our internal valuation experts to assist in the testing of key assumptions and inputs.

Based on the work performed we deem management's assessment is reasonable that no impairment of goodwill, distribution agreements and attorney-in-fact contracts is needed.

Other information in the annual report
The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements of Zurich Insurance Group Ltd, the audited sections of the risk review on pages 120 to 149, the Remuneration report of Zurich Insurance Group Ltd and our auditor's reports thereon. Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements 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 the Board of Directors for the consolidated financial statements
The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is 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, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements
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 to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs and Swiss Auditing Standards will always detect a material misstatement when it exists. 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.

A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: http://expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

Report on other legal and regulatory requirements
In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

PricewaterhouseCoopers AG

Alex Finn Audit expert Auditor in charge	Mark Humphreys Audit expert

Zurich, February 6, 2019

Holding company

Review of the year

Zurich Insurance Group Ltd's net income after taxes for the year was CHF 67 million compared with CHF 2,370 million in 2017. In 2017, the net income after taxes mainly reflects dividend income from its subsidiary Zurich Insurance Company Ltd (ZIC) in the amount of CHF 2,300 million. This dividend did not recur in 2018. In 2018, ZIC paid back CHF 2,700 million of the subordinated debt to its parent.

The Annual General Meeting on April 4, 2018, approved a total dividend of CHF 18.00 per share to be paid to the shareholders, whereof CHF 1.40 per share were paid out of the capital contribution reserve free of Swiss withholding tax and CHF 16.60 per share less 35 percent for Swiss withholding tax were paid out of the available earnings.

Shareholders' equity decreased by CHF 3,164 million to CHF 13,561 million as of December 31, 2018, from CHF 16,725 million as of December 31, 2017. The decrease was mainly driven by the dividend of CHF 2,684 million paid in 2018 as well as by the public share buy-back program of 1,740,000 shares for a total purchase value of CHF 548 million completed on May 18, 2018, partially offset by the net income after taxes for the year 2018. On April 3, 2019, the Board of Directors will propose to the Annual General Meeting 2019 that the share capital be reduced via the cancellation of the repurchased 1,740,000 shares.

Contents

Income statements

in CHF thousands, for the years ended December 31	Notes	**2018**	2017
Other operating income		29	184
Other operating expenses	4	(15,312)	(19,247)
Financial income	5	91,549	2,401,635
Dividend income		–	*2,300,000*
Interest income		*91,469*	*97,269*
Other financial income		*80*	*4,366*
Financial expenses		(38)	(893)
Direct taxes	6	(9,637)	(11,594)
Net income after taxes		**66,591**	**2,370,085**

Holding company (continued)

Balance sheets

Assets

in CHF thousands, as of December 31	Notes	2018	2017
Current assets			
Cash and cash equivalents		2,557	534,714
Receivables from subsidiaries		77	–
Receivables from third parties		34,222	321
Accrued income and prepaid expenses from subsidiaries		91,429	7
Total current assets		128,285	535,042
Non-current assets			
Subordinated loans to subsidiaries	7	2,132,405	4,832,405
Investments in subsidiaries	8	11,368,069	11,368,069
Total non-current assets		13,500,474	16,200,474
Total assets		**13,628,759**	**16,735,516**

Liabilities and shareholders' equity

in CHF thousands, as of December 31	Notes	2018	2017
Short-term liabilities			
Other liabilities to subsidiaries		65,028	–
Other liabilities to third parties		962	8,198
Other liabilities to shareholders		1,425	1,320
Accrued expenses and deferred income to subsidiaries		–	953
Accrued expenses and deferred income to third parties		47	24
Derivatives with subsidiaries		–	13
Total short-term liabilities		67,462	10,508
Total liabilities		67,462	10,508
Shareholders' equity (before appropriation of available earnings)			
Share capital	10	15,135	15,134
Legal reserves:		1,019,984	835,514
Capital contribution reserve[1]	*11*	*287,506*	*494,374*
General capital contribution reserve		*27,751*	*212,286*
Reserve for treasury shares (indirectly held via subsidiaries)	*12*	*259,755*	*282,088*
General legal reserve		*732,478*	*341,140*
General legal reserve		*341,140*	*341,140*
Reserve for treasury shares (indirectly held via subsidiaries)	*12*	*391,338*	–
Treasury shares (directly held by the Company)	10	(548,167)	–
Free reserve	13	344,643	344,624
Retained earnings:			
As of January 1		*15,529,736*	*14,855,952*
Dividends paid		*(2,475,287)*	*(1,696,301)*
Net income after taxes		*66,591*	*2,370,085*
Allocation to reserve for treasury shares (indirectly held via subsidiaries)		*(391,338)*	–
Retained earnings, as of December 31		12,729,702	15,529,736
Total shareholders' equity (before appropriation of available earnings)		13,561,297	16,725,008
Total liabilities and shareholders' equity		**13,628,759**	**16,735,516**

[1] Dividends paid in the year, out of capital contribution reserve in respect of the 2017 result, amounting to CHF 208,759.

Notes to the financial statements

1. General information

Zurich Insurance Group Ltd (the Company) is a public limited company domiciled in Zurich, Switzerland, and its shares are listed on the SIX Swiss Exchange. It was incorporated on April 26, 2000, and is the holding company of the Zurich Insurance Group with the principal activity of holding subsidiary companies. The Company does not employ staff, as employees work in a joint capacity for Zurich Insurance Company Ltd (ZIC).

2. Basis of presentation

Zurich Insurance Group Ltd presents its financial statements in accordance with Swiss law.

All amounts in these financial statements including the notes are shown in Swiss franc thousands, rounded to the nearest thousand, unless otherwise specified.

3. Summary of significant accounting policies

a) Exchange rates

Unless otherwise stated, assets and liabilities expressed in currencies other than Swiss francs are translated at year end exchange rates. Revenues and expenses are translated using the exchange rate at the date of the transaction. Net unrealized exchange losses are recorded in the income statements and net unrealized exchange gains are deferred until realized.

b) Investments in subsidiaries

Investments in subsidiaries are equity interests, held on a long-term basis for the purpose of the holding company's business activities. Each investment in subsidiaries is valued individually and carried at its cost less adjustments for impairments.

c) Accrued income

Income is accrued for interest which is earned but not yet due for payment at the end of the reporting period.

d) Derivatives

Derivatives are carried at market value, with changes in the market value recorded in the income statement.

e) Reserves for treasury shares (indirectly held via subsidiaries)

Reserves for treasury shares are accounted for at the acquisition costs of these shares held by the respective subsidiary.

f) Treasury shares (directly held by the Company)

Treasury shares are carried at acquisition cost and presented as a deduction in the shareholders' equity.

4. Other operating expenses

Other operating expenses include directors' fees of CHF 4.3 million and CHF 4.8 million for the years ended December 31, 2018, and December 31, 2017, respectively. Overhead expenses decreased by CHF 1.7 million to CHF 6.8 million in 2018. In addition, fees paid to the Swiss Financial Market Supervisory Authority of CHF 3.4 million and CHF 3.2 million are included for the years ended December 31, 2018, and December 31, 2017.

5. Financial income

Financial income for the year 2018 mainly consists of interest income of CHF 91.4 million (2017: CHF 97.3 million) on the subordinated loan received from the Company's subsidiary ZIC. This interest income is recognized when Zurich Insurance Company Ltd declares its intention to pay a dividend to the Company. In 2017, the dividend income of CHF 2,300 million received from the Company's subsidiary ZIC was shown as part of the financial income.

Holding company (continued)

6. Direct taxes

Direct taxes include income and capital taxes in Switzerland.

7. Subordinated loans to subsidiaries

Subordinated loans include a loan to Zurich Insurance Company Ltd of CHF 2,132 million as of December 31, 2018. In April 2018, ZIC paid back CHF 2,700 million.

8. Investments in subsidiaries

Investments in subsidiaries

as of December 31	2018			2017		
	Carrying value[1]	Voting rights in %	Capital rights in %	Carrying value[1]	Voting rights in %	Capital rights in %
Zurich Insurance Company Ltd	11,088,466	100.00	100.00	11,088,466	100.00	100.00
Zurich Financial Services EUB Holdings Ltd	121,436	99.90	99.90	121,436	99.90	99.90
Farmers Group, Inc.	157,992	12.10	4.62	157,992	12.10	4.62
Allied Zurich Limited	175	100.00	100.00	175	100.00	100.00
Total	**11,368,069**			**11,368,069**		

[1] in CHF thousands.

In addition to the above mentioned directly held subsidiaries, the Company indirectly owns additional subsidiaries primarily through Zurich Insurance Company Ltd. Information regarding indirectly owned subsidiaries is included on pages 271 to 273 of this Annual Report.

9. Commitments and contingencies

Zurich Insurance Group Ltd has provided unlimited guarantees in support of entities belonging to the Zurich Capital Markets group of companies. The Company has also entered into support agreements and guarantees for the benefit of certain of its subsidiaries. They amounted to CHF 1,054 million as of December 31, 2018, and CHF 1,319 million as of December 31, 2017. The decrease is mainly due to an expired senior guarantee in the amount of USD 217 million (CHF 214 million) provided to a fully owned subsidiary to secure its third party investment in surplus notes. Furthermore, the Company has issued an unlimited guarantee in favor of the Institute of London Underwriters in relation to business transferred to Zurich Insurance plc from a Group company which no longer has insurance licenses.

Zurich Insurance Group Ltd knows of no event of default that would require it to satisfy any of these guarantees or to take action under a support agreement.

10. Share capital

a) Changes to the share capital

At the Annual General Meeting of April 4, 2018, the shareholders approved to extend the validity period of the authorized share capital and the combined dilution limitations for authorized and contingent share capital until April 4, 2020. The authorized share capital (Art. 5bis 1) amounted to 45,000,000 shares. The contingent share capital for Financial Instruments (Art. 5ter 1a) amounted to 30,000,000 shares and the contingent share capital for employees (Art. 5ter 2a) amounted to 4,947,232 shares. During the years 2018 and 2017, a total of 8,176 shares and 732,445 shares, respectively, were issued to Group employees out of the contingent capital.

During 2018, the Board of Directors launched a public share buy-back program for cancellation purposes of 1,740,000 Zurich Insurance Group Ltd's own shares. The program was launched on April 11, 2018 and completed on May 18, 2018. The purchase value of the repurchased own shares corresponded to CHF 548,167,352 (average purchase price of CHF 315). For further information see the audited consolidated financial statements, note 19 on pages 225 to 227.

b) Authorized share capital (as specified in Article 5bis of the Articles of Association)
Until April 4, 2020, the Board of Zurich Insurance Group Ltd is authorized to increase the share capital by an amount not exceeding CHF 4,500,000 by issuing up to 45,000,000 fully paid registered shares with a nominal value of CHF 0.10 each. An increase in partial amounts is permitted. The Board would determine the date of issue of any such new shares, the issue price, type of payment, conditions for exercising subscription rights, and the commencement of entitlement to dividends.

The Board may issue such new shares by means of a firm underwriting by a banking institution or syndicate with a subsequent offer of those shares to current shareholders. The Board may allow the expiry of subscription rights which have not been exercised, or it may place these rights as well as shares, the subscription rights of which have not been exercised, at market conditions.

The Board is further authorized to restrict or exclude the subscription rights of shareholders and to allocate them to third parties, the Zurich Insurance Group Ltd or one of its group companies, up to a maximum of 15,000,000 fully paid registered shares, if the shares are to be used:

- for the take-over of an enterprise, of parts of an enterprise or of participations or for investments by the Zurich Insurance Group Ltd or one of its group companies, or the financing including re-financing of such transactions; or
- for the purpose of expanding the scope of shareholders in connection with the quotation of shares on foreign stock exchanges or issuance of shares on the national or international capital markets (including private placements to one or more selected investors); or
- for the conversion of loans, bonds, similar debt instruments, equity-linked instruments or other financial market instruments (collectively, the 'Financial Instruments') issued by the Zurich Insurance Group Ltd or one of its group companies; or
- for the improvement of the regulatory capital position of the Zurich Insurance Group Ltd or one of its group companies in a fast and expeditious manner.

Up to April 4, 2020, the total of new shares issued from (i) authorized share capital where the subscription rights were restricted or excluded, and (ii) contingent share capital in connection with Financial Instruments where the advance subscription rights were restricted or excluded, may not exceed 30,000,000 new shares.

c) Contingent share capital (as specified in Article 5ter of the Articles of Association)
Financial Instruments
The share capital of Zurich Insurance Group Ltd may be increased by an amount not exceeding CHF 3,000,000 by issuing of up to 30,000,000 fully paid registered shares with a nominal value of CHF 0.10 each by the voluntary or mandatory exercise of conversion and/or option rights which are granted in connection with the issuance of loans, bonds, similar debt instruments, equity-linked instruments or other financial market instruments (collectively, the 'Financial Instruments') by Zurich Insurance Group Ltd or one of its group companies or by mandatory conversion of Financial Instruments issued by the Zurich Insurance Group Ltd or one of its group companies, that allow for contingent mandatory conversion into shares of Zurich Insurance Group Ltd, or by exercising option rights which are granted to the shareholders. The subscription rights are excluded. The then-current owners of the Financial Instruments shall be entitled to subscribe for the new shares. The conversion and/or option conditions are to be determined by the Board.

The Board is authorized, when issuing Financial Instruments to restrict or exclude the advance subscription rights in cases where they are issued:

- for the financing including re-financing of a take-over of an enterprise, of parts of an enterprise, or of participations or of investments by the Zurich Insurance Group Ltd or one of its group companies; or
- on national or international capital markets (including private placements to one or more selected investors); or
- for the improvement of the regulatory capital position of the Zurich Insurance Group Ltd or one of its group companies in a fast and expeditious manner.

If the advance subscription rights are restricted or excluded by a resolution of the Board, the following applies: the Financial Instruments are to be issued at prevailing market conditions (including standard dilution protection clauses in accordance with market practice) and the setting of the conversion or issue price of the new shares must take due account of the stock market price of the shares and/or comparable instruments priced by the market at the time of issue or time of conversion.

Holding company (continued)

The conversion rights may be exercisable during a maximum of ten years and option rights during a maximum of seven years from the time of the respective issue; contingent conversion features may remain in place indefinitely.

Up to April 4, 2020, the total of new shares issued from (i) authorized share capital where the subscription rights were restricted or excluded, and (ii) contingent share capital in connection with Financial Instruments where the advance subscription rights were restricted or excluded, may not exceed 30,000,000 new shares.

Employee participation
On January 1, 2018, the contingent share capital, to be issued to employees of Zurich Insurance Group Ltd and its subsidiaries, amounted to CHF 495,540.80 or 4,955,408 fully paid registered shares with a nominal value of CHF 0.10 each. On January 1, 2017, the contingent share capital, to be issued to employees of Zurich Insurance Group Ltd and its subsidiaries, amounted to CHF 68,785.30 or 687,853 fully paid registered shares with a nominal value of CHF 0.10 each.

During 2018 and 2017, 8,176 shares and 732,445 shares, respectively, were issued to Group employees from contingent share capital. The remaining contingent share capital, which can be issued to employees amounted to CHF 494,723.20 and CHF 495,540.80 or 4,947,232 and 4,955,408 fully paid registered shares as of December 31, 2018 and 2017, respectively, with a nominal value of CHF 0.10 each. Subscription rights of the shareholders, as well as advance subscription rights, are excluded. The issuance of new shares or respective option rights to employees is subject to one or more regulations to be issued by the Board and takes into account performance, functions, levels of responsibility and criteria of profitability. New shares or option rights may be issued to employees at a price lower than that quoted on the stock exchange.

11. Capital contribution reserve

Capital contribution reserve

in CHF thousands	**2018**	2017
As of January 1	494,374	1,154,003
Transfer to free reserve (adjustment capital contribution reserve)	(19)	(1,960)
Dividend payment out of capital contribution reserve	(208,759)	(855,656)
Agio on share-based payment transactions	1,910	197,987
As of December 31	**287,506**	**494,374**

12. Reserves for treasury shares (indirectly held via subsidiaries)

These reserves correspond to the purchase value of all Zurich Insurance Group Ltd shares held by companies of the Zurich Insurance Group as shown in the table below.

Reserves for treasury shares (indirectly held via subsidiaries)

	Number of shares 2018	**Purchase value 2018[1]**	Number of shares 2017	Purchase value 2017[1]
As of January 1	1,156,567	282,088	1,203,523	293,522
Purchases during the year	1,634,015	502,359	–	–
Sales during the year	(448,150)	(133,354)	(46,956)	(11,434)
As of December 31	**2,342,432**	**651,093**	**1,156,567**	**282,088**
Thereof held in capital contribution reserve				
As of January 1	1,156,567	282,088	1,203,523	293,522
As of December 31	**1,064,728**	**259,755**	**1,156,567**	**282,088**
Thereof held in general legal reserve				
As of January 1	–	–	–	–
As of December 31	**1,277,704**	**391,338**	**–**	**–**
Average purchase price, in CHF		307		–
Average selling price, in CHF		319		262

[1] in CHF thousands

13. Free reserve

Free reserve

in CHF thousands	2018	2017
As of January 1	344,624	342,664
Transfer from capital contribution reserve	19	1,960
As of December 31	**344,643**	**344,624**

14. Shareholders

According to information available as of December 31, 2018, Zurich Insurance Group Ltd is not aware of any person or institution, other than BlackRock, Inc., New York, (>5 percent of the shares) and The Capital Group Companies, Inc., Los Angeles, (>3 percent of the shares) which, directly or indirectly, had an interest as a beneficial owner in shares, option rights and/or conversion rights relating to shares of Zurich Insurance Group Ltd exceeding the relevant thresholds prescribed by law.

15. Remuneration of the Board of Directors and the Executive Committee

The information required by articles 14–16 of the Ordinance Against Excessive Compensation, which prevails over article 663bbis of the Swiss Code of Obligations, is disclosed and audited in the remuneration report on pages 80 to 113 of this Annual Report.

16. Shareholdings of the Board of Directors and the Executive Committee

The information on share and share option holdings of Directors and of the members of the Executive Committee (ExCo), who held office as of December 31, 2018, as required by article 663c paragraph 3 and article 959c paragraph 2 cif 11 of the Swiss Code of Obligations is included and audited in the remuneration report on pages 80 to 113 of this Annual Report.

17. Supplementary information

Cash and cash equivalents of CHF 2.6 million include restricted cash of CHF 0.3 million as of December 31, 2018, compared to cash and cash equivalents of CHF 534.7 million and thereof restricted cash of CHF 0.4 million in the previous year.

Proposed appropriation of available earnings

as of December 31	2018	2017
Registered shares eligible for dividends[1]		
Eligible shares	151,348,027	151,339,851

[1] These figures are based on the share capital issued on December 31, 2018, and may change depending on the number of shares issued on April 8, 2019. Treasury shares are not entitled to dividends and will not be taken into account.

The Board of Directors proposes to the shareholders at the Annual General Meeting on April 3, 2019, a dividend of CHF 19.00 per share.

in CHF thousands	Available earnings
Available earnings	
As of January 1, 2018	*15,529,736*
Dividends paid	*(2,475,287)*
Net income after taxes	*66,591*
Allocation to reserve for treasury shares (indirectly held via subsidiaries)	*(391,338)*
Available earnings, as of December 31, 2018	**12,729,702**

in CHF thousands	Available earnings
Appropriation of available earnings	
As of January 1, 2019	12,729,702
Dividend payment out of available earnings[1]	(2,875,613)
Balance carried forward[1]	**9,854,089**

[1] This figure is based on the share capital issued on December 31, 2018, and may change depending on the number of shares issued on April 8, 2019. Treasury shares are not entitled to dividends and will not be taken into account.

The Board of Directors proposes to the shareholders at the Annual General Meeting on April 3, 2019, to pay a dividend of CHF 2,876 million out of available earnings and to carry forward retained earnings of CHF 9,854 million as shown in the above table.

If this proposal is approved, a dividend of CHF 19.00 per share, less 35 percent for Swiss withholding tax, is expected to be paid starting from April 9, 2019.

Zurich, February 6, 2019

On behalf of the Board of Directors of Zurich Insurance Group Ltd

Michel M. Liès

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Report of the statutory auditor

Report of the statutory auditor

To the General Meeting of Zurich Insurance Group Ltd, Zurich

Report on the audit of the financial statements

Opinion
We have audited the financial statements of Zurich Insurance Group Ltd, which comprise the income statement for the year ended December 31, 2018, balance sheet as at December 31, 2018, and notes, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements as at December 31, 2018 comply with Swiss law and the Company's articles of association.

Basis for opinion
We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report.

We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview

Overall audit materiality: CHF 135 million

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the entity, the accounting processes and controls, and the industry in which the entity operates.

As key audit matter the following area of focus has been identified:

Valuation of Investments in subsidiaries

Audit scope

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we considered where subjective judgments were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Audit materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material, if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgment, we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the financial statements as a whole.

Overall audit materiality	CHF 135 million
How we determined it	1% of total assets
Rationale for the materiality benchmark applied	We chose total assets as the benchmark because, in our view, it is the relevant benchmark for a holding company with no own business activities, and is a generally accepted benchmark.

We agreed with the Audit Committee that we would report to them misstatements above CHF 13.5 million identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority
Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of Investments in subsidiaries

Key audit matter	How our audit addressed the key audit matter
We consider the investments in subsidiaries to be a key audit matter not only due to the judgment involved but also based on the magnitude of CHF 11.4 billion, which makes up more than 83% of the Company's total assets. The determination whether an investment in subsidiary needs to be impaired includes assumptions about the profitability of the underlying business and growth, which involves management's judgment. Investments in subsidiaries are carried at cost less necessary impairments and valued on an individual basis. Management assesses whether there are any impairments in the carrying value of the investments in subsidiaries. As a first step the Company compares the carrying value to the IFRS net asset value of the subsidiary as at December 31. If the net asset value is below the carrying value, then the Company may perform a valuation of the subsidiary by using a discounted cash flow analysis. If the valuations still indicate a need for an impairment, the Company reduces the carrying value of the investment in subsidiary accordingly. We refer to note 3, para b) ("Summary of significant accounting policies") and note 8 ("Investments in subsidiaries") to the financial statements 2018.	In relation to the particular matters set out opposite, our testing procedures included the following: – Assessed the appropriateness of the Company's impairment testing methodology. – Obtained an understanding of management's process and controls. – Tested the mathematical accuracy of management's calculations. – Re-performed management's impairment test on the carrying value of each investment in subsidiary, and challenged the impairment decisions taken. – Tested the required disclosures in the notes to the financial statements. We determined that the carrying value of investments in subsidiaries and the decisions made in connection with potential impairments thereof are reasonable and supportable. The methodology used by management serves as an adequate and sufficient basis for their decisions.

Responsibilities of the Board of Directors for the financial statements
The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the Company's articles of association, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements
Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and Swiss Auditing Standards will always detect a material misstatement when it exists. 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 financial statements.

A further description of our responsibilities for the audit of the financial statements is located at the website of EXPERTsuisse: http://expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

Report on other legal and regulatory requirements
In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the Company's articles of association. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG

Mark Humphreys
Audit expert
Auditor in charge

Ray Kunz
Audit expert

Zurich, February 6, 2019

Independent auditor's report

On the conditional capital increase to the Board of Directors of Zurich Insurance Group Ltd, Zurich

We have audited the issue of new shares by Zurich Insurance Group Ltd in the period from January 1, 2018, to December 31, 2018, pursuant to the resolutions of the general meeting of March 29, 2017, and April 4, 2018, in accordance with article 653f para. 1 Code of Obligations (CO).

Board of Directors' responsibility
The Board of Directors is responsible for the issue of new shares in accordance with the legal requirements and the Company's articles of association.

Auditor's responsibility
Our responsibility is to express an opinion based on our audit as to whether the issue of new shares complies with Swiss law and the Company's articles of association. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the issue of new shares complies with the legal requirements and Company's articles of association.

An audit involves performing procedures to obtain audit evidence so that material breaches of the legal requirements and the Company's articles of association for the issue of new shares may be identified with reasonable assurance. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material breaches of the requirements concerning the issue of new shares, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the issue of 8,176 registered shares with a nominal value of CHF 0.10 complies with Swiss law and the Company's articles of association.

PricewaterhouseCoopers AG

Mark Humphreys Audit expert	Nicolas Juillerat Audit expert

Zurich, January 18, 2019

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Glossary

Group

Book value per share
is a measure that is calculated by dividing shareholders' equity by the number of shares issued less the number of treasury shares as of the period end.

Business operating profit (BOP)
is the Group's internal performance measure, on which the Group manages all of its business units. It indicates the underlying performance, after non-controlling interests, by eliminating the impact of financial market volatility and other non-operational variables. BOP reflects adjustments for shareholders' taxes, net capital gains/(losses) and impairments on investments (except for certain non-insurance operations included in Non-Core Businesses, investments in hedge funds as at fair value through profit or loss, certain securities held for specific economic hedging purposes and policyholders' share of investment results for the life businesses) and non-operational foreign exchange movements. Significant items arising from special circumstances, including restructuring charges, legal matters or large one-off regulatory projects outside the ordinary course of business, gains and losses on divestment of businesses, certain business combination integration costs and impairments of goodwill are also excluded from BOP. **Business operating profit before interest, depreciation and amortization (BOPBIDA)** excludes interest expense on debt, depreciation and impairments of property and equipment and amortization and impairments of intangible assets. BOPBIDA includes amortization of deferred policy acquisition costs, deferred origination costs and distribution agreements.

Business operating profit (after-tax) return on shareholders' equity (BOPAT ROE)
indicates the level of BOP relative to resources provided by shareholders. It is calculated as BOP, annualized on a linear basis and adjusted for taxes, divided by the average value of shareholders' equity, adjusted for net unrealized gains/(losses) on available-for-sale investments and cash flow hedges, using the value at the beginning and end of each quarter within the period. The average shareholders' equity for each quarter is then added together and divided by the number of quarters. If the dividend is approved at the Annual General Meeting within the first ten working days in April, then the dividend is deducted from the second quarter opening shareholders' equity.

Investments
Total investments in the consolidated balance sheets include Group investments and investments for unit-linked contracts. **Group investments** are those for which the Group bears part or all of the investment risk. They also include investments related to investment contracts with discretionary participation features. Average invested assets include investment cash, but exclude cash collateral received for securities lending. The Group manages its diversified investment portfolio to optimize benefits for both shareholders and policyholders while ensuring compliance with local regulatory and business requirements under the guidance of the Group's Asset/Liability Management and Investment Committee. **Investments for unit-linked contracts** include investments where the policyholder bears the investment risk, and are held for liabilities related to unit-linked investment contracts and reserves for unit-linked contracts. They are managed in accordance with the investment objectives of each unit-linked fund. The investment result for unit-linked products is passed to policyholders through a charge to policyholder dividends and participation in profits.

Return on shareholders' equity (ROE)
is a measure that indicates the level of profit or loss relative to resources provided by shareholders. It is calculated as net income after taxes attributable to shareholders, annualized on a linear basis, divided by the average value of shareholders' equity, adjusted for net unrealized gains/(losses) on available-for-sale investments and cash flow hedges, using the value at the beginning and end of each quarter within the period. The average shareholders' equity for each quarter is then added together and divided by the number of quarters. If the dividend is approved at the Annual General Meeting within the first ten working days in April, then the dividend is deducted from the second quarter opening shareholders' equity.

Property & Casualty

The following Property & Casualty (P&C) measures are net of reinsurance.

Net underwriting result
is calculated as the difference between net earned premiums and policy fees and the sum of net insurance benefits and losses and net technical expenses.

Total net technical expenses
includes underwriting and policy acquisition costs, as well as the technical elements of administrative and other operating expenses, amortization of intangible assets, interest credited to policyholders and other interest, and other income.

Combined ratio
is a performance measure that indicates the level of claims and net technical expenses during the period relative to net earned premiums and policy fees. It is calculated as the sum of the loss ratio and the expense ratio.

Loss ratio
is a performance measure that indicates the level of claims during the period relative to net earned premiums and policy fees. It is calculated as insurance benefits and losses net, which include paid claims, claims incurred but not reported (IBNR) and claims handling costs, divided by net earned premiums and policy fees.

Expense ratio
is a performance measure that indicates the level of technical expenses during the period relative to net earned premiums and policy fees. It is calculated as the sum of net technical expenses and policyholder dividends and participation in profits, divided by net earned premiums and policy fees.

Net non-technical result
includes expenses or income not directly linked to insurance operating performance, such as gains/losses on foreign currency translation and interest expense on debt. It includes the impact of financial market volatility and other non-operational variables that distort the ongoing business performance.

Life

Embedded value (EV) principles
is a methodology using a "bottom-up" market consistent approach, which explicitly allows for market risk. In particular, asset and liability cash flows are valued using risk discount rates consistent with those applied to similar cash flows in the capital markets. Options and guarantees are valued using market consistent models calibrated to observable market prices.

Insurance deposits
are deposits, similar to customer account balances, not recorded as revenues. However, the fees charged on insurance deposits are recorded as revenue within gross written premiums and policy fees. These deposits arise from investment contracts and insurance contracts that are accounted for under deposit accounting. They represent the pure savings part, which is invested.

New business annual premium equivalent (APE)
is calculated as new business annual premiums plus 10 percent of single premiums, before the effect of non-controlling interests. **Present value of new business premiums (PVNBP)** is calculated as the value of new business premiums discounted at the risk-free rate, before the effect of non-controlling interests.

New business value, after tax
is a measure that reflects the value added by new business written during the period, including allowances for frictional costs, time value of options and guarantees, and the cost of non-market risk, and is valued at the point of sale. It is calculated as the present value of the projected after-tax profit from life insurance contracts sold during the period using a valuation methodology consistent with the EV principles, after the effect of non-controlling interests.

Farmers

Gross management result
is a performance measure of Farmers Management Services calculated as management fees and other related revenues minus management and other related expenses, including amortization and impairments of intangible assets.

Managed gross earned premium margin
is a performance measure calculated as the gross operating profit of Farmers Management Services divided by the gross earned premiums of the Farmers Exchanges, which are owned by their policyholders. Farmers Group, Inc., a wholly owned subsidiary of the Group, provides certain non-claims administrative, management, and ancillary services to the Farmers Exchanges.

Contact information

For more information please contact the appropriate office below, or visit our website at www.zurich.com

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Financial calendar

For more information see page 21 of this report or website:
www.zurich.com/en/investor-relations/calendar

Our 2018 reports

Annual Review 2018
The Annual Review provides information about our strategy and business activities. It includes examples of how we are delivering on our strategy, related in narratives and through imagery. It is available in English and German.

Annual Report 2018
The Annual Report provides information about our strategy and business activities, governance and executive bodies, remuneration and financial and non-financial performance. It is available in English and German, with the financial statements in English only.

Both the Annual Review and Annual Report are available online and in print.

Disclaimer and cautionary statement

Certain statements in this document are forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans or objectives of Zurich Insurance Group Ltd or the Zurich Insurance Group (the Group). Forward-looking statements include statements regarding the Group's targeted profit, return on equity targets, expenses, pricing conditions, dividend policy and underwriting and claims results, as well as statements regarding the Group's understanding of general economic, financial and insurance market conditions and expected developments. Undue reliance should not be placed on such statements because, by their nature, they are subject to known and unknown risks and uncertainties and can be affected by other factors that could cause actual results and plans and objectives of Zurich Insurance Group Ltd or the Group to differ materially from those expressed or implied in the forward-looking statements (or from past results). Factors such as (i) general economic conditions and competitive factors, particularly in key markets; (ii) the risk of a global economic downturn; (iii) performance of financial markets; (iv) levels of interest rates and currency exchange rates; (v) frequency, severity and development of insured claims events; (vi) mortality and morbidity experience; (vii) policy renewal and lapse rates; and (viii) changes in laws and regulations and in the policies of regulators may have a direct bearing on the results of operations of Zurich Insurance Group Ltd and its Group and on whether the targets will be achieved. Zurich Insurance Group Ltd undertakes no obligation to publicly update or revise any of these forward-looking statements, whether to reflect new information, future events or circumstances or otherwise.

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It should be noted that past performance is not a guide to future performance.
Please also note that interim results are not necessarily indicative of full year results.

Persons requiring advice should consult an independent advisor.

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The Annual Report is published in English and German, with the financial statements in English only. In the event of inconsistencies in the German translation, the English original version shall prevail.

Our reporting consists of the Annual Report, which is divided into the Group overview, the governance, the risk review and the financial review, and which contains the annual financial statements (Holding Company) and the consolidated financial statements. With regards to content, the management report as per the Articles of Association consists of the aforementioned reports excluding the remuneration report.

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