BUSINESS OPERATIONS

Allianz Group structure

Allianz SE and its subsidiaries (the Allianz Group) offer property-casualty insurance, life/health insurance, and asset management products and services in over 70 countries, with the largest of our operations located in Europe. The Allianz Group serves more than 100 million private and corporate customers[1]. Allianz SE, the parent company of the Allianz Group, has its headquarters in Munich, Germany.

The Allianz Group's structure reflects both our business segments and geographical regions. Business activities are organized by product and type of service, based on how these are strategically managed: insurance activities, asset management activities, and corporate and other activities. Due to differences in the nature of products, risks, and capital allocation, insurance activities are further divided into the two categories property-casualty and life/health. In accordance with the Board of Management's responsibilities, each of the insurance categories is grouped into regional reportable segments. In 2020, the Allianz Group had 11 reportable segments.

Allianz Group structure – business segments and reportable segments[2]

PROPERTY-CASUALTY	LIFE/HEALTH
– German Speaking Countries and Central & Eastern Europe – Western & Southern Europe and Asia Pacific – Iberia & Latin America and Allianz Partners – Global Insurance Lines & Anglo Markets, Middle East and Africa	– German Speaking Countries and Central & Eastern Europe – Western & Southern Europe and Asia Pacific – Iberia & Latin America – USA – Global Insurance Lines & Anglo Markets, Middle East and Africa
ASSET MANAGEMENT	**CORPORATE AND OTHER**
– Asset Management	– Corporate and Other

Insurance operations

We offer a wide range of property-casualty and life/health insurance products to both retail and corporate customers. For the Property-Casualty business segment, these include motor, accident, property, general liability, travel insurances, and assistance services. The Life/Health business segment offers savings and investment-oriented products in addition to life and health insurance. We are the leading property-casualty insurer worldwide and rank among the top five in the life/health insurance business[3]. Our key markets (in terms of premiums) are Germany, France, Italy, and the United States.

Most of our insurance markets are served by local Allianz companies. However, some business lines – such as Allianz Global Corporate & Specialty (AGCS), Allianz Partners (AP), and Euler Hermes – are run globally.

Asset Management

Our two major investment management entities, PIMCO and AllianzGI, operate under the governance of Allianz Asset Management (AAM). We are one of the largest asset managers in the world that actively manage assets. Our offerings cover a wide range of equity, fixed income, cash, and multi-assets products as well as a strongly growing number of alternative investment products, such as infrastructure debt/equity, real assets, liquid alternatives, and solution business. Our core markets are the United States, Canada, Germany, France, Italy, the United Kingdom, and the Asia-Pacific region. As of October 2020, PIMCO officially assumed oversight of Allianz Real Estate and, as a result, Allianz Real Estate was transferred from the Corporate and Other business segment into the Asset Management business segment. The combined entity forms one of the world's largest and most diversified real estate platforms.

Corporate and Other

The Corporate and Other business segment's activities include the management and support of the Allianz Group's businesses through its central Holding functions, Banking and Alternative as well as Digital Investments. The Holding functions manage and support the Group's businesses through its strategy, risk, corporate finance, treasury, financial reporting, controlling, communication, legal, human resources, technology, and other functions. Our Banking operations, which place a primary focus on retail clients, support our insurance business and complement the products we offer in Italy, France, and Bulgaria. Digital Investments identifies and invests in digital growth companies and provides digital investment management services and an interface between portfolio companies and the Allianz Group.

1_Including non-consolidated entities with Allianz customers.
2_For further information on organizational changes, please refer to the Executive Summary of 2020 Results.
3_Based on currently available peer data. Final peer analysis first available after publication of this Annual Report, due to the ongoing peers' full year reporting season.

Worldwide presence and business segments

Market presence of our business operations[1]

	Property-Casualty	Life/Health	Banking
Insurance German Speaking Countries, Insurance Central & Eastern Europe			
Germany	■	■	
Switzerland	■	■	
Central & Eastern Europe			
Austria	■	■	
Bulgaria	■	■	■
Croatia	■	■	
Czech Republic	■	■	
Hungary	■	■	
Poland	■	■	
Romania	■	■	
Slovakia	■	■	
Russia	■	■	
Ukraine	■		
Insurance Western & Southern Europe and Asia Pacific			
Europe			
Italy	■	■	■
Greece	■	■	
Turkey	■	■	
France	■	■	■
Belgium	■	■	
The Netherlands	■	■	
Luxembourg	■	■	
Asia Pacific			
China	■	■	
Hong Kong[2]	■		
Indonesia	■	■	
Japan[2]	■	■	
Laos	■		
Malaysia	■	■	
Pakistan		■	
Philippines		■	
Singapore	■		
Sri Lanka	■	■	
Taiwan		■	
Thailand	■	■	
India	■	■	
Insurance Iberia & Latin America and Allianz Partners			
Iberia			
Spain	■	■	
Portugal	■	■	
Latin America			
Argentina	■		
Brazil	■	■	
Colombia	■	■	
Mexico	■	■	
Allianz Partners			
Allianz Partners	■	■	
Allianz Direct			
Allianz Direct	■		
US life insurance			
United States		■	

	Property-Casualty	Life/Health
Global Insurance Lines & Anglo Markets, Insurance Middle East and Africa		
Global Insurance Lines & Anglo Markets		
United Kingdom	■	
Australia	■	■
Ireland	■	
Allianz Global Corporate & Specialty	■	
Euler Hermes	■	
Reinsurance	■	■
Middle East		
Egypt	■	■
Lebanon	■	■
Saudi Arabia	■	■
Africa		
Cameroon	■	■
Congo Brazzaville	■	
Ghana	■	■
Ivory Coast	■	■
Kenya	■	
Madagascar	■	■
Morocco	■	■
Nigeria	■	■
Senegal	■	■

	Retail Asset Management	Institutional Asset Management
Asset Management		
North and Latin America		
United States	■	■
Canada	■	■
Brazil	■	■
Europe		
Germany	■	■
Austria	■	■
France	■	■
Italy	■	■
Ireland	■	■
Luxembourg	■	■
Spain	■	■
Switzerland	■	■
Belgium	■	■
The Netherlands	■	■
United Kingdom	■	■
Sweden	■	■
Asia Pacific		
Japan	■	■
Hong Kong	■	■
Taiwan	■	■
Singapore	■	■
China	■	■
Australia	■	■

■ Property-Casualty ■ Life/Health ■ Banking ■ Retail Asset Management ■ Institutional Asset Management

1_This overview is based on our organizational structure as of 31 December 2020.
2_Property-Casualty business belongs to Allianz Global Corporate & Specialty.

Our steering

BOARD OF MANAGEMENT AND ORGANIZATIONAL STRUCTURE

Allianz SE has a divisional Board structure based on functional and business responsibilities. Business-related divisions reflect our business segments Property-Casualty, Life/Health, Asset Management, and Corporate and Other. In 2020, they were overseen by five board members. The following divisions focus on Group functions and come with business-related responsibilities: Chairman of the Board of Management; Finance, Controlling and Risk; Investment Management; Operations and Allianz Services; Human Resources, Legal, Compliance and M&A; and Business Transformation[1].

For further information on Board of Management members and their responsibilities, please refer to Mandates of the Members of the Board of Management.

TARGET SETTING AND MONITORING

The Allianz Group steers its operating entities and business segments via an integrated management and control process. It begins with the definition of a business-specific strategy and goals, which are discussed and agreed upon between the Holding and operating entities. Based on this strategy, our operating entities prepare three-year plans, which are then aggregated to form the financial plans for the business divisions and for the Allianz Group as a whole. This plan also forms the basis for our capital management. The Supervisory Board approves the plan and sets corresponding targets for the Board of Management. The performance-based remuneration of the Board of Management is linked to short-term and long-term targets to ensure effectiveness and emphasize sustainability. For further details about our remuneration structure, including target setting and performance assessment, please refer to the Remuneration Report.

We continuously monitor our business performance against these targets through monthly reviews – which cover key operational and financial metrics – to ensure we can move quickly and take appropriate measures in the event of negative developments. The Allianz Group uses operating profit and net income as key financial performance indicators across all its business segments. Other indicators include segment-specific figures, such as the combined ratio for Property-Casualty, return on equity[2] and new business margins for Life/Health, and the cost-income ratio for Asset Management. For a comprehensive view of our business segment performance, please refer to the respective chapters on the following pages.

Besides performance steering, we also have a risk steering process in place, which is described in the Risk and Opportunity Report.

Non-financial key performance indicators (KPIs) are used to assess the organizational health of Allianz and are reflected in the annual bonus of the Board of Management. In line with our Renewal Agenda 2.0 motto "Simplicity Wins", Customer Centricity and employee commitment – the two key levers identified – are reflected in two KPIs: the Net Promoter Score (NPS[3]) and the Inclusive Meritocracy Index. For further information on non-financial KPIs, please refer to the Combined Separate Non-Financial Report for the Allianz Group and Allianz SE (according to §§ 289b (3), 315b (3), sentence 1, sentence 2 in conjunction with § 298 (2) of the HGB) and for an overview of the development and expected development of these non-financial KPIs, please refer to the chapter Outlook 2021.

1_This member of the Board of Management also oversees Insurance Iberia & Latin America and Allianz Partners.
2_Excluding unrealized gains/losses on bonds net of shadow accounting.
3_NPS is a measurement of customers' willingness to recommend Allianz. Top-down NPS is measured regularly according to global cross-industry standards and allows benchmarking against competitors in the respective markets.

BUSINESS ENVIRONMENT

Economic environment 2020[1]

2020 was the year of the COVID-19 pandemic, which claimed almost two million lives globally last year and brought entire economies to a standstill. As a result, the world gross domestic product slumped by around 4 %, by far the worst performance since the Second World War. (By comparison, the Financial Crisis caused a drop of only 0.1 % in 2009.) The blow from the pandemic on livelihoods could be cushioned, however – first and foremost in advanced economies – by unprecedented fiscal policy measures: Governments' outlays totaled more than € 10 tn globally. This staggering level of support helped people and companies to endure lockdowns, trade disruptions, and social distancing – at least economically. Corporate insolvencies, for example, even declined by around 10 % globally in 2020, defying economic logic in the face of a severe recession. The flip side of generous fiscal support is rapidly escalating public debt: It reached around 130 % of world gross domestic product in advanced economies in 2020.

The big fall in global economic activity conceals an unusually large dispersion of performance in large economies. Reflecting diverging strategies as well as their differing success in combating the pandemic, the growth gap between China (+ 2.3 % in 2020) and the Eurozone (-6.8 % in 2020) amounted to nine percentage points; the gross domestic product of the United States declined by 3.5 % in 2020.

Capital markets initially reacted with panic to the outbreak of COVID-19; even the U.S. sovereign bond market, the backbone of the global financial system, was not immune to dislocations. But as central banks quickly stepped in, offering provisions of liquidity of unparalleled scale, functionality was restored. As a consequence of the ongoing monetary support, markets enjoyed a strong recovery since the March turbulences, even setting new records in some areas such as corporate bond issuance or initial public offers. Most equity markets concluded 2020 in positive territory, with the U.S. market, measured by the market-wide index S&P 500, setting the pace with a plus of 16 %. On the other hand, interest rates and yields dropped to new record lows: The 10-year U.S. Treasury yield declined from 1.9 % to 0.9 %, while the 10-year Bund yield dropped from -0.2 % to -0.6 % at the end of 2020.

Business environment 2020 for the insurance industry

Initially, COVID-19 impacted both sides of the balance sheet of the insurance industry. But entering the crisis with strong, well-capitalized balance sheets and the quick rebound of markets helped to manage temporary losses on the asset side. On the liability side, however, underwriting losses emerged in particular in travel and event cancellation, credit, and business interruption insurance. At the same time, frozen activity during lockdowns lowered claims frequencies in some lines of business. Global insured losses of natural catastrophes increased sharply in 2020, mainly due to severe storms and wildfires in the United States.

The industry also had to cope with the operational challenge of business continuity amidst lockdowns and social distancing: Accelerating digitalization was the answer to serving clients and maintaining operations while protecting employees during the pandemic.

The **property-casualty sector** proved remarkably resilient in 2020. Specifically, a hardening of rates helped stabilize premium income in commercial lines, while in personal lines the intensive use of digital channels mitigated the impact to new business that was caused by mobility restrictions. Industry profitability came under stress as investment income kept declining. The impact on underwriting profitability, however, was mixed: While some lines of business suffered from COVID-19-related and natural catastrophe losses, others, in particular motor, benefitted from lower claims frequencies during lockdowns.

In the **life sector**, premium income is very likely to have declined in 2020. To start with, products are in general less commoditized and thus less suitable for digital channels. Furthermore, the high uncertainty and ultra-low interest rates weighed on the demand for savings-type insurance products, a trend that could only partially be offset by growing demand for protection products. The overall impact of COVID-19 on industry profitability was ambiguous as lines of business were differently impacted. By and large, profitability remained challenged as falling interest rates and yields affected investment income.

Business environment 2020 for the asset management industry

In 2020, the asset management industry was severely impacted by the COVID-19 driven market disruption at the end of the first quarter. After years of steady growth, the industry's asset base was hit by financial market volatility. Yet, with aid of monetary and fiscal stimulus, markets recovered and the global economy was supported through the crisis. Both bonds and equities saw a year of high returns with the MSCI World Index increasing by 16 % in 2020, overcompensating the effects at the end of the first quarter of 2020.

Overall, global assets continued to grow and exceeded USD 110 tn for the first time. Although active investments still make up for most assets under management, growth in both passive and alternative investments is continuing. Related acceleration in fee and profitability compression for asset managers is partly compensated by an expansion of alternative and private market offerings. Also, asset managers are putting more focus on the growing importance of ESG-engagement (ESG = Environment, Social, Governance) with investors, impacting product design, fund allocation and performance objectives.

During 2020, asset managers continued to invest in digitalization. Accelerated by COVID-19, technology has become even more essential to drive customer engagement, data mining for information on clients, operational efficiency, and regulatory and tax reporting.

1_At the date of the publication of this report, not all general market data for the year 2020 used in the chapter Business Environment was final. Also, please note that the information provided in this chapter is based on our estimates.

EXECUTIVE SUMMARY OF 2020 RESULTS

KEY FIGURES

Key figures Allianz Group[1]

		2020	2019	Delta
Total revenues[2]	€ mn	140,455	142,369	(1,914)
Operating profit[3]	€ mn	10,751	11,855	(1,104)
Net income[3]	€ mn	7,133	8,302	(1,169)
thereof: attributable to shareholders	€ mn	6,807	7,914	(1,107)
Solvency II capitalization ratio[4]	%	207	212	(5) %-p
Return on equity[5]	%	11.4	13.6	(2.2) %-p
Earnings per share	€	16.48	18.90	(2.42)
Diluted earnings per share	€	16.32	18.83	(2.52)

Earnings summary

MANAGEMENT'S ASSESSMENT OF 2020 RESULTS

On an internal basis[6], our total revenues declined by 1.8% compared to the previous year. Although most of this decline was attributable to our Life/Health business in the United States and Germany, our Property-Casualty business segment also registered a decrease, due to lower volumes. Our Asset Management business segment, on the other hand, generated higher revenues based on an all-time high total assets under management (AuM) level.

Our operating profit decreased by 9.3% mostly due to adverse impacts from COVID-19. We registered a decrease in operating profits in three of our four business segments: in Property-Casualty, this was caused by a sharp drop in the underwriting result as well as in the operating investment result, with the former being due to COVID-19-related losses and lower run-off. In Life/Health, operating profit decreased but still remained on a strong level supported by a resilient investment margin. The decline was mainly due to a positive prior-year impact in the United States and the disposal of Allianz Popular S.L. in Spain. In Corporate and Other, the operating result worsened, mainly driven by a lower operating investment result. Our Asset Management business segment, on the other hand, registered operating profit growth from higher average AuM and continued cautious cost management.

Our operating investment result decreased by € 220 mn to € 23,634 mn, driven by significantly higher impairments and lower interest and similar income, partly offset by higher realizations on debt securities and a higher trading result.

Our non-operating result worsened by € 370 mn, resulting in a € 1,148 mn loss. Key drivers were higher restructuring and integration expenses.

Income taxes decreased by € 305 mn to € 2,471 mn, a result of lower pre-tax income. The effective tax rate increased to 25.7% (2019: 25.1%), mostly due to the absence of one-off tax benefits compared to 2019.

The lower operating profit and worsened non-operating result led to a decrease in net income.

Our shareholders' equity[7] increased by € 6.8 bn to € 80.8 bn, largely due to a net income attributable to shareholders of € 6.8 bn, a € 5.0 bn increase in unrealized gains and losses (net) and the issuance of undated subordinated bonds of € 2.3 bn. Part of the increase was offset by a € 4.0 bn dividend payout, the € 2.2 bn lower foreign currency translation adjustments, as well as € 750 mn for the purchase of 4.9 million own shares[8]. Our Solvency II capitalization ratio was strong at 207%[9].

For a more detailed description of the results generated by each individual business segment (Property-Casualty insurance operations, Life/Health insurance operations, Asset Management, and Corporate and Other), please consult the respective chapters on the following pages.

Other information

RECENT ORGANIZATIONAL CHANGES

As of October 2020, Allianz Real Estate was transferred from the Corporate and Other business segment into the Asset Management business segment.

In the course of 2020, there were only minor reallocations between reportable segments.

Other parts of the Group Management Report

The Group Management Report also entails the following sections:
– Statement on Corporate Management,
– Takeover-Related Statements and Explanations, and the
– Remuneration Report.

1_For further information on Allianz Group figures, please refer to note 5 to the Consolidated Financial Statements.
2_Total revenues comprise Property-Casualty total revenues (gross premiums written and fee and commission income), Life/Health statutory gross premiums written, operating revenues in Asset Management, and total revenues in Corporate and Other (Banking).
3_The Allianz Group uses operating profit and net income as key financial indicators to assess the performance of its business segments and of the Group as a whole.
4_Figures as of 31 December. Figure as of 31 December 2020 excludes the application of transitional measures for technical provisions.
5_Represents the ratio of net income attributable to shareholders to the average shareholders' equity at the beginning of the period and at the end of the period. The net income attributable to shareholders is adjusted for net financial charges related to undated subordinated bonds classified as shareholders' equity. From the average shareholders' equity undated subordinated bonds classified as shareholders' equity and unrealized gains/losses on bonds net of shadow accounting are excluded.
6_Internal total revenue growth excludes the effects of foreign currency translation as well as acquisitions and disposals. For a reconciliation of nominal total revenue growth to internal total revenue growth for each of our business segments and the Allianz Group as a whole, please refer to the chapter Reconciliations.
7_For further information on shareholders' equity, please refer to the Balance Sheet Review.
8_For further information on the share buy-back program, please refer to note 20 to the Consolidated Financial Statements.
9_Including the application of transitional measures for technical provisions, the Solvency II capitalization ratio amounted to 240% as of 31 December 2020. For further information, please refer to the Risk and Opportunity Report.

PROPERTY-CASUALTY INSURANCE OPERATIONS

KEY FIGURES

Key figures Property-Casualty[1]

		2020	2019	Delta
Total revenues[2]	€ mn	59,412	59,156	256
Operating profit	€ mn	4,371	5,045	(674)
Net income	€ mn	2,605	3,983	(1,378)
Loss ratio[3]	%	69.5	68.0	1.5%-p
Expense ratio[4]	%	26.8	27.5	(0.7) %-p
Combined ratio[5]	%	96.3	95.5	0.8%-p

Total revenues[6]

On a nominal basis, we recorded a slight increase in total revenues by 0.4% compared to the previous year.

This included unfavorable foreign currency translation effects to the amount of € 1,088 mn[7] and positive (de)consolidation effects of € 2,201 mn. On an internal basis, our revenues decreased by 1.5%, driven mainly by a negative volume effect of 4.8% and a positive price effect of 3.8%.

The following operations contributed positively to internal growth:

AGCS: Total revenues were € 9,339 mn, a 4.2% increase on an internal basis. Key drivers were price increases in our Liability, Financial Lines, and Property lines of business.

Turkey: Total revenues went up 17.1% on an internal basis, totaling € 1,003 mn. Much of this increase was owed to favorable volume effects in our health and motor insurance business.

Germany: Total revenues amounted to € 10,918 mn, an internal growth of 1.6%. Key drivers were price increases in our motor and property insurance business.

The following operations weighed on internal growth:

Allianz Partners: Total revenues went down 19.0% on an internal basis, totaling € 5,336 mn. The main reason for this was that the COVID-19 pandemic caused a volume decline in our travel insurance business.

Euler Hermes: Total revenues amounted to € 2,755 mn, an internal decrease by 7.0%. Much of it was due to COVID-19-related unfavorable volume effects in our credit insurance business.

Italy: Total revenues fell to € 3,794 mn, a decrease of 5.0% on an internal basis. It was largely due to negative price effects in our motor insurance business.

Operating profit

Operating profit
€ mn

	2020	2019	Delta
Underwriting result	1,639	1,997	(358)
Operating investment income (net)	2,556	2,840	(283)
Other result[1]	175	208	(33)
Operating profit	**4,371**	**5,045**	**(674)**

1_Consists of fee and commission income/expenses and other income/expenses.

We registered a sharp drop in our operating profit. While most of it was driven by our underwriting result, our operating investment income also contributed negatively.

The decrease in our underwriting result was due to an overall negative impact of COVID-19 amounting to € 1.1 bn, higher claims from natural catastrophes, and a lower contribution from run-off. On the other hand, strong improvements on the expenses side had a partially offsetting effect. Overall, our combined ratio deteriorated by 0.8 percentage points to 96.3%.

Underwriting result
€ mn

	2020	2019	Delta
Premiums earned (net)	51,631	51,328	303
Accident year claims	(36,314)	(35,959)	(355)
Previous year claims (run-off)	431	1,059	(628)
Claims and insurance benefits incurred (net)	(35,883)	(34,900)	(983)
Acquisition and administrative expenses (net)	(13,846)	(14,119)	273
Change in reserves for insurance and investment contracts (net) (without expenses for premium refunds)[1]	(263)	(312)	49
Underwriting result	**1,639**	**1,997**	**(358)**

1_Consists of the underwriting-related part (aggregate policy reserves and other insurance reserves) of "change in reserves for insurance and investment contracts (net)". For further information, please refer to note 27 to the Consolidated Financial Statements.

Our accident year loss ratio[8] stood at 70.3%, an increase by 0.3 percentage points compared to the previous year. Losses from natural catastrophes were € 880 mn, compared to € 771 mn in 2019. This translates into a negative effect on our combined ratio of 0.2 percentage points, as the impact from natural catastrophes increased from 1.5 percentage points in 2019 to 1.7 percentage points in 2020.

Leaving aside losses from natural catastrophes, our accident year loss ratio worsened by 0.1 percentage points to 68.6%.

1_For further information on Property-Casualty figures, please refer to note 5 to the Consolidated Financial Statements.
2_Total revenues in Property-Casualty also include fee and commission income.
3_Represents claims and insurance benefits incurred (net) divided by premiums earned (net).
4_Represents acquisition and administrative expenses (net) divided by premiums earned (net).
5_Represents the total of claims and insurance benefits incurred (net) plus acquisition and administrative expenses (net), divided by premiums earned (net).
6_We comment on the development of our total revenues on an internal basis, which means figures have been adjusted for foreign currency translation and (de-)consolidation effects to provide more comparable information.
7_Based on the average exchange rates in 2020 compared to 2019.
8_Represents claims and insurance benefits incurred (net) less previous year claims (run-off), divided by premiums earned (net).

The following operations contributed positively to the development of our accident year loss ratio:

Italy: 0.5 percentage points, due to a reduction in claims frequency.

France: 0.4 percentage points, also driven by a reduction in claims frequency.

Allianz Direct: 0.3 percentage points, due to reduced claims frequencies across all markets, with the strongest impact recorded in our motor insurance business in Italy.

The following operations weighed on the development of our accident year loss ratio:

AGCS: 0.9 percentage points. The deterioration resulted from an increase in natural catastrophes and a severe impact of COVID-19, mostly on the losses from the Entertainment line of business.

Reinsurance: 0.7 percentage points. This increase was mainly due to the negative effects from the COVID-19 pandemic.

Our positive run-off result was € 431 mn – after € 1,059 mn in 2019 – translating into a run-off ratio of 0.8 %. Reserve releases stemmed particularly from our operations in Reinsurance, Australia, and Italy, but were in many operations lower compared to 2019, leading to a drop in run-off. AGCS continued to have a negative impact on our run-off result.

Acquisition and administrative expenses amounted to € 13,846 mn in 2020, after € 14,119 mn in the previous year. Our expense ratio improved significantly by 0.7 percentage points to 26.8 %, as it benefited from our acquisitions in the United Kingdom and a positive business mix development at Allianz Partners.

Operating investment income (net)
€ mn

	2020	2019	Delta
Interest and similar income (net of interest expenses)	3,061	3,314	(252)
Operating income from financial assets and liabilities carried at fair value through income (net)	(28)	(57)	28
Operating realized gains (net)	131	204	(73)
Operating impairments of investments (net)	(141)	(42)	(99)
Investment expenses	(421)	(426)	5
Expenses for premiums refunds (net)[1]	(45)	(153)	108
Operating investments income (net)[2]	**2,556**	**2,840**	**(283)**

1_Refers to policyholder participation, mainly from APR business (accident insurance with premium refunds), reported within "change in reserves for insurance and investment contracts (net)". For further information, please refer to note 27 to the Consolidated Financial Statements.

2_The operating investment income (net) of our Property-Casualty business segment consists of the operating investment result – as shown in note 5 to the Consolidated Financial Statements – and expenses for premium refunds (net) (policyholder participation).

Our operating investment income (net) decreased, mainly because the interest and similar income (net of interest expenses) worsened due to a lower reinvestment yield and a lower dividend income.

Other result
€ mn

	2020	2019	Delta
Fee and commission income	1,640	1,946	(305)
Other income	152	153	(1)
Fee and commission expenses	(1,617)	(1,888)	271
Other expenses	(1)	(2)	2
Other result	**175**	**208**	**(33)**

Our other result declined mostly due to negative developments in our credit insurance business.

Net income

Our net income decreased by a significant € 1,378 mn. Along with the reduction in our operating profit, our non-operating result decreased significantly by € 771 mn. It was strongly affected by a deterioration of our non-operating investment result and increasing restructuring expenses related to our efficiency initiatives.

LIFE/HEALTH INSURANCE OPERATIONS

KEY FIGURES

Key figures Life/Health[1]

		2020	2019	Delta
Statutory premiums[2]	€ mn	74,044	76,426	(2,382)
Operating profit	€ mn	4,359	4,708	(349)
Net income	€ mn	3,766	3,523	243
Return on equity[3]	%	12.8	12.7	0.0%-p

Statutory premiums[4]

On a nominal basis, our statutory premiums decreased by 3.1 %, impacted by COVID-19 restrictions. This includes unfavorable foreign currency translation effects of € 510 mn as well as positive (de-)consolidation effects of € 137 mn. On an internal basis, statutory premiums dropped by 2.6 % – or € 2,009 mn – to € 74,296 mn.

In the German life business, statutory premiums totaled € 26,232 mn, a 5.4% decrease on an internal basis that was largely driven by lower single premium sales in our business with capital-efficient products. In the German health business, statutory premiums went up to € 3,741 mn. The increase – 4.6% on an internal basis – mainly resulted from premium adjustments in comprehensive healthcare coverage as well as from the acquisition of new customers in supplementary healthcare coverage.

In the United States, statutory premiums declined to € 9,915 mn, a decrease of 17.6% on an internal basis. Most of it was caused by declining sales of fixed index annuity products, with the effect partly offset by higher sales for non-traditional variable annuity products.

In Italy, statutory premiums grew to € 12,487 mn. Key drivers of this increase – 15.4 % on an internal basis – were stronger sales for unit-linked and capital-efficient products, while weaker sales of guaranteed savings & annuities contributed negatively.

In France, statutory premiums decreased to € 7,409 mn, an 8.8% drop on an internal basis. It was largely attributable to lower sales of our guaranteed savings & annuity products.

In the Asia-Pacific region, statutory premiums went up to € 6,049 mn, translating into a 9.3 % increase on an internal basis. For the most part, it was due to sales increases for unit-linked products in Indonesia as well as guaranteed savings & annuity products in Taiwan.

Present value of new business premiums (PVNBP)[5]

Our PVNBP decreased by € 5,450 mn to € 65,448 mn, impacted by COVID-19 restrictions. Most of the drop was a result of the lower sales volumes for capital-efficient products in the German life business, fixed index annuities in the United States, and guaranteed savings & annuities in France. The negative effects were partly offset by increased volumes from unit-linked products in Italy.

Present value of new business premiums (PVNBP) by lines of business
%

	2020	2019	Delta
Guaranteed savings & annuities	13.6	18.9	(5.3)
Protection & health	17.4	15.4	2.0
Unit-linked without guarantee	24.4	20.2	4.2
Capital-efficient products	44.6	45.5	(0.9)
Total	**100.0**	**100.0**	**-**

Operating profit[6]

OPERATING PROFIT BY PROFIT SOURCES[7]

Operating profit by profit sources
€ mn

	2020	2019	Delta
Loadings and fees	6,605	6,713	(108)
Investment margin	4,194	4,039	155
Expenses	(7,365)	(7,461)	96
Technical margin	1,132	1,174	(42)
Impact of changes in DAC	(206)	243	(450)
Operating profit	**4,359**	**4,708**	**(349)**

Our operating profit decreased, mainly due to increased hedging expenses and a loss recognition in the United States, as well as a lower investment margin in France. Other drivers included the extension of the amortization period for deferred acquisition costs in the United States in 2019, resulting in a favorable effect in that year, as well as the disposal of Allianz Popular S.L. in Spain. Positive effects partly offsetting the decrease came from the unlocking of assumptions, as well as from a model refinement in the United States, an improved investment margin in our German life business due to a higher reserve base, and increased unit-linked management fees in Italy. We also registered higher volumes and lower claims in the Asia-Pacific region.

1_For further information on Allianz Life/Health figures, please refer to note 5 to the Consolidated Financial Statements.
2_Statutory premiums are gross premiums written from sales of life and health insurance policies, as well as gross receipts from sales of unit-linked and other investment-oriented products, in accordance with the statutory accounting practices applicable in the insurer's home jurisdiction.
3_Represents the ratio of net income to the average total equity, excluding unrealized gains/losses on bonds, net of shadow accounting, at the beginning of the year and at the end of the year.
4_In this section, our comments in the following section on the development of statutory gross premiums written refer to values determined "on an internal basis", i.e. adjusted for foreign currency translation and (de-) consolidation effects, in order to provide more comparable information.
5_PVNBP before non-controlling interests.
6_Prior year figures changed in order to reflect the refinement of profit source reporting in the USA.
7_The purpose of the analysis of Life/Health operating profit sources is to explain movements in IFRS results by analyzing underlying drivers of performance, consolidated for the Life/Health business segment.

The negative effects on our operating profit that were due to COVID-19 amounted to € 0.2 bn in 2020, and resulted mainly from market downturns in the first quarter of 2020.

LOADINGS AND FEES[1]

Loadings and fees
€ mn

	2020	2019	Delta
Loadings from premiums	4,229	4,322	(93)
Loadings from reserves	1,655	1,639	16
Unit-linked management fees	721	752	(31)
Loadings and fees[1]	**6,605**	**6,713**	**(108)**
Loadings from premiums as % of statutory premiums	5.7	5.7	0.1
Loadings from reserves as % of average reserves[1,2]	0.3	0.3	-
Unit-linked management fees as % of average unit-linked reserves[2,3]	0.5	0.5	-

1_Aggregate policy reserves and unit-linked reserves.
2_Yields are pro rata.
3_Unit-linked management fees, excluding asset management fees, divided by unit-linked reserves.

Loadings from premiums decreased as sales volumes declined, above all, for capital-efficient products in our German life business, but also in guaranteed savings & annuities in Thailand. Stronger sales of protection & health products in the United States partly offset this development. Loadings from reserves went up, largely driven by higher reserve volumes in our German life business and remained stable in relation to reserves. Unit-linked management fees went down, mainly due to the disposal of Allianz Popular S.L. in Spain, an effect partly compensated by an increase in Italy that, for the most part, resulted from an increase in assets under management.

INVESTMENT MARGIN[2]

Investment margin
€ mn

	2020	2019	Delta
Interest and similar income	18,022	18,648	(626)
Operating income from financial assets and liabilities carried at fair value through income (net)	33	(1,707)	1,740
Operating realized gains/losses (net)	8,687	5,997	2,690
Interest expenses	(117)	(121)	4
Operating impairments of investments (net)	(4,466)	(1,201)	(3,266)
Investment expenses	(1,681)	(1,592)	(89)
Other[1]	(185)	637	(822)
Technical interest	(9,081)	(9,071)	(10)
Policyholder participation	(7,019)	(7,552)	534
Investment margin	**4,194**	**4,039**	**155**
Investment margin in basis points[2,3]	86	86	-

1_"Other" comprises the delta of out-of-scope entities, on the one hand, which are added here with their respective operating profit and different line item definitions compared to the financial statements, such as interest paid on deposits for reinsurance, fee and commission income, and expenses excluding unit-linked management fees on the other hand.
2_Investment margin divided by the average of current end-of-period and previous end-of-period aggregate policy reserves.
3_Yields are pro rata.

Our investment margin increased. In the United States, we registered positive effects from the unlocking of assumptions and from a model refinement in both our fixed index and our variable annuity businesses as well as from a recovered spread margin in the fixed index annuity business. On the other hand, we saw increased hedging expenses, due to market turbulences caused by the COVID-19 pandemic in our variable annuity business, which, however, only partly offset the positive developments. In our German life business, higher realizations from debt securities and equity instruments and an increased trading result outweighed higher impairments from equities and a decrease in interest income. In Switzerland, increased realizations and reduced reserve strengthening contributed positively. Negative developments included an increase in impairments from equities, due to the pandemic, and a decline in interest income in France, which could not be offset by higher realizations and lower policyholder participations.

1_Loadings and fees include premium and reserve based fees, unit-linked management fees, and policyholder participation in expenses.

2_The investment margin is defined as IFRS investment income net of expenses, less interest credited to IFRS reserves and policyholder participation (including policyholder participation beyond contractual and regulatory requirements mainly for the German life business).

EXPENSES[1]

Expenses
€ mn

	2020	2019	Delta
Acquisition expenses and commissions	(5,458)	(5,638)	180
Administrative and other expenses	(1,907)	(1,823)	(84)
Expenses	**(7,365)**	**(7,461)**	**96**
Acquisition expenses and commissions as % of PVNBP[1]	(8.3)	(8.0)	(0.4)
Administrative and other expenses as % of average reserves[2,3]	(0.3)	(0.3)	-

1_PVNBP before non-controlling interests.
2_Aggregate policy reserves and unit-linked reserves.
3_Yields are pro rata.

Acquisition expenses and commissions decreased along with lower sales volumes, particularly in our U.S. fixed index annuity business and in our capital-efficient products in our German life business. This was partly offset by higher unit-linked sales in Italy as well as stronger protection & health sales in France. Administrative and other expenses went up along with the increase in our reserves.

TECHNICAL MARGIN[2]

Our technical margin decreased, mainly because of a lower lapse margin in the United States but also deteriorated risk margins in Switzerland and France. The deconsolidation of Allianz Popular S.L. in Spain also weighed on the margin. Positive factors included lower claims and volume growth in the Asia-Pacific region as well as an improved lapse result in Italy.

IMPACT OF CHANGE IN DEFERRED ACQUISITION COSTS (DAC)[3]

Impact of change in DAC
€ mn

	2020	2019	Delta
Capitalization of DAC	1,745	1,813	(68)
Amortization, unlocking, and true-up of DAC	(1,951)	(1,570)	(382)
Impact of change in DAC	**(206)**	**243**	**(450)**

The impact of change in DAC turned negative, driven mainly by our business in the United States. After an extension of the DAC amortization period had caused a favorable effect in the previous year, amortization rose, also due to the loss recognition in the long-term care business. Other drivers included the unlocking of assumptions in both our fixed index and our variable annuity businesses as well as the recovered spread margin in the fixed index annuity business. Lower capitalization was largely due to lower sales volumes in our fixed index annuity products in the United States, an effect partly compensated by stronger sales of unit-linked products in Italy and guaranteed savings & annuity products in Taiwan.

OPERATING PROFIT BY LINES OF BUSINESS

Operating profit by lines of business
€ mn

	2020	2019	Delta
Guaranteed savings & annuities	2,003	2,421	(418)
Protection & health	781	851	(70)
Unit-linked without guarantee	488	552	(65)
Capital-efficient products	1,087	883	205
Operating profit	**4,359**	**4,708**	**(349)**

A decline in operating profit in our guaranteed savings & annuities line of business was largely driven by increased hedging expenses and lower loadings and fees in our U.S. variable annuity business. Another key development was a shift to capital-efficient products, combined with a lower contribution due to a smaller portfolio share in the German life business. The operating profit in the protection & health line of business decreased. Key drivers included the loss recognition in the U.S. long-term care business, a deteriorated combined ratio in France, and the deconsolidation of Allianz Popular S.L. in Spain. Lower claims as well as growth in the Asia-Pacific region had a partially offsetting effect. The operating profit generated by our unit-linked without guarantee line of business went down. Most of the decline resulted from the disposal of Allianz Popular S.L. in Spain and a lower technical margin in France, due to negative one-off effects. The rise registered in the operating profit in the capital-efficient products line of business was primarily due to lower acquisition costs and a higher portfolio share in the German life business. Other contributing factors included the unlocking of assumptions and a model refinement, as well as the recovered spread margin in the United States. This was partly offset by a change in the DAC amortization period in the United States in 2019, leading to a favorable effect in that year, and in a corresponding negative impact in 2020.

Net income

Our net income increased by € 243 mn. A higher non-operating result – mainly due to increased realizations from the disposal of Allianz Popular S.L. in Spain – and reduced income taxes outweighed the decrease in operating profit.

Return on equity

Our return on equity remained stable at 12.8 %.

1_Expenses include acquisition expenses and commissions (excluding commission clawbacks, which are allocated to the technical margin) as well as administrative and other expenses.
2_The technical margin comprises the risk result (risk premiums less benefits in excess of reserves less policyholder participation), the lapse result (surrender charges and commission clawbacks) and the reinsurance result.
3_The impact of change in DAC includes effects of the change in DAC, unearned revenue reserves (URR), and the value of business acquired (VOBA). It represents the net impact of deferral and amortization of acquisition costs and front-end loadings on operating profit and therefore deviates from the IFRS financial statements.

ASSET MANAGEMENT

KEY FIGURES

Key figures Asset Management[1]

		2020	2019	Delta
Operating revenues	€ mn	7,347	7,164	183
Operating profit	€ mn	2,853	2,704	149
Cost-income ratio[2]	%	61.2	62.3	(1.1) %-p
Net income	€ mn	1,973	1,992	(19)
Total assets under management as of 31 December	€ bn	2,389	2,268	121
thereof: third-party assets under management as of 31 December	€ bn	1,712	1,686	26

Assets under management

Composition of total assets under management
€ bn

Type of asset class	As of 31 December 2020	As of 31 December 2019	Delta
Fixed income	1,848	1,801	47
Equities	181	170	11
Multi-assets[1]	178	177	1
Alternatives	182	120	62
Total	**2,389**	**2,268**	**121**

1_The term "multi-assets" refers to a combination of several asset classes (e.g., bonds, stocks, cash and real property) used as an investment. Multi-asset class investments increase the diversification of an overall portfolio by distributing investments over several asset classes.

Net inflows[3] of **total assets under management** (AuM) amounted to € 41.4 bn in 2020 (2019: € 74.2 bn) – third-party net inflows were € 32.8 bn (2019: € 75.8 bn). The full year's net inflows were attributable to both, PIMCO (€ 34.8 bn total and € 25.7 bn third-party) and AllianzGI (€ 6.6 bn total and € 7.0 bn third-party).

Positive effects from market and dividends[4] totaled € 131.5 bn. Of these, € 108.2 bn came from PIMCO and were mainly related to fixed-income assets, while € 23.3 bn were attributable to AllianzGI and related to equity, fixed-income assets and multi-assets.

Positive effects from consolidation, deconsolidation, and other adjustments added € 62.6 bn to total AuM. This is mainly related to Allianz Real Estate (ARE), which was transferred from the Corporate and Other to the Asset Management business segment as of 1 October 2020, adding € 62.5 bn total AuM to PIMCO's total AuM. By the end of the year, they had developed to a value of € 66.1 bn.

Negative foreign currency translation effects amounted to € 114.4 bn and, for the most part, weighed on PIMCO's AuM.

Third-party assets under management

		As of 31 December 2020	As of 31 December 2019	Delta
Third-party assets under management	**€ bn**	**1,712**	**1,686**	**1.5%**
Business units' share				
PIMCO	%	78.1	78.8	(0.7) %-p
AllianzGI	%	21.9	21.2	0.7 %-p
Asset classes split				
Fixed income	%	78.3	78.6	(0.2) %-p
Equities	%	9.5	8.6	1.0 %-p
Multi-assets	%	9.4	9.5	(0.1) %-p
Alternatives	%	2.7	3.3	(0.6) %-p
Investment vehicle split[1]				
Mutual funds	%	57.9	58.8	(0.9) %-p
Separate accounts	%	42.1	41.2	0.9 %-p
Regional allocation[2]				
America	%	54.8	55.4	(0.6) %-p
Europe	%	32.8	33.4	(0.6) %-p
Asia-Pacific	%	12.4	11.2	1.3 %-p
Overall three-year rolling investment outperformance[3]	%	79	92	(14) %-p

1_Mutual funds are investment vehicles (in the United States, investment companies subject to the U.S. code; in Germany, vehicles subject to the "Standard-Anlagerichtlinien des Fonds" Investmentgesetz) where the money of several individual investors is pooled into one account to be managed by the asset manager, e.g., open-end funds, closed-end funds. Separate accounts are investment vehicles where the money of a single investor is directly managed by the asset manager in a separate dedicated account (e.g., public or private institutions, high net worth individuals, and corporates).
2_Based on the location of the asset management company.
3_Three-year rolling investment outperformance reflects the mandate-based and volume-weighted three-year investment success of all third-party assets that are managed by Allianz Asset Management's portfolio-management units. For separate accounts and mutual funds, the investment success (valued on the basis of the closing prices) is compared with the investment success prior to cost deduction of the respective benchmark, based on various metrics. For some mutual funds, the investment success, reduced by fees, is compared with the investment success of the median of the respective Morningstar peer group (a position in the first and second quartile is equivalent to outperformance).

The decline in the overall three-year rolling investment outperformance is due to COVID-19-driven significant market dislocations and the fact that often the investment universe for a global active manager is significantly different from the respective benchmark.

1_For further information on our Asset Management figures, please refer to note 5 to the Consolidated Financial Statements.
2_Represents operating expenses divided by operating revenues.
3_Net flows represent the sum of new client assets, additional contributions from existing clients – including dividend reinvestment – withdrawals of assets from and termination of client accounts and distributions to investors.
4_Market and dividends represents current income earned on the securities held in client accounts as well as changes in the fair value of these securities. This also includes dividends from net investment income and from net realized capital gains to investors of both open-ended mutual funds and closed-end funds.

Operating revenues

Our operating revenues increased by 2.6 % on a nominal basis. This was driven by higher average third-party AuM mainly at PIMCO, due to strong market effects – especially from fixed-income assets – combined with net inflows. These positive impacts were partly offset by unfavorable foreign currency translation effects. On an internal basis[1], operating revenues grew by 3.6 %.

Performance fees were lower in alternative assets as a result of the extreme volatility in the first quarter of 2020. While PIMCO recovered strongly in the second half of the year, AllianzGI was burdened by the challenging performance environment in the context of COVID-19 over the year.

Other net fee and commission income rose, driven by higher average third-party AuM mainly at PIMCO.

Other operating revenues decreased due to a lower net interest and similar income.

Operating profit

Our operating profit increased by 5.5 % on a nominal basis, as growth in operating revenues by far exceeded an increase in operating expenses. On an internal basis[1], our operating profit went up by 7.2 %, which was due to higher average third-party AuM.

The nominal increase in administrative expenses was driven by PIMCO and due to investments in business growth and infrastructure.

Our cost-income ratio went down as a consequence of stronger growth in operating revenue and a lower increase in operating expenses, compared to the previous year.

Asset Management business segment information
€ mn

	2020	2019	Delta
Performance fees	402	490	(89)
Other net fee and commission income	6,956	6,681	275
Other operating revenues	(11)	(7)	(3)
Operating revenues	7,347	7,164	183
Administrative expenses (net), excluding acquisition-related expenses	(4,494)	(4,460)	(34)
Operating expenses	(4,494)	(4,460)	(34)
Operating profit	**2,853**	**2,704**	**149**

Net income

A decrease of € 19 mn in our net income was driven by a lower non-operating result, a consequence of restructuring expenses. Another contributing factor were higher income taxes due to the increase in operating profit.

1_Operating revenues/operating profit adjusted for foreign currency translation and (de-)consolidation effects.

CORPORATE AND OTHER

KEY FIGURES

Key figures Corporate and Other[1]
€ mn

	2020	2019	Delta
Operating revenues	2,969	2,895	75
Operating expenses	(3,800)	(3,496)	(304)
Operating result	(831)	(602)	(229)
Net loss	(1,216)	(1,194)	(22)

Earnings summary

We recorded a decline in our **operating result** in 2020, mainly due to a weaker operating investment result and higher administrative expenses compared to the previous year – with part of that cost increase resulting from our contribution to a COVID-19 solidarity fund. However, the result of our internal IT provider improved.

Our **net loss** increased, driven by the decline of our operating result, which was only partly offset by a significantly higher income tax result.

1_For further information on Corporate and Other figures, please refer to note 5 to the Consolidated Financial Statements.

OUTLOOK 2021

Overview: 2020 results versus previous year's outlook[1]

2020 results versus previous year's outlook for 2020

	Outlook 2020 – as per Annual Report 2019	Results 2020
Allianz Group	Operating profit of € 12.0 bn, plus or minus € 0.5 bn.	The outlook for 2020 assumed no significant deviation from underlying assumptions, i.e., stable global economic growth and no major disruption. Due to the impact of the pandemic, the overall outlook for 2020 was withdrawn on 30 April. Our operating profit in 2020 was € 10.8 bn. Adjusted for the negative impact of COVID-19 of EUR 1.3 bn, the outlook would have been achieved.
	Protection of shareholder value while continuing to provide attractive returns and dividends.	Return on equity (RoE)[1] amounted to 11.4% (2019: 13.6%). In the interest of dividend continuity, our ambition is to keep the regular dividend per share at least at the previous year's level. We therefore propose a stable dividend at € 9.60 (2019: € 9.60) per share. This leads to a pay-out ratio of 58 %.
	Selective profitable growth.	Total revenues decreased by 1.8% on an internal basis, compared to 2019. The decrease was driven by the Life/Health as well as the Property-Casualty segments.
Property-Casualty	Revenue growth of approximately 6 % of which 4 % come from our acquisitions in the United Kingdom.	Total revenues increased by 0.4%. Internal growth of (1.5)% was mainly driven by Allianz Partners partially offset by AGCS.
	Operating profit in the range of € 5.2 bn to € 6.0 bn.	Operating profit of € 4.4 bn was below our target range. Our underwriting result was negatively impacted by COVID-19.
	Combined ratio of approximately 94 %.	Combined ratio was at 96.3 %, missing our target. Despite an approximate 2 percentage points negative COVID-19 impact, our accident year loss remained almost stable. Strong improvements in our expense ratio could not compensate for this COVID-19 deterioration and a lower run-off level.
	Pressure on operating investment income (net) to continue, due to reinvestments in a consistently low interest rate environment.	Operating investment income (net) decreased, driven by lower interest and similar income.
Life/Health	Continue to focus on profitable growth; keep developing capital-efficient products; expand to new markets. Revenues expected to be in the range of € 71.0 bn to € 77.0 bn.	Revenues of € 74.0 bn are in the range indicated in our outlook. Stronger unit-linked sales in Italy were offset by lower growth of capital-efficient products in Germany and in the United States.
	Operating profit between € 4.1 bn and € 4.7 bn.	At € 4.4 bn, our operating profit was within the target range. Positive contribution from growth in Germany and Asia as well as a favorable investment margin from the unlocking of assumption in the United States are offset by higher hedge costs driven by higher market volatility due to COVID-19 in the United States.
	RoE[2] between 10.0% and 13.0%.	Our 12.8 % RoE[2] is at the upper end of the outlook range.
	Pressure on investment income due to low and even negative interest rates and continued capital market volatility.	Operating investment result reached € 20.5 bn, due to higher realized gains and a better trading result partly offset by higher impairments, and lower interest and similar income.
Asset Management	Moderate increase in total AuM due to moderate third-party net inflows, supported by an overall slightly positive market return in a volatile market environment.	Total AuM recorded a growth of 5.3 % (despite negative currency effects of 114 bn) due to an outstanding market return (€ 131 bn) and strong third-party net inflows (€ 33 bn).
	Operating profit in the range of € 2.4 bn to € 3.0 bn.	Operating profit amounted to € 2.9 bn, continuing the organic growth driven by higher AuM-driven fees.
	Cost-income ratio below 64%.	At 61.2%, the cost-income ratio is clearly below 64%.

1_Represents the ratio of net income attributable to shareholders to the average shareholders' equity at the beginning of the period and at the end of the period. The net income attributable to shareholders is adjusted for net financial charges related to undated subordinated bonds, classified as shareholders' equity. From the average shareholders' equity undated subordinated bonds, classified as shareholders' equity, and unrealized gains/losses on bonds net of shadow accounting are excluded.
2_Represents the ratio of net income to the average total equity, excluding unrealized gains/losses on bonds, net of shadow accounting, at the beginning of the year and at the end of the year.

Economic outlook[2]

2021 will be the year of the vaccine. The progress of the global vaccination campaign will be the decisive factor for the economic recovery from the pandemic. After a lackluster start into 2021 – due to new COVID-19 restrictions in Europe and other parts of the world – a successful vaccination of vulnerable populations (20 - 40% of the total) should set the stage for moderate growth in the second half of 2021. Main driver of the rebound will be the return of confidence, helping to restart the service economy, to unleash forced and precautionary savings, and to resume corporate investments. All in all, we expect global gross domestic product to expand by 4.6% in 2021, with China setting the pace (+8.4%) and the United States and the Eurozone registering more modest growth of 3.6% and 4.3%, respectively.

The downside risks are sizeable. First and foremost, vaccination hurdles on the demand side (vaccination skepticism) as well as the supply side (production and distribution bottlenecks) could easily derail the recovery; in that respect, the slow start to the vaccination rollout in Europe is not promising. Other risks include an unexpected strong bout of inflation, a premature withdrawal of fiscal and monetary support, a spike in insolvencies and social unrest in response to rising inequalities and poverty in the aftermath of the pandemic.

In our base case scenario, however, we expect policymakers to step up support to limit long-term scarring to the economy and provide a tailwind to the recovery. On the fiscal side, in Europe, safety net measures look set to be extended while in the United States stimulus spending will be stepped up in 2021. Meanwhile, central banks will continue with their bond purchases to ensure favorable refinancing rates to the public and the private sectors, with the U.S. Federal Reserve and European Central Bank maintaining record-low interest rates for the time being.

At the beginning of 2021, equity markets have already consumed most of the optimism story and high valuations provide very little

1_For more detailed information on the previous year's outlook for 2020, please see the Annual Report 2019 from page 65 onwards.

2_The information presented in the sections "Economic outlook", "Insurance industry outlook", and "Asset management industry outlook" is based on our own estimates.

cushion against unexpected bad news. On the other hand, markets for safe assets, i.e., government bonds, embrace a more cautious stance. Our baseline scenario assumes a slight increase in yields due to reflationary expectations as the economic recovery unfolds.

Insurance industry outlook

The expected economic recovery and heightened risk awareness after the pandemic should give insurance markets some tailwinds in 2021. Premiums are likely to increase in some lines of business. One of the legacies of the pandemic that will shape 2021(and the following years) is accelerated digitalization: digital processes and distribution channels will continue to become more relevant. Another legacy, less pleasant, are low or even negative interest rates, which have become even more entrenched. Thus, falling investment returns will impact industry profitability in 2021 and beyond.

In the non-life sector, premium growth is expected to return to pre-crisis levels, with emerging markets – and particularly China – outperforming advanced markets by a wide margin. Besides the recovery, another supportive factor is the ongoing hard market in commercial lines. On the other hand, investment income will remain under pressure and in some business lines claims from COVID-19 are likely to drag on. Social inflation and impacts from natural catastrophes are other factors that could drive claims higher and thus require thorough claims management to preserve underwriting profitability.

In the life sector, premium income should largely rebound in 2021. This optimism is based on two observations: the pandemic should have raised the awareness of the need for risk cover, especially for healthcare and life insurance, and the lockdowns have swollen the amount of excess savings, parts of which might be used to bolster old-age provisions. But there are also reasons to be cautious: first and foremost, ultra-low interest rates, which will not only impact profitability but also continue to weigh on the demand for savings-type insurance products.

Asset management industry outlook

Monetary easing by central banks across the globe as well as fiscal support by many governments in the context of the COVID-19 pandemic, massively helped capital markets. Market volatility, on the other hand, is very likely to persist and investors are expected to stay alert. We therefore expect a volatile and overall moderate capital market contribution to assets under management growth.

The asset management industry benefits from the strong market performance, but nevertheless industry profitability remains under pressure, due to continuous flows into passive products, new pricing models and rising distribution costs. We also expect the trend towards industry consolidation to persist, accompanied by a growing cost awareness. Both developments lead to respective restructuring activities within the industry. At the same time, digital channels such as robo-advisory platforms are likely to continue gaining traction. The strengthening of regulatory oversight and reporting could also affect profitability in the asset management sector. Opportunities in the area of active asset management will continue to exist, particularly in alternative and solutions-oriented strategies, but also in the area of ESG (Environment, Social, Governance) investing. We expect the COVID-19 pandemic to accelerate the already existing trends within the industry. In order to continue growing, it will remain vital for asset managers to keep sufficient business volumes, ensure efficient operations, and maintain a strong investment performance.

Overview: outlook and assumptions 2021 for the Allianz Group

Outlook 2021	
ALLIANZ GROUP	Operating profit of € 12.0 bn, plus or minus € 1 bn.
	Protect shareholder value while continuing to provide attractive returns and dividends.
	Selective profitable growth.
	NPS: for over 75 % of Allianz Group business segments to outperform their local market (meaning either above market or Loyalty Leader position).
	IMIX of 73 % plus.
PROPERTY-CASUALTY	Revenue growth of up to 6 % of which 1 % will come from our acquisition in Spain.
	Operating profit of € 5.6 bn, plus or minus 10 %.
	Combined ratio of approximately 93 %.
	Pressure on operating investment income (net) to continue, due to reinvestments in a consistently low interest rate environment.
LIFE/HEALTH	Continue to focus on profitable growth; keep developing capital-efficient products; expand to new markets. Revenues expected to be in the range of € 67.0 bn to € 73.0 bn.
	Operating profit of € 4.4 bn, plus or minus 10 %.
	RoE between 10.0 % and 13.0 %.
	Pressure on investment income due to low interest rates and continued capital market volatility.
ASSET MANAGEMENT	Moderate increase in AuM driven by slight positive market return combined with third-party net inflows at PIMCO and AllianzGI.
	Operating profit € 2.8 bn, plus or minus 10 %.
	Cost-income ratio approximately 62 %

ASSUMPTIONS

Our outlook assumes no significant deviations from our underlying assumptions – specifically:

- Expected global economic recovery,
- Interest rates to remain at the current level,
  - A 100 basis point increase (decrease) in interest rates would raise (lower) the expected operating profit by less than € 0.1 bn in the first year that follows the rate change.
- No major disruptions in the capital markets,
- No disruptive fiscal or regulatory interference,
- Level of claims from natural catastrophes at expected average levels,
- An average U.S. Dollar to Euro exchange rate of 1.17.
  - A 10% weakening (strengthening) of the U.S. Dollar, compared to the assumed exchange rate of 1.17 to the Euro, would have a negative (positive) effect on operating profits of approximately € 0.4 bn.

For further information on our ambitions for the period 2019 - 2021, please see section "Our business aspirations" in the Risk and Opportunity Report.

Management's assessment of expected revenues and earnings for 2021

In 2020, our total revenues were € 140.5 bn, a 1.3 % decrease on a nominal and a 1.8 % decrease on an internal basis,[1] compared to 2019. For 2021, we envisage moderate growth, with strong growth in Property-Casualty, moderate growth in Asset Management and Life/Health revenues remaining rather stable, owing to our selective focus on profitable growth.

Our 2020 operating profit was € 10.8 bn, with the pandemic reducing it by an estimated € 1.3 bn. As we do not expect continued material impact from the pandemic for 2021 comparable to last year, we envisage strong performance in all business segments and an overall operating profit of € 12.0 bn, plus or minus € 1.0 bn for this year.

Our net income attributable to shareholders was also affected by the pandemic in 2020, reaching a total of € 6.8 bn in 2020. Consistent with our disclosure practice in the past, and given the susceptibility of our non-operating results to capital market developments, we refrain from providing a precise outlook for net income. However, as our outlook presumes no major disruptions in our capital markets we anticipate a higher net income for 2021.

PROPERTY-CASUALTY INSURANCE

We expect our revenues to increase by up to 6 % in 2021 (2020: 0.4 %), assuming a fast recovery from the COVID-19 pandemic, of which 1 % will come from our acquisition in Spain. Organic growth will be supported by favorable price and volume effects.

We expect revenue growth at Allianz Partners where we have pooled our B2B2C activities. We expect growth to pick up here in the second half of the year, depending on further developments of the COVID-19 pandemic. Further growth is likely to happen in Germany and Ireland as well as in Asian markets such as China.

We believe that the overall rise in prices that we saw in a number of markets in the past year will continue in 2021. Nevertheless, we will maintain our focus on achieving strong underwriting results by adhering to our strict underwriting discipline, as we have in previous years, and we will be prepared to accept a lower top line if we fail to achieve target margins.

Our combined ratio was 96.3 % in 2020, missing our target. This was mainly due to negative COVID-19 impacts. In 2021, we envisage a combined ratio of approximately 93 %. The underlying assumption is that the aggregate effect of improvements in pricing, claims management, and productivity will compensate for any inflation in underlying claims. Furthermore, impacts from COVID-19 are mainly expected from Euler Hermes and Allianz Partners. As for impacts from natural catastrophes, despite the highly volatile nature of such catastrophes in recent years we assume claims to continue at comparable levels going forward.

As the low-interest-rate environment is likely to stay, investment income will remain under pressure due to the rather short investment spans in our Property-Casualty business segment. Going forward, we will continue to actively adapt our investment strategy to changing market conditions.

Overall, we expect our 2021 operating profit to be at € 5.6 bn, plus or minus 10 % (2020: € 4.4 bn).

LIFE/HEALTH INSURANCE

At € 4.4 bn, our Life/Health operating profit was within the target range in 2020. For 2021, we expect this business segment's operating profit to be at € 4.4 bn, plus or minus 10 %.

One of the key performance indicators used in steering our Life/Health business segment is RoE. In 2021, we expect it to be between 10.0 % and 13.0 %.

Allianz continuously works to make the Life/Health business model more resilient to market volatility, for instance, by adjusting our products to market needs while keeping in line with our strategy. Going forward, we will continue to pursue profitable growth and to improve our capital-efficient products – always with a particular focus on the customer – while exploring new market opportunities and building on our strong track record of product innovation. In addition, we will continue to actively manage both our new and our in-force business through continuous price reviews, expense management, asset/liability management, crediting strategies and reinsurance solutions. As in the past years, this should allow us to mitigate the impacts of difficult market conditions, in particular negative interest rates, and achieve our profitability targets.

ASSET MANAGEMENT

For 2021, we envisage overall moderate third-party net inflows and market returns at both PIMCO and AllianzGI, with relatively stable margins and stable performance fees, resulting in modest growth in operating revenues. We also assume the U.S. Dollar to remain relatively stable compared to 2020. All things considered, we expect our 2021 operating profit to be at € 2.8 bn, plus or minus 10 % (2020: € 2.9 bn).

Our cost-income ratio is expected to be approximately 62 % in 2021 (2020: 61.2 %) as we continue to invest in business growth. Over the mid-term, we expect to maintain it at that level.

CORPORATE AND OTHER (INCLUDING CONSOLIDATION)

We recorded an operating loss of € 0.8 bn in Corporate and Other in 2020. For 2021, we envisage an operating loss of € 0.8 bn, plus or minus 10 %.

Non-financial key performance indicators

As outlined in our Remuneration Report as well as the section "Our Strategy" in our Risk and Opportunity Report, we have set ourselves non-financial targets. Below, we provide an overview of how the most important of these targets have developed, and are expected to develop in 2021.

1_Operating revenues adjusted for foreign currency translation and (de)consolidation effects.

NET PROMOTER SCORE (NPS)

We achieved the highest ever measured NPS results for Allianz, with:

- 45 out of 57 measured segments having been either above local market or Loyalty Leaders resulting in a share of 79 % (2019: 70 %)
- 34 out of 57 measured segments having been Loyalty Leaders resulting in a share of 60 % (2019: 46 %).

This means that we exceeded the 2021 group target (75 % plus outperforming) one year ahead of time. Main drivers for this success have been the VOICE of the customer initiative, product simplifications, expanding digital service offerings and COVID-19 measures.

INCLUSIVE MERITOCRACY INDEX (IMIX)

Our IMIX was 78 % in 2020, a five percentage point improvement compared to 2019. For 2021, our IMIX target is 73 % plus. Although the Allianz Group already exceeded its 2021 targets in 2020, we will start working on new global focus areas and continue with the VOICE initiative in order to further improve results.

For further information on our non-financial key performance indicators, please refer to the Combined Separate Non-Financial Report.

Financing, liquidity development, and capitalization

Allianz Group enjoys a very robust liquidity position and excellent financial strength as well as healthy business mix and global diversification, which allow us to outperform despite challenges in the performance of our industrial insurance segment following the COVID-19 pandemic. Allianz Group Solvency II capitalization is well above regulatory requirements.

As a result, we have full access to financial markets and are in a position to raise financing at low cost. We are determined to maintain our financial flexibility, which is supported by both prudent steering of our liquidity resources and our well-balanced debt maturity profile.

We are managing our portfolios with great diligence to ensure that the Group has sufficient resources to back its solvency capital and liquidity needs. In addition, we will continue to monitor the sensitivity of our Solvency II capitalization ratio with regard to changes in interest rates and spreads, by continuing to ensure prudent asset/liability management and life product design.

Expected dividend development[1]

Allianz management is committed to have shareholders participate in the economic development of Allianz Group through dividend payments. Through prudent capital management, Allianz Group aims to maintain a healthy balance between an attractive yield and investment in profitable growth. Of the Group's net income attributable to shareholders, we will continue to pay out 50 % as a regular dividend. While the 2020 earnings are impacted by the COVID-19 crisis, Allianz Group aims to keep the regular dividend per share at least at the previous year's level. For 2020, the Allianz SE Board of Management and the Supervisory Board propose a dividend of € 9.60 per share.

In addition, as part of our policy to return capital to the shareholders on a flexible basis, Allianz SE executed five share buy-back programs with an aggregate volume of EUR 8.2 bn in the period from 2017 to 2020. Due to the ongoing economic uncertainties caused by the COVID-19 pandemic, Allianz SE's Board of Management announced on 6 November 2020 that it would no longer execute the second tranche of € 750 mn of the initial announced € 1.5 bn 2020 share buy-back program.

All of the above remains subject to our sustainable Solvency II capitalization ratio above 160 % – which is considerably below our year-end 2020 level of 207 %[2] and 20 percentage points below our minimum solvency ambition for the Solvency II capitalization ratio of 180 %.

Management's overall assessment of the current economic situation of the Allianz Group

At the date of issuance of this Annual Report and based on current information regarding natural catastrophes and capital market trends – in particular foreign currency, interest rates, and equities –, the Board of Management has no indication that the Allianz Group is facing any major adverse developments.

The COVID-19 pandemic continues to have a significant impact on individuals, society, business and the wider economy across the globe. The insurance industry was hit, but the Allianz Group has responded quickly, has introduced measures to mitigate the adverse impact and still continues to run its business profitably.

Cautionary note regarding forward-looking statements

This document includes forward-looking statements, such as prospects or expectations, that are based on management's current views and assumptions and subject to known and unknown risks and uncertainties. Actual results, performance figures, or events may differ significantly from those expressed or implied in such forward-looking statements.

Deviations may arise due to changes in factors including, but not limited to, the following: (i) the general economic and competitive situation in the Allianz Group's core business and core markets, (ii) the performance of financial markets (in particular market volatility, liquidity, and credit events), (iii) the frequency and severity of insured loss events, including those resulting from natural catastrophes, and the development of loss expenses, (iv) mortality and morbidity levels and trends, (v) persistency levels, (vi) particularly in the banking business, the extent of credit defaults, (vii) interest rate levels, (viii) currency exchange rates, most notably the EUR/USD exchange rate, (ix) changes in laws and regulations, including tax regulations, (x) the impact of acquisitions including and related integration issues and reorganization measures, and (xi) the general competitive conditions that, in each individual case, apply at a local, regional, national, and/or global level. Many of these changes can be exacerbated by terrorist activities.

No duty to update

The Allianz Group assumes no obligation to update any information or forward-looking statement contained herein, save for any information we are required to disclose by law.

1_This represents management's current state of planning and may be revised in the future. Also, note that the decision regarding dividend payments in any given year is subject to specific dividend proposals by the Management and Supervisory Boards, each of which may elect to deviate, if and as appropriate under the then prevailing circumstances, as well as to the approval of the Annual General Meeting.

2_Including the application of transitional measures for technical provisions, the Solvency II capitalization ratio amounted to 240 % as of 31 December 2020.

BALANCE SHEET REVIEW

Shareholders' equity[1]

Shareholders' equity
€ mn

	As of 31 December 2020	As of 31 December 2019	Delta
Shareholders' equity			
Paid-in capital	28,928	28,928	-
Undated subordinated bonds	2,259	-	2,259
Retained earnings	31,371	29,577	1,793
Foreign currency translation adjustment	(4,384)	(2,195)	(2,189)
Unrealized gains and losses (net)	22,648	17,691	4,956
Total	**80,821**	**74,002**	**6,820**

Shareholders' equity increased largely due to the issuance of undated subordinated bonds of € 2.3 bn, higher unrealized gains and losses (net), and net income attributable to shareholders of € 6.8 bn. The dividend payout in May 2020 (€ 4.0 bn), the share buy-back program[2] with an amount of € 750 mn, and the lower foreign currency translation adjustments (€ 2.2 bn) partly offset this increase.

Total assets and total liabilities

As of 31 December 2020, total assets amounted to € 1,060.0 bn and total liabilities were € 975.4 bn. Compared to year-end 2019, total assets and total liabilities increased by € 48.8 bn and € 41.6 bn, respectively.

The following section focuses on our financial investments in debt instruments, equities, real estate, and cash, as these reflect the major developments in our asset base.

STRUCTURE OF INVESTMENTS – PORTFOLIO OVERVIEW

The following portfolio overview covers the Allianz Group's assets held for investment, which are largely driven by our insurance businesses.

Asset allocation and fixed-income portfolio overview

	As of 31 December 2020	As of 31 December 2019	Delta	As of 31 December 2020	As of 31 December 2019	Delta
Type of investment	€ bn	€ bn	€ bn	%	%	%-p
Debt instruments, thereof:	**682.4**	**643.6**	**38.7**	**86.3%**	**85.3%**	**1.0**
Government bonds	258.5	238.1	20.3	37.9%	37.0%	0.9
Covered bonds	66.7	71.3	(4.6)	9.8%	11.1%	(1.3)
Corporate bonds	249.5	228.9	20.6	36.6%	35.6%	1.0
Banks	35.9	35.8	0.1	5.3%	5.6%	(0.3)
Other	71.8	69.4	2.4	10.5%	10.8%	(0.3)
Equities	**73.1**	**78.3**	**(5.2)**	**9.3%**	**10.4%**	**(1.1)**
Real estate	**14.3**	**13.0**	**1.2**	**1.8%**	**1.7%**	**0.1**
Cash/other	**20.5**	**19.4**	**1.0**	**2.6%**	**2.6%**	**-**
Total	**790.3**	**754.4**	**35.9**	**100.0%**	**100.0%**	**-**

Compared to year-end 2019, our overall asset portfolio increased by € 35.9 bn mainly in our debt investments.

About 93 % of the debt portfolio was invested in investment-grade bonds and loans.[3] Our government bonds portfolio contained bonds from France, Germany, Italy and Spain that represented 17.0 %, 13.7 %, 7.6 % and 6.2 % of our portfolio shares. Our corporate bonds portfolio contained bonds from the United States, Eurozone, and Europe excl. Eurozone. They represented 38.4 %, 33.6 % and 12.6 % of our portfolio shares.

Our exposure to equities decreased due to sales and market movements.

1_This does not include non-controlling interests of € 3,773 mn and € 3,363 mn as of 31 December 2020 and 31 December 2019, respectively. For further information, please refer to note 20 to the Consolidated Financial Statements.
2_For further information, please refer to note 20 to the Consolidated Financial Statements
3_Excluding self-originated German private retail mortgage loans. For 3 %, no ratings were available.

LIABILITIES

PROPERTY-CASUALTY LIABILITIES

As of 31 December 2020, the business segment's gross reserves for loss and loss adjustment expenses as well as discounted loss reserves amounted to € 72.8 bn, compared to € 70.0 bn at year-end 2019. On a net basis, our reserves, including discounted loss reserves, increased from € 60.1 bn to € 62.0 bn.[1]

LIFE/HEALTH LIABILITIES

Life/Health reserves for insurance and investment contracts increased by € 23.2 bn to € 596.1 bn. A € 20.0 bn increase (before foreign currency translation effects) in aggregate policy reserves was driven by our operations in Germany (€ 14.5 bn) and the United States (€ 6.9 bn before foreign currency translation effects). Reserves for premium refunds increased by € 13.3 bn (before foreign currency translation effects), due to higher unrealized gains to be shared with policyholders. Foreign currency translation effects decreased the balance sheet value by € 10.3 bn, mainly due to the weaker U.S. Dollar (€ 9.2 bn).

Off-balance sheet arrangements

In the normal course of business, the Allianz Group may enter into arrangements that do not lead to the recognition of assets and liabilities in the Consolidated Financial Statements under IFRS. Since the Allianz Group does not rely on off-balance sheet arrangements as a significant source of revenue or financing, our off-balance sheet exposure to loss is immaterial relative to our financial position.

The Allianz Group enters into various commitments including loan commitments, purchase obligations, and other commitments. For more details, please refer to note 38 to the Consolidated Financial Statements.

The Allianz Group has also entered into contractual relationships with various types of structured entities. They have been designed in such a way that their relevant activities are directed by means of contractual arrangements rather than voting or similar rights. Typically, structured entities have been set up in connection with asset-backed financing and certain investment fund products. For more details on our involvement with structured entities, please refer to note 36 to the Consolidated Financial Statements.

Please refer to the Risk and Opportunity Report for a description of the main concentrations of risk and other relevant risk positions.

Regulatory capital adequacy

For details on the regulatory capitalization of the Allianz Group, please refer to our Risk and Opportunity Report.

1_For further information about changes in the reserves for loss and loss adjustment expenses for the Property-Casualty business segment, please refer to note 15 to the Consolidated Financial Statements.

LIQUIDITY AND FUNDING RESOURCES

Organization

The Allianz Group's liquidity management is based on policies and guidelines approved by the Allianz SE Board of Management. Allianz SE and each of the operating entities are responsible for managing their respective liquidity positions, while Allianz SE provides central cash pooling for the Group. Capital allocation is managed by Allianz SE for the entire Group. This structure allows the efficient use of liquidity and capital resources and enables Allianz SE to achieve the desired liquidity and capitalization levels for the Group and its operating entities.

Liquidity management of our operating entities

INSURANCE OPERATIONS

Major sources of liquidity for our operational activities are primary and reinsurance premiums received, reinsurance receivables collected, investment income, and proceeds generated from the maturity or sale of investments. These funds are mainly used to pay claims arising from the Property-Casualty insurance business and related expenses, life policy benefits, surrenders and cancellations, acquisition costs, and operating costs.

We receive a large part of premiums before payments of claims or policy benefits are required, generating solid cash flows from our insurance operations. This allows us to invest the funds in the interim to create investment income.

Our insurance operations also carry a high proportion of liquid investments, which can be converted into cash to pay for claims. Generally, our investments in fixed-income securities are sequenced to mature when funds are expected to be needed.

The overall liquidity of our insurance operations depends on capital market developments, interest rate levels, and our ability to realize the market value of our investment portfolio to meet insurance claims and policyholder benefits. Other factors affecting the liquidity of our Property-Casualty insurance operations include the timing, frequency, and severity of losses underlying our policies and policy renewal rates. In our Life operations, liquidity needs are generally influenced by trends in actual mortality rates compared to the assumptions underlying our life insurance reserves. Market returns, crediting rates, and the behavior of our life insurance clients – for example, regarding the level of surrenders and withdrawals – can also have significant impacts.

ASSET MANAGEMENT OPERATIONS

Within our Asset Management operations, the most important sources of liquidity are fees generated from asset management activities. These are primarily used to cover operating expenses.

Liquidity management and funding of Allianz SE

The responsibility for managing the funding needs within the Group, maximizing access to liquidity sources and minimizing borrowing costs, lies with Allianz SE. We therefore comment on the liquidity and funding resources of Allianz SE in the following sections. Restrictions on the transferability of capital within the Group mainly result from the capital maintenance rules under applicable company laws, as well as from the regulatory solvency capital requirements for regulated Group companies.

LIQUIDITY RESOURCES AND USES

Allianz SE ensures adequate access to liquidity and capital for our operating subsidiaries. The main sources of liquidity available for Allianz SE are dividends received from subsidiaries and funding provided by capital markets. Liquidity resources are defined as readily available assets – specifically cash, money market investments, and highly liquid government bonds. Our funds are primarily used for interest payments on our debt funding, operating costs, internal and external growth investments, and dividends to our shareholders.

FUNDING SOURCES

Allianz SE's access to external funds depends on various factors such as capital market conditions, access to credit facilities, credit ratings, and credit capacity. The financial resources available to Allianz SE in the capital markets for short-, mid- and long-term funding needs are described below. In general, mid- to long-term financing is covered by issuing senior or subordinated bonds or ordinary no-par value shares.

SHARE CAPITAL

As of 31 December 2020, the issued share capital as registered at the Commercial Register was € 1,169,920,000. This was divided into 412,293,128 no-par value shares. As of 31 December 2020, the Allianz Group held 247,489 (2019: 595,677) own shares.

Allianz SE has the option to increase its share capital according to authorizations provided by the AGM. The following table outlines Allianz SE's capital authorizations as of 31 December 2020:

Capital authorizations of Allianz SE

Capital authorization	Nominal amount	Expiry date of the authorization
Authorized Capital 2018/I[1]	€ 334,960,000	8 May 2023
Authorized Capital 2018/II[2]	€ 15,000,000	8 May 2023
Conditional Capital 2010/2018[3]	€ 250,000,000	8 May 2023

1_For issuance of shares against contribution in cash and/or in kind, with the authorization to exclude shareholders' subscription rights.
2_For issuance of shares to employees with exclusion of shareholders' subscription rights.
3_To cover convertible bonds, bonds with warrants, convertible participation rights, participation rights, and subordinated financial instruments, each with the authorization to exclude shareholders' subscription rights.

For further information on our share capital and regarding authorizations to issue and repurchase shares, please refer to the chapter Takeover-Related Statements and Explanations (part of the Group Management Report).

LONG-TERM DEBT FUNDING

As of 31 December 2020, Allianz SE had senior and subordinated bonds with a variety of maturities outstanding, reflecting our focus on long-term financing. As the cost and availability of external funding may be negatively affected by general market conditions or by matters specific to the financial services industry or the Allianz Group, we seek to reduce refinancing risk by actively steering the maturity profile of our funding structure.

Maturity structure of Allianz SE's senior and subordinated bonds[1]
€ mn

	Contractual maturity date			
As of 31 December	Up to 1 year	1 – 5 years	Over 5 years	Total
2020				
Senior bonds	-[2]	2,745[3]	5,291[4]	8,036
Subordinated bonds (debt)	-	-	13,974[5,6]	13,974
Total bonds (debt)	**-**	**2,745**	**19,265**	**22,010**
Subordinated bonds (equity)	-	-	2,272[7]	2,272
Total bonds (equity)	**-**	**-**	**2,272**	**2,272**
2019				
Senior bonds	1,252	2,243	4,590	8,085
Subordinated bonds (debt)	-	-	13,177	13,177
Total bonds (debt)	**1,252**	**2,243**	**17,767**	**21,262**

1_Based on carrying value.
2_Senior bonds of € 0.5 bn and € 0.75 bn were redeemed in the first and fourth quarter of 2020.
3_A senior bond of € 0.5 bn was issued in the first quarter of 2020.
4_A senior bond of € 0.75 bn was issued in the first quarter of 2020.
5_Includes two subordinated bonds which Allianz resolved to call for redemption in March 2021.
6_Includes the issuance of a € 1.0 bn subordinated bond in the second quarter of 2020.
7_Includes the issuance of a dual tranche RT1 bond (€ 1.25 bn and USD 1.25 bn) in the fourth quarter of 2020.

Interest expenses on senior bonds decreased, mainly due to lower funding costs on average in 2020. For subordinated bonds, the decrease of interest expenses was also driven by lower funding costs on average in 2020, partially offset by higher volumes outstanding.

Senior and subordinated bonds issued or guaranteed by Allianz SE[1]

As of 31 December	Nominal value	Carrying value	Interest expenses	Weighted-average interest rate[2]
	€ mn	€ mn	€ mn	%
2020				
Senior bonds	8,088	8,036	158	1.8
Subordinated bonds (debt)	13,929	13,974	565	4.2
Total bonds (debt)	**22,017**	**22,010**	**723**	**3.3**
Subordinated bonds (equity)	2,272	2,272	8[3]	3.0
Total bonds (equity)	**2,272**	**2,272**	**8**	**3.0**
2019				
Senior bonds	8,135	8,085	200	2.2
Subordinated bonds (debt)	13,157	13,177	595	4.5
Total bonds (debt)	**21,293**	**21,262**	**795**	**3.6**

1_For further information on Allianz SE debt (issued or guaranteed) as of 31 December 2020, please refer to note 19 to the Consolidated Financial Statements.
2_Based on nominal value.
3_Accrued interest (not part of the consolidated income statement).

The following table details the long-term debt issuances and redemptions/buy-backs of Allianz SE during 2020 and 2019:

Issuances and redemptions of Allianz SE's senior and subordinated bonds
€ mn

As of 31 December	Issuances[1]	Redemptions/ buy-backs[1]	Issuance net of redemptions/ buy-backs
2020			
Senior bonds	1,250	1,250	-
Subordinated bonds (debt)	1,000	-	1,000
Subordinated bonds (equity)	2,272	-	2,272
2019			
Senior bonds	1,500	1,500	-
Subordinated bonds (debt)	1,000	1,364	(364)

1_Based on nominal value.

Funding in non-Euro currencies enables us to diversify our investor base or to take advantage of favorable funding costs in those markets. Funds raised in non-Euro currencies are incorporated in our general hedging strategy. As of 31 December 2020, approximately 18.1% (2019: 17.1%) of the long-term debt was issued or guaranteed by Allianz SE in currencies other than the Euro.

Currency allocation of Allianz SE's senior and subordinated bonds[1]
€ mn

As of 31 December	Euro	Non-Euro	Total
2020			
Senior and subordinated bonds (debt and equity)	19,896	4,393	24,289
2019			
Senior and subordinated bonds (debt)	17,646	3,647	21,293

1_Based on nominal value.

SHORT-TERM DEBT FUNDING

Available short-term funding sources are the Medium-Term Note Program and the Commercial Paper Program. Money market securities increased in the use of commercial paper, compared to the previous year-end. Interest expenses on money market securities decreased mainly due to lower funding costs on average in 2020.

Money market securities of Allianz SE

	Carrying value	Interest expense	Average interest rate
As of 31 December	€ mn	€ mn	%
2020			
Money market securities	1,170	5	0.5
2019			
Money market securities	1,124	17	1.5

The Group maintained its A-1+/Prime-1 ratings for short-term issuances. We can therefore continue funding our liquidity under the Euro Commercial Paper Program at an average rate for each tranche below Euribor, and under the U.S. Dollar Commercial Paper Program at an average rate for each tranche below U.S. Libor.

Further potential sources of short-term funding that allow the Allianz Group to fine-tune its capital structure are letter of credit facilities and bank credit lines.

Allianz Group consolidated cash flows

Annual changes in cash and cash equivalents
€ mn

	2020	2019	Delta
Net cash flow provided by operating activities	32,049	36,448	(4,399)
Net cash flow used in investing activities	(28,870)	(27,703)	(1,167)
Net cash flow used in financing activities	(1,390)	(4,850)	3,460
Change in cash and cash equivalents[1]	1,031	3,986	(2,955)

1_Includes effects of exchange rate changes on cash and cash equivalents of € (758) mn and € 90 mn in 2020 and 2019, respectively.

Net cash flow provided by operating activities amounted to € 32.0 bn in 2020, down by € 4.4 bn compared to the previous year. This figure comprises net income plus adjustments for non-cash charges, credits, and other items included in net earnings, as well as cash flows related to the net change in operating assets and liabilities. Net income after adding back non-cash charges and similar items decreased to € 11.0 bn in 2020. Additionally, operating cash flows from net changes in operating assets and liabilities decreased by € 3.4 bn to € 21.0 bn. This was mainly driven by lower reserves for insurance and investment contracts in our Life/Health business segment in Germany, the United States and France. Part of the effect was offset by higher net cash inflows from assets and liabilities held for trading.

Net cash outflow used in investing activities increased by € 1.2 bn to € 28.9 bn. The main driver were higher net cash outflows from loans and advances to banks and customers, mainly at our Life/Health business in Germany, Allianz SE and the United States. This was partly compensated by lower net cash outflows from financial assets and liabilities designated at fair value through income, especially in our Life/Health business in Germany and in our Property-Casualty reinsurance business.

Net cash outflow used in financing activities amounted to € 1.4 bn, compared to € 4.9 bn in 2019. This development was largely driven by higher net cash inflows from our refinancing activities – including the issuance of a dual tranche RT1 bond and lower net cash outflows from transactions between equity holders, in particular from the Allianz SE share buy-back program.

Cash and cash equivalents increased by € 1.4 bn. This figure includes € 0.3 bn cash and cash equivalents reclassified to assets of disposal groups held for sale which were disposed of in 2020.

For further information on the above, please refer to our Consolidated Statement of Cash Flows.

RECONCILIATIONS

The analysis in the previous chapters is based on our Consolidated Financial Statements and should be read in conjunction with them. In addition to our figures stated in accordance with the International Financial Reporting Standards (IFRS), the Allianz Group uses operating profit and internal growth to enhance the understanding of our results. These additional measures should be viewed as complementary to, rather than a substitute for, our figures determined according to IFRS.

For further information, please refer to note 5 to the Consolidated Financial Statements.

Composition of total revenues

Total revenues comprise total revenues in Property-Casualty, statutory premiums in Life/Health, operating revenues in Asset Management, and total revenues in Corporate and Other (Banking).

Composition of total revenues
€ mn

	2020	2019
PROPERTY-CASUALTY		
Total revenues	**59,412**	**59,156**
consisting of:		
Gross premiums written	57,772	57,210
Fee and commission income	1,640	1,946
LIFE/HEALTH		
Statutory premiums	**74,044**	**76,426**
ASSET MANAGEMENT		
Operating revenues	**7,347**	**7,164**
consisting of:		
Net fee and commission income	7,358	7,171
Net interest and similar income	(15)	(10)
Income from financial assets and liabilities carried at fair value through income (net)	3	1
Other income	2	1
CORPORATE AND OTHER		
thereof: Total revenues (Banking)	**245**	**239**
consisting of:		
Interest and similar income	63	73
Income from financial assets and liabilities carried at fair value through income (net)[1]	2	3
Fee and commission income	561	576
Interest expenses, excluding interest expenses from external debt	(22)	(21)
Fee and commission expenses	(359)	(394)
Consolidation effects within Corporate and Other	-	1
CONSOLIDATION	(593)	(616)
Allianz Group total revenues	**140,455**	**142,369**

1_Includes trading income.

Composition of total revenue growth

We believe that an understanding of our total revenue performance is enhanced when the effects of foreign currency translation as well as acquisitions, disposals, and transfers (or "changes in scope of consolidation") are analyzed separately. Accordingly, in addition to presenting nominal total revenue growth, we also present internal growth, which excludes these effects.

Reconciliation of nominal total revenue growth to internal total revenue growth
%

	Internal growth	Changes in scope of consolidation	Foreign currency translation	Nominal growth
2020				
Property-Casualty	(1.5)	3.7	(1.8)	0.4
Life/Health	(2.6)	0.2	(0.7)	(3.1)
Asset Management	3.6	0.6	(1.6)	2.6
Corporate and Other	2.5	-	-	2.5
Allianz Group	**(1.8)**	**1.6**	**(1.2)**	**(1.3)**
2019				
Property-Casualty	4.7	1.7	0.4	6.8
Life/Health	7.3	-	1.2	8.5
Asset Management	1.8	0.3	4.3	6.4
Corporate and Other	(2.0)	(11.1)	-	(12.9)
Allianz Group	**5.9**	**0.7**	**1.0**	**7.6**

Life/Health insurance operations

OPERATING PROFIT

The reconciling item scope comprises the effects from out-of-scope entities in the profit sources reporting compilation. Operating profit from operating entities that are out of scope is included in the investment margin. Currently, 23 entities – comprising the vast majority of Life/Health total statutory premiums – are in scope.

EXPENSES

Expenses include acquisition expenses and commissions as well as administrative and other expenses.

The delta shown as definitions in acquisition expenses and commissions represents commission clawbacks, which are allocated to the technical margin. The delta shown as definitions in administrative and other expenses mainly represents restructuring charges, which are stated in a separate line item in the Group income statement.

Acquisition, administrative, capitalization, and amortization of DAC[1]
€ mn

	2020	2019
Acquisition expenses and commissions[2]	(5,458)	(5,638)
Definitions	12	13
Scope	(129)	(194)
Acquisition costs incurred	(5,575)	(5,818)
Capitalization of DAC[2]	1,745	1,813
Definition: URR capitalized	642	625
Definition: policyholder participation[3]	1,078	1,210
Scope	30	124
Capitalization of DAC	3,494	3,772
Amortization, unlocking, and true-up of DAC[2]	(1,951)	(1,570)
Definition: URR amortized	(79)	38
Definition: policyholder participation[3]	(1,127)	(1,109)
Scope	(36)	(31)
Amortization, unlocking, and true-up of DAC	(3,194)	(2,672)
Commissions and profit received on reinsurance business ceded	131	95
Acquisition costs[4]	**(5,144)**	**(4,624)**
Administrative and other expenses[2]	(1,907)	(1,823)
Definitions	166	164
Scope	(166)	(174)
Administrative expenses on reinsurance business ceded	9	9
Administrative expenses[4]	**(1,898)**	**(1,825)**

1_Prior year figures changed in order to reflect the refinement of profit source reporting in the USA.
2_As per Group Management Report.
3_For German Speaking Countries, policyholder participation on revaluation of DAC/URR capitalization/amortization.
4_As per notes to the Consolidated Financial Statements.

IMPACT OF CHANGE IN DEFERRED ACQUISITION COSTS (DAC)

"Impact of change in DAC" includes the effects of changes in DAC, unearned revenue reserves (URR), and value of business acquired (VOBA). As such, it is the net impact of the deferral and amortization of acquisition costs and front-end loadings on operating profit.

URR capitalized: capitalization amount of unearned revenue reserves (URR) and deferred profit liabilities (DPL) for FAS 97 LP.

URR amortized: total amount of URR amortized includes scheduled URR amortization, true-up, and unlocking.

Both capitalization and amortization are included in the line item premiums earned (net) in the Group income statement.

Policyholder participation is included in "Change in our reserves for insurance and investment contracts (net)" in the Group income statement.

Reconciliation to Notes to the Consolidated Financial Statements[1]
€ mn

	2020	2019
Acquisition expenses and commissions[2]	(5,458)	(5,638)
Administrative and other expenses[2]	(1,907)	(1,823)
Capitalization of DAC[2]	1,745	1,813
Amortization, unlocking, and true-up of DAC[2]	(1,951)	(1,570)
Acquisition and administrative expenses	**(7,571)**	**(7,218)**
Definitions	691	941
Scope	(302)	(276)
Commissions and profit received on reinsurance business ceded	131	95
Administrative expenses on reinsurance business ceded	9	9
Acquisition and administrative expenses (net)[3]	**(7,042)**	**(6,449)**

1_Prior year figures changed in order to reflect the refinement of profit source reporting in the USA.
2_As per Group Management Report.
3_As per notes to the Consolidated Financial Statements.

RISK AND OPPORTUNITY REPORT

Target and strategy of risk management

Allianz aims to ensure that the Group is adequately capitalized at all times and that all related undertakings at least meet their respective regulatory capital requirements for the benefit of both shareholders and policyholders.

In addition, we take the requirements of rating agencies into account. While capital requirements imposed by regulators constitute a binding constraint, meeting rating agencies' capital requirements and maintaining strong credit ratings are strategic business objectives of the Allianz Group.

We closely monitor the capital position and risk concentrations of the Group and its related undertakings and apply regular stress tests (including standardized, historical, and reverse stress test scenarios as well as monthly stress and scenario analyses focusing on current and possible future developments). These analyses allow us to take appropriate measures to preserve our continued capital and solvency strength. For example, the risk capital reflecting the risk profile and the cost of capital being an important aspect which is considered in business decisions. Furthermore, we ensure a close alignment of the risk and business strategy by the fact that business decisions to achieve our set targets are taken within the determined risk appetite and in line with the risk strategy. The implemented sound processes to steer the business and assess and manage associated risks ensure a continuous alignment of the risk and business strategy and enable us to detect and address any potential deviations.

In addition, our liquidity risk management framework ensures that all legal entities in scope are responsible for managing their liquidity risks and maintaining a sufficient liquidity position under both market conditions (expected as well as stressed) and business conditions.

Risk governance system

RISK MANAGEMENT FRAMEWORK

As a provider of financial services, we consider risk management to be a core competency and an integral part of our business. Our risk management framework covers all operations and subsidiaries within the Group in proportion to the inherent risks of their activities, ensuring that risks across the Group are consistently identified, analyzed, assessed, and adequately managed. The key elements of our risk management framework are:

- Promotion of a strong risk management culture, supported by a robust risk governance structure.
- Consistent and proportional application of an integrated risk capital framework to protect our capital base and support effective capital management.
- Integration of risk considerations and capital needs into management and decision-making processes by attributing risk and allocating capital to business segments, products, and strategies.

Our risk management system is based on the following four pillars:

- Risk identification and underwriting: A robust system of risk identification and underwriting forms the foundation for adequate risk management decisions. Supporting activities include standards for underwriting, valuation methods, individual transaction and new product approvals, emerging-/operational-/top-risk assessments, liquidity risk and scenario analyses, amongst others.
- Risk strategy and risk appetite: Our risk strategy defines our risk appetite consistent with our business strategy. It ensures that rewards are appropriate based on the taken risks and the required capital. It also ensures that delegated decision-making bodies are in line with our overall risk-bearing capacity and strategy.
- Risk reporting and monitoring: Our comprehensive qualitative and quantitative risk monitoring and reporting framework provides management with the transparency needed to assess whether our risk profile remains within the approved limits and to identify emerging issues and risks quickly. For example, risk dashboard and limit utilization reports as well as scenario analyses and stress tests are regularly prepared and communicated.
- Communication and transparency: Transparent risk disclosure provides the basis for communicating our strategy and performance to internal and external stakeholders, ensuring a sustainable positive impact on valuation and financing. It also strengthens the risk awareness and risk culture throughout the entire Group.

OUR STRATEGY

OUR BUSINESS ASPIRATIONS

The Board of Management of Allianz SE has defined the following objectives for Allianz Group's medium-term strategy with the motto "Simplicity wins":

- Outperform: We seek to move ahead of our competitors, both traditional businesses and disruptors.
- Transform: We seek to become simpler and deeply digital and to make our businesses more scalable.
- Rebalance: We seek to build leading positions in large, profitable, and fast-growing geographies as well as in new areas of business.

These objectives have been translated into clear ambitions for the period 2019 – 2021. With regard to financial performance, we strive for a return on equity (excluding unrealized gains/losses on bonds) of more than 13%, while growing our earnings per share at a compound annual growth rate of more than 5% (baseline full year 2018).

To ensure the sustainability of our performance, we have set ourselves non-financial health targets: For customer loyalty, our ambition is for more than 75% of the business segments of our entities to be or become rated by their customers as a loyalty leader or above-market in terms of Net Promoter Score (NPS). In terms of employee engagement, our ambition is to have the Inclusive Meritocracy Index above 73%. At the same time, we have also set a number of sustainability targets such as the reduction of our corporate greenhouse gas emissions and the transition of our proprietary investment portfolio to net-zero emissions by 2050.

The COVID-19 pandemic has accelerated some trends that shape the insurance markets, while halting others. The altered environment has reinforced many of our strategic priorities, for example, digital by default, simplification, and rebalancing of our product portfolios, for example towards Health and Protection insurance, and the transformation towards higher resilience and agility.

OUR BUSINESS STRATEGY

To implement these strategic objectives, we have defined a number of strategic priorities, and are implementing initiatives and programs to address the five dimensions of our Renewal Agenda.

- True Customer Centricity: Design intuitive products and processes to achieve loyalty leadership in our core markets.
- Digital by Default: Build legacy-free platforms with automated core processes.
- Technical Excellence: Move to data-driven product design, pricing, and claims handling.
- Growth Engines: Systematically exploit new sources for profitable growth.
- Inclusive Meritocracy: Reinforce a culture where both people and performance matter.

Allianz SE's Board of Management has also defined a strategy for the management of risks. This risk strategy places particular emphasis on protecting the Allianz brand and reputation, remaining solvent even in the event of extremely adverse scenarios, maintaining sufficient liquidity to meet financial obligations, and providing resilient profitability.

Opportunities

Our financial strength, coupled with ongoing transformation, renders us resilient and allows us to profit from new opportunities in a fast-changing business environment as well, for example:

- By combining close customer understanding and evolving data analytics techniques, we provide superior insurance products and raise productivity.
- As a diversified financial group that is active in over 70 countries, we can innovate locally, then spread ideas and best practices across the Group in order to exploit economies of scale.
- We seek to grow in fast-growing regions, including Asia-Pacific, and want to profit from consolidation in developed markets such as Europe.
- We are building expertise and business models to benefit from new risk pools, including cyber risk (insurance, risk mitigation, and recovery services) and mobility fleets.
- As the world's population ages, we are improving our offerings in the retirement savings markets.

In a continuously evolving market where the demands of customers constantly change, our knowledge of the industry and our expertise in product development and risk management offers us great opportunities to create customer-focused solutions. For further details on opportunities envisaged by the Allianz Group in the various segments, please refer to Outlook 2021.

RISK GOVERNANCE STRUCTURE

SUPERVISORY BOARD AND BOARD OF MANAGEMENT

Allianz Group's approach to risk governance permits integrated management of local and global risks and ensures that our risk profile remains consistent with both our risk strategy and our capacity to bear risks.

Within our risk governance system, the Supervisory Board and Board of Management of Allianz SE have both Allianz SE and group-wide responsibilities. The Board of Management formulates business objectives and a corresponding risk strategy; the core elements of the risk framework are set out in the Allianz Group Risk Policy and approved by the Board of Management. The Supervisory Board advises, challenges, and supervises the Board of Management in the execution of its management activities. The following committees support the Board and the Supervisory Board on risk issues:

Supervisory Board Risk Committee

The Risk Committee reports to the Supervisory Board, where the information and the findings are discussed with the Board of Management. It monitors the effectiveness of the Allianz risk management framework. Furthermore, it focuses on risk-related developments as well as general risks and specific risk exposures and ensures that the business strategy is aligned with the risk strategy.

For more information, please refer to the paragraph "Risk Committee" in the Supervisory Board Report.

Group Finance and Risk Committee

The Group Finance and Risk Committee (GFRC) provides oversight of the Group's and Allianz SE's risk management framework, acting as a primary early-warning function by monitoring the Allianz Group's and Allianz SE's risk profiles as well as the availability of capital. The GFRC also ensures that an adequate relationship between return and risk is maintained. Additionally, the GFRC defines risk standards, is the limit-setting authority within the framework set by the Board of Management, and approves major financing and capital management transactions. Finally, the GFRC supports the Board of Management with recommendations regarding the capital structure, capital allocation, liquidity position, and investment strategy, including strategic asset allocation for the different business segments.

Overall risk organization and roles in risk management

A comprehensive system of risk governance is achieved by setting standards related to organizational structure, risk strategy and appetite, limit systems, documentation, and reporting. These standards ensure the accurate and timely flow of risk-related information and a disciplined approach towards decision-making and execution at both the global and local levels.

As a general principle, the responsibility for the First Line of Defense rests with business managers in the related undertaking. They are responsible for both the risks taken and the returns from their decisions. The Second Line of Defense is made up of independent global oversight functions including Risk, Actuarial, Compliance, and Legal, which support the Board in defining the risk frameworks within which the business can operate. Group Audit forms the Third Line of Defense, independently and regularly reviewing risk governance implementation, compliance with risk principles, performing quality reviews of risk processes, and testing adherence to business standards, including the internal control framework.

Group Risk management function

Group Risk is managed by the Group Chief Risk Officer and supports Allianz SE's Board of Management, including its committees, by performing various analyses, communicating risk management related information and preparing and implementing committee decisions.

Group Risk also supports the Board of Management in developing the risk management framework – which covers risk governance, risk strategy and appetite – and risk monitoring and reporting. Group Risk's operational responsibility encompasses assessing risks and monitoring limits and accumulations of specific risks across business lines, including natural and man-made disasters and exposures to financial markets and counterparties.

Group Risk strengthens and maintains the Group's risk network through regular and close interaction with the management of related undertakings and with other key stakeholders such as the local finance, risk, actuarial, underwriting and investment departments. A strong group-wide risk network enables the Allianz Group to influence risk culture across the Group, identify risks at an early stage, and make management aware of these risks.

Related undertakings

Related undertakings[1] are responsible for their own risk management, including adherence to both external requirements (for example, those imposed by local regulators) and internal standards. Their Boards of Management are responsible for setting and approving a local risk strategy – supporting the Group's risk strategy – during the annual Strategic and Planning Dialogs with the Group and for ensuring adherence to their risk strategy.

A risk function, headed by a Chief Risk Officer which is independent from business line management, is established by each related undertaking. A local Risk Committee supports both the Board of Management and the Chief Risk Officer by acting as the primary risk controlling body.

Consistent implementation of the Group's risk management framework in the related undertakings, including regular dialog between the Group and the entity, is ensured, for example, through Group Risk representation on local Risk Committees and through regular assessment of the appropriateness of the local risk management framework and performance of the Chief Risk Officers by Group Risk. Moreover, the Group Chief Risk Officer must be consulted on decisions regarding the staffing, objectives, and performance evaluation of local Chief Risk Officers.

Other functions and bodies

In addition to Group Risk and the local risk functions, legal, compliance, and actuarial functions established at both the Group and the entity levels constitute additional components of the Second Line of Defense.

Group Legal and Group Compliance seek to mitigate legal risks with support from other departments. The objectives of both functions are to ensure that laws and regulations are observed, to react appropriately to all impending legislative changes or new court rulings, to attend to legal disputes and litigation, and to provide legally appropriate solutions for transactions and business processes. In addition, Group Compliance – in conjunction with Group Legal and other experts involved – is responsible for integrity management, which aims to protect the Allianz Group as well as our related undertakings and employees from regulatory risks.

Group Actuarial, Planning and Controlling contributes towards assessing and managing risks in line with regulatory requirements, in particular for those risks whose management requires actuarial expertise. The range of tasks includes, amongst others, the calculation and monitoring of technical provisions, technical actuarial assistance in business planning, reporting and monitoring of the results, and supporting the effective implementation of the risk management system.

Risk-based steering and risk management

The Allianz Group is exposed to a variety of risks through its core insurance and asset management activities, including market, credit, underwriting, business, operational, strategic, liquidity, and reputational risks.

As an integrated financial services provider, we consider diversification across different business segments and regions to be an important element in managing our risks efficiently, as it limits the economic impact of any single event and contributes to relatively stable results. Our aim is to maintain a balanced risk profile without any disproportionately large risk concentrations and accumulations.

With Solvency II being the regulatory regime relevant for the Group as of 1 January 2016, our risk profile is measured and steered based on our approved Solvency II internal model[2]. We have introduced a target solvency ratio range in accordance with Solvency II, based on pre-defined stress scenarios for both the Group and related undertakings, supplemented by ad-hoc scenarios, historical and reverse stress tests, and sensitivity analyses.

In addition, central elements of Allianz's dividend policy are linked to Solvency II capitalization based on the internal model. This helps us to ensure a consistent view on risk steering and capitalization in line with the Solvency II framework.

Allianz steers its portfolio taking a comprehensive view at risk and return, which is based on the internal model and is supported by scenario analyses. Risk and concentrations are actively restricted by limits based on our internal model, and there is a comprehensive analysis of the return on risk capital[3] (RoRC). The RoRC is a new business indicator that allows us to identify profitable lines of new business and products on a sustainable basis, reflecting the capital commitment over the life time of the products, and is a key criterion for capital allocation decisions.

As a consequence, the internal model is fully integrated in business steering, and its application satisfies the so-called "use test" requirement, under Solvency II.

1_Related undertakings are also referred to as operating entities.

2_From a formalistic perspective, the German Supervisory Authority deems our model to be "partial" because not all of our entities are using the internal model. Some of our smaller entities report under the standard formula and others under the deduction and aggregation approach. Without loss of generality, we might use the term internal model in the following chapters, e.g., in case descriptions also referring to entities that use the internal model, or descriptions focusing on processes with respect to the internal model components.

3_The return on risk capital is defined as the present value of future real world profits on the capital requirement (including buffer to regulatory requirements) held at the local level.

MARKET RISK

As an inherent part of our insurance operations, we collect premiums from our policyholders and invest them in a wide variety of assets; the resulting investment portfolios back the future claims payments and benefits to our customers. In addition, we also invest shareholders' capital, which is required to support the business. Finally, we use derivatives, mostly to hedge our portfolio against adverse market movements (for example, protective puts) or to reduce our reinvestment risk (for example, by using forwards, swaps, or swaptions). Asset/liability management (ALM) decisions are taken based on the internal model, considering both the risks and the returns on the financial market.

As the fair values of our investment portfolios and liabilities depend on the changes observed in the financial markets, we are exposed to the risk of adverse financial market developments. The long-dated liabilities in our Life/Health business segment and those attributable to internal pensions contribute to interest rate risk, in particular when they cannot be fully matched by available investments due to long maturities. In addition, we are also exposed to adverse changes in equity and real estate prices, credit spread levels, inflation, implied volatilities, and currencies, which might impact the value of our portfolios.

To measure these market risks, real-world stochastic models[1] for the relevant risk factors are calibrated using historical time series to generate possible future market developments. After the scenarios for all the risk factors are generated, the asset and liability positions are revalued under each scenario. The worst-case outcome of the sorted portfolio profit and loss distribution at a certain confidence level (99.5%) defines the market Value at Risk (VaR). For entities modeled using the standard formula, the market risk is based on aggregating the losses under specified standard formula shock scenarios.

Strategic asset allocation benchmarks and risk limits, including financial VaR, stand-alone interest rate and equity sensitivity limits, and foreign exchange exposure limits, are defined for both the Group and related undertakings. Limits are closely monitored and, if a breach occurs, countermeasures are implemented which may include escalation to the respective decision-making bodies and/or the closing of positions. Furthermore, we have put in place standards for hedging activities, due to the exposure to fair-value options embedded in our life insurance products. Finally, guidelines are provided by the Group regarding certain investments, new investment products, and the use of derivatives. Compliance with these guidelines is controlled by the respective risk and controlling functions.

INTEREST RATE RISK

Allianz is a liability-driven investor. We may suffer an economic loss in the event of falling interest rates as we reinvest maturing assets at lower rates prior to the maturity of liability contracts, if the duration of our assets is shorter than our liabilities. This risk is higher for long-dated life investment and savings products as well as for internal pensions, with a significant part of the Life/Health business segment's interest rate risk coming from Western Europe, mainly from traditional life insurance products with guarantees. Conversely, opportunities may arise when interest rates increase, as this may result in returns from reinvestments being higher than the guaranteed rates. Interest rate risk is managed within our asset/liability management process and controlled via interest rate sensitivity and duration mismatch limits for the Group and the local entities.

INFLATION RISK

As an insurance company, we are exposed to changing inflation rates, predominantly due to our Non-Life insurance obligations but also due to inflation-indexed internal pension obligations. While inflation assumptions are taken into account in our product development and pricing, unexpected rising rate of inflation will increase both future claims and expenses, leading to higher liabilities; conversely, if future inflation rates were to be lower than assumed, liabilities would be lower than anticipated. The risk of changing inflation rates is incorporated in our internal model.

EQUITY RISK

The Group's insurance-focused operating entities may hold equity investments to diversify their portfolios and take advantage of expected long-term returns. Strategic asset allocation benchmarks, investment and equity sensitivity limits are used to monitor and manage these exposures. In addition, equity investments fall within the scope of the credit risk platform to avoid single-name risk concentrations. Risks from changes in equity prices are normally associated with decreasing share prices and increasing equity price volatilities. As stock markets might also increase, opportunities may arise from equity investments in those events.

CREDIT SPREAD RISK

Fixed-income assets such as bonds may lose value if credit spreads widen. However, our risk appetite for credit spread risk takes into account the underlying economics of our business model: As a liability-driven investor, we typically hold fixed-income assets until maturity. This implies that we are less affected economically by short-term changes in market prices. In our capacity as a long-term investor, this gives us the opportunity to invest in bonds yielding spreads over the risk-free return and earning this additional yield component.

CURRENCY RISK

Our operating entities typically invest in assets which are denominated in the same currency as their liabilities. However, some foreign currency exposures are allowed to support portfolio diversification and tactical investment decisions. Our largest exposure to foreign currency risk comes from our ownership of non-Euro entities: Whenever the Euro strengthens, the Euro equivalent net asset value of our foreign subsidiaries will decline from a Group perspective; however, at the same time the capital requirements in Euro will decrease, partially mitigating the total impact on Group capitalization. Based on our foreign exchange management limit framework, currency risk is monitored and managed at both the local and Group level.

REAL ESTATE RISK

Despite the risk of decreasing real estate values, real estate is a suitable addition to our investment portfolio due to good diversification benefits as well as to the contribution of relatively predictable, long-term cash flows.

Allianz's Group Investment Committee has defined a framework for standard transactions for real estate equity and commercial real

1_Internal pensions are evaluated and modeled based on deterministic models, following IAS 19 principles.

estate loan investments. These standards outline diversification targets, minimum-return thresholds, and other qualitative and quantitative requirements. All transactions that do not meet these standards or have a total investment volume (including costs) exceeding a defined threshold must be reviewed individually by Group Risk and other Group center functions. In addition, all applicable limits must be respected, in particular those resulting from strategic asset allocation as well as its leeways and risk limits, with regards to an investing entity's portfolio.

CREDIT RISK

Credit risk is measured as the potential economic loss in the value of our portfolio that would result from either changes in the credit quality of our counterparties ("migration risk") or the inability or unwillingness of a counterparty to fulfill contractual obligations ("default risk").

The Group's credit risk profile originates from three sources: our investment portfolio, our credit insurance business, and our external reinsurance.

- Investment portfolio: Credit risk results from our investments in fixed-income bonds, loans, derivatives, cash positions, and receivables whose value may decrease depending on the credit quality of the obligor. However, losses due to credit events can be shared with the policyholder for certain life insurance products.
- Credit insurance: Credit risk arises from potential claim payments on limits granted by Euler Hermes to its policyholders. Euler Hermes insures its policyholders against credit risk associated with short-term trade credits advanced to policyholder's clients. When the client of the policyholder is unable to meet its payment obligations, Euler Hermes indemnifies the loss to the policyholder.
- Reinsurance: Credit risk arises from potential losses from non-recoverability of reinsurance receivables or due to default on benefits under in-force reinsurance treaties. Our reinsurance partners are carefully selected by a dedicated team. Besides focusing on companies with strong credit profiles, we may also require letters of credit, cash deposits, or other financial measures to further mitigate our exposure to credit risk.

The internal credit risk capital model takes into account the major determinants of credit risk for each instrument, including exposure at default, rating, seniority, collateral, and maturity. Additional parameters assigned to obligors are migration probabilities and obligor asset correlations reflecting dependencies within the portfolio. Ratings are assigned to single obligors using a clearly defined assignment process. Central components of this assignment process are long-term ratings from external rating agencies, and internal rating models in case of specific internal investment strategies. If available, a dynamic adjustment using market-implied ratings and the most recent qualitative information available is applied.

The loss profile of a given portfolio is obtained using a Monte Carlo simulation, taking into account interdependencies and exposure concentrations per obligor segment. The loss profiles are calculated at different levels of the Allianz Group, and then fed into the internal model at each level for further aggregation across sources of risk to derive diversified credit risk.

Our credit insurance portfolio is modeled by Euler Hermes, based on a proprietary model component which is a local adaptation of the central internal credit risk model. Euler Hermes' loss profile is integrated in the Group's internal credit risk model to capture the concentration and diversification effects.

To ensure effective credit risk management, credit VaR limits are derived from our internal risk capital framework, and rating bucket benchmarks are used to define our risk appetite for exposures in the lower investment-grade and non-investment-grade area.

Our group-wide country and obligor group limit management framework (CRisP[1]) allows us to manage counterparty concentration risk, covering both credit and equity exposures at the Group and operating-entity levels. This limit framework forms the basis for discussions on credit actions and provides notification services featuring the quick and broad communication of credit-related decisions across the Group.

Clearly defined processes ensure that exposure concentrations and limit utilizations are appropriately monitored and managed. The setting of country and obligor exposure limits from the Group's perspective (i.e., the maximum concentration limit) takes into account the Allianz Group's portfolio size and structure as well as our overall risk strategy.

UNDERWRITING RISK

Underwriting risk consists of premium and reserve risks in the Property-Casualty[2] business segment as well as biometric risks in the Life/Health[3] business segment. Underwriting risks are not relevant for the Asset Management business segment and our banking operations.

PROPERTY-CASUALTY

Our Property-Casualty insurance businesses are exposed to premium-risk-related adverse developments in the current year's new and renewed business as well as to reserve risks related to the business in force.

Premium risk

As part of our Property-Casualty business operations, we receive premiums from our customers and provide insurance protection in return. Premium risk is the risk that actual claims for the business in the current year develop adversely relative to expected claims ratios. Premium risk can be mitigated by reinsurance as well as by technical excellence in underwriting. Assessing risks as part of the underwriting process is therefore a key element of our risk management framework. There are clear underwriting limits and restrictions which are defined centrally and applied across the Group.

Premium risk is subdivided into three categories: natural catastrophe risk, terror risk, and non-catastrophe risk including man-made catastrophes.

Premium risk is estimated based on actuarial models that are used to derive loss distributions. Non-catastrophe risks are modeled using frequency and severity models for large losses and aggregate loss distribution models for attritional losses. Natural disasters such as earthquakes, storms, and floods represent a significant challenge for risk management due to their high accumulation potential for higher return periods. For natural catastrophe risks, we use special modeling

1_Credit Risk Platform
2_Property-Casualty is also referred to as Non-Life.
3_Life/Health is also referred to as Life.

techniques which combine portfolio data (geographic location, characteristics of insured objects, and their values) with simulated natural disaster scenarios to estimate the magnitude and frequency of potential losses. Where such stochastic models do not exist, we use deterministic, scenario-based approaches to estimate potential losses. Similar approaches are used to evaluate risk concentrations for terror and man-made catastrophes, including losses from cyber incidents and industrial concentrations.

These loss distributions are then used within the internal model to calculate potential losses with a predefined confidence level of 99.5 %.

Reserve risk

Reserve risk represents the risk of adverse developments in best-estimate reserves over a one-year time horizon, resulting from fluctuations in the timing and/or amount of claims settlement. We estimate and hold reserves for claims resulting from past events that have not yet been settled. In case of unexpected developments, we would experience a reserve gain or loss dependent on the assumptions applied for the estimate.

Similar to premium risk, reserve risk is calculated based on actuarial models. The reserve distributions derived are then used within the internal model to calculate potential losses based on a predefined confidence level of 99.5 %.

In order to reduce the risk of unexpected reserve volatility, our operating entities constantly monitor the development of reserves for insurance claims on a line-of-business level. In addition, operating entities generally conduct annual reserve uncertainty analyses based on similar methods used for reserve risk calculations. The Allianz Group performs regular independent reviews of these analyses and Group representatives participate in the local reserve committee meetings.

LIFE/HEALTH

Underwriting risks in our Life/Health operations (biometric risks) include mortality, disability, morbidity, and longevity risks. Mortality, disability, and morbidity risks are associated with an unexpected increase in the occurrence of death, disability, or medical claims. Longevity risk is the risk that the reserves covering life annuities and group pension products might not be sufficient due to longer life expectancies of the insured.

Life/Health underwriting risk arises from profitability being lower than expected. As profitability calculations are based on several parameters – such as historical loss information and assumptions on inflation, mortality, or morbidity – realized parameters may differ from the ones used for underwriting. For example, higher-than-expected inflation may lead to higher medical claims in the future. However, beneficial deviations are also possible; for example, a lower morbidity rate than expected will most likely result in lower claims in income protection products.

We measure these risks within our internal model, distinguishing, where appropriate, between risks affecting the absolute level and trend development of the actuarial assumptions on the one hand and pandemic risk scenarios on the other. Depending on the nature and complexity of the risks involved, our health business is represented in the internal model according to Property-Casualty or Life/Health calculation methods and is therefore included in the relevant Property-Casualty and Life/Health figures accordingly. However, most of our health business is attributable to the Life/Health business segment.

BUSINESS RISK

Business risks include cost risks and policyholder behavior risks. They are mostly driven by the Life/Health business and to a lesser extent by the Property-Casualty business. Cost risks are associated with the risk that expenses incurred in administering policies are higher than expected or that new business volume decreases to a level that does not allow Allianz to absorb its fixed costs. Business risk is measured relative to baseline plans.

For the Life/Health business, policyholder behavior risks are risks related to unpredictable, adverse behavior of policyholders in exercising their contractual options, such as, for instance, early termination of contracts, surrenders, partial withdrawals, renewals, and annuity take-up options.

Assumptions on policyholder behavior are set in line with accepted actuarial methods and based on own historical data, where available. If there is no historical data, assumptions are based on industry data or expert judgment. It is used as a basis to determine the economic impact of policyholder behavior under different scenarios within our internal model.

OPERATIONAL RISK

Operational risks refer to losses resulting from inadequate or failed internal processes, human errors, system failures, and external events, and can stem from a wide variety of sources, including the following:

- "Clients, Products & Business Practices": potential losses due to a failure to meet the professional obligations or from the design of products. Examples include misselling, non-compliance with internal or external requirements related to products, anti-trust behavior, data protection, sanctions and embargoes, etc. These losses tend to be less frequent but, when they occur, can have high financial impact.
- "Execution, Delivery and Process Management": potential losses arising from transaction or process management failures. Examples include interest and penalties from non-payment or underpayment of taxes or losses associated with broker and agent distribution processes. These losses tend to be of a relatively higher frequency but with little financial impact (although single large-loss events can occur).
- Other operational risks including, for example, internal or external fraud, financial misstatement risk, a cyber security incident causing business disruption or fines, a potential failure at our outsourcing partners causing a disruption to our working environment, etc.

The Group's operational risk capital is dominated (by more than 80 %) by the risk of potential losses within the categories "Clients, Products, and Business Practices" and "Execution, Delivery, and Process Management". With regard to the largest category "Clients, Products, and Business Practices", key external drivers are changes in laws and regulations. Internal drivers reflect potential failures of internal processes. These drivers are considered in the local scenario analyses.

Operational risk capital is calculated using a scenario-based approach based on expert judgment as well as internal and external operational loss data. The estimates for frequency and severity of potential loss events for each material operational risk category are assessed and used as a basis for our internal model calibration.

Allianz has developed a consistent operational risk management framework, which is applied across the Group based on proportionality and focuses on the early recognition and proactive management of material operational risks. The framework defines roles and responsibilities as well as management processes and methods: Local risk managers, in their capacity as Second Line of Defense, identify and evaluate relevant operational risks and control deficiencies via a dialog with the First Line of Defense, report operational risk events in a central database, and ensure that the framework is implemented in their respective operating entity.

This framework triggers specific mitigating control programs. For example, compliance risks are addressed with written policies and dedicated compliance programs monitored by the Group Compliance function at Allianz Group. The risk of financial misstatement is mitigated by a system of internal controls covering financial reporting. Outsourcing risks are covered by our Outsourcing Policy, Service Level Agreements, and Business Continuity and Crisis Management programs to protect critical business functions from these events. Cyber risks are mitigated through investments in cyber security, cyber insurance that Allianz buys from third-party insurers, and a variety of ongoing control activities.

OTHER MATERIAL RISKS NOT MODELED IN THE INTERNAL MODEL

There are risks which, due to their nature, cannot be adequately addressed or mitigated by setting aside dedicated capital. These risks are therefore not considered in the internal model. For the identification, analysis, assessment, monitoring, and management of these risks we also use a systematic approach, with risk assessment generally based on qualitative criteria or scenario analyses. The most important of these other risks are strategic, liquidity, and reputational risk.

STRATEGIC RISK

Strategic risk is the risk of a decrease in the company's value that will arise from adverse management decisions on business strategies and their implementation.

Strategic risks are identified and evaluated as part of the Group's Top Risk Assessment process, and discussed in various Board of Management-level committees (for example, GFRC). We also monitor market and competitive conditions, capital market requirements, regulatory conditions, etc., to decide if strategic adjustments are necessary.

The most important strategic risks are directly addressed through Allianz's Renewal Agenda, which focuses on five themes: True Customer Centricity, Digital by Default, Technical Excellence, Growth Engines, and Inclusive Meritocracy. Progress on mitigating strategic risks and meeting the Renewal Agenda objectives is monitored and evaluated in the course of the Strategic and Planning Dialogs between Allianz Group and the related undertakings.

LIQUIDITY RISK

Liquidity risk is defined as the risk that current or future payment obligations cannot be met or can only be met on the basis of adversely altered conditions. Liquidity risk can arise primarily if there are mismatches in the timing of cash in- and out-flows.

Each legal entity of Allianz Group manages liquidity risk locally, using asset/liability management systems designed to ensure that assets and liabilities are adequately matched. Local investment strategies particularly focus on the quality of the investments and ensure a significant portion of liquid assets (for example, high-rated government bonds or covered bonds) in the portfolios. In the course of liquidity planning, liquidity sources (for example, cash from investments and premiums) and liquidity needs (for example, payments due to insurance claims and expenses) are reconciled under a best-estimate plan, as well as under adverse idiosyncratic and systemic liquidity scenarios, to allow for a group-wide consistent view on liquidity risk. These analyses are performed at legal entity level and are monitored by the Group.

An identical liquidity stress-testing framework is applied at Allianz SE. Major contingent liquidity requirements arise mainly from market risk scenarios for Allianz SE and its subsidiaries, from the non-availability of external capital markets, and from reinsurance risk scenarios for Allianz SE.

In addition, the cash position of the Group cash pool investment portfolio is monitored and forecast on a daily basis and is subject to an absolute minimum liquidity threshold and an absolute target liquidity threshold. Both thresholds are defined for the Allianz SE cash pool in order to be protected against short-term liquidity crises.

The liquidity planning process addresses future potential liquidity needs and aims to manage available liquidity sources in an efficient and effective manner. The annual and high-level three-year cash flow plan for Allianz SE and the Holding and Treasury reportable segment of Allianz SE reflects the overall operating, financing, and investing strategy of Allianz Group. The annual liquidity plan for Allianz SE and for the Holding and Treasury reportable segment is subject to the approval of the Board of Management. Liquidity planning is constantly monitored and regularly reported to the Board of Management via GFRC.

REPUTATIONAL RISK

Allianz's reputation as a well-respected and socially aware provider of financial services is influenced by our behavior in a range of areas such as product quality, corporate governance, financial performance, customer service, employee relations, intellectual capital, and corporate responsibility.

Reputational risk is the risk of an unexpected drop in the value of the Allianz SE share price, the value of the in-force business, or the value of future business caused by a decline in our reputation in internal or external stakeholders' judgment.

The identification and assessment of reputational risks is part of the annual Top Risk Assessment process. As part of this process, senior management approves the risk management strategy for the most significant risks facing the company, including those with a potentially severe reputational impact.

The management of Environmental, Social and Governance (ESG) risks – which are closely related to reputational risk – is supported by a dedicated Group ESG Board and Group ESG Office[1], which help steer the integration of ESG aspects into core investment and insurance activities. Significant ESG and other reputational risks identified in the course of business are escalated to experts from Group Communications and Corporate Responsibility[2], Group Risk, and

1_The Allianz Environmental, Social, Governance (ESG) Board and the ESG office are constituted as advisors to the Board of Management of Allianz SE and will further elevate environmental, social, and governance aspects in corporate governance and decision-making processes at the Allianz Group.

2_Until 31 December 2020, the corporate responsibility function was part of Group Communications and Corporate Responsibility. As of 1 January 2021, Allianz's ESG agenda will be managed by a new Global Sustainability function and Group Communications and Corporate Responsibility is renamed into Group Communications and Reputation.

Group ESG for assessment and decision-making, with the GFRC acting as the ultimate escalation/decision-making body.

CLIMATE CHANGE

Climate change has the potential to materially affect the global economy and our business, especially in the long run. Risks arising from climate change can be seen already today and their relevance will increase over the mid- and long-term. These can for instance be acute and chronic physical risks such as warming temperatures, extreme weather events, rising sea levels, intensifying heatwaves and droughts, or a change in vector-borne diseases, with impacts on property or health. The risks also result from the cross-sectoral structural change stemming from the transition towards a low-carbon economy. These include changes in climate policy, technology, or market sentiment, and impact thereof on the market value of financial assets as well as impact resulting from climate change litigation.

Climate change also creates opportunities – be it in connection with financing a low-carbon and climate-resilient future, e.g., by investing in renewable energy, energy efficiency in real estate, and electric vehicle infrastructure –, or by providing insurance solutions to protect against physical climate impacts and to support low-carbon business models.

Climate change impacts Allianz's business in two key ways:

- Firstly, through insurance policies e.g., covering health impacts, property damage, and other losses, and
- Secondly, through changes in the sectors and business models it underwrites.

Furthermore, Allianz is affected by climate change as a large-scale institutional investor. It has significant stakes in various economies, companies, infrastructure, and real estate that might be affected by the physical impact of climate change and by the transition to a low-carbon economy. This can directly influence the ability of assets to generate long-term value.

We address immediate risks from climate change factors following the management approach for the primary underlying risks e.g., building on our long-term expertise in the modeling of extreme weather events or analyzing emission profiles of our proprietary investments. On a forward-looking basis, we consider risks from climate change factors under emerging risks, where we closely monitor the development of the risk landscape supported by selective analyses on our portfolios.

Internal risk capital framework

We define internal risk capital as the capital required to protect us against unexpected, extreme economic losses, and which forms the basis for determining our Solvency II regulatory capitalization. On a quarterly basis, we calculate and consistently aggregate internal risk capital across all business segments. We also project risk capital requirements regularly between reporting periods in times of financial market turbulence.

GENERAL APPROACH

For the management of our risk profile and solvency position, we utilize an approach that reflects the Solvency II rules in that it comprises our approved internal model covering all major insurance operations. Other entities are reflected based on standard formula results, others under the deduction and aggregation approach as well as on sectoral or local requirements for non-insurance operations, in accordance with the Solvency II framework.

INTERNAL MODEL

Our internal model is based on a VaR approach using a Monte Carlo simulation. Following this approach, we determine the maximum loss in portfolio value in scope of the model within a specified timeframe ("holding period", set at one year) and probability of occurrence ("confidence level", set at 99.5%). We simulate risk events from all risk categories ("sources of risk") modeled and calculate the portfolio value based on the net fair value of assets minus liabilities, including risk-mitigating measures such as reinsurance contracts or derivatives, under each scenario.

The risk capital required is defined as the difference between the current portfolio value and the portfolio value under adverse conditions at the 99.5% confidence level. As we consider the impacts of a negative or positive event on all risk sources and covered businesses at the same time, diversification effects across products and regions are taken into account. The results of our Monte Carlo simulation allow us to analyze our exposure to each source of risk both separately and in aggregate. We also analyze several pre-defined stress scenarios representing historical events, reverse stress tests, and adverse scenarios relevant for our portfolio. Furthermore, we conduct ad-hoc stress tests on a monthly basis to reflect current political and financial developments and to analyze specific non-financial risks more closely.

COVERAGE OF THE RISK CAPITAL CALCULATIONS

The Allianz Group's internal model to calculate our Solvency Capital Requirement (SCR) covers all major insurance operations[1]. This includes both relevant assets (including fixed-income, equities, real estate, and derivatives) and liabilities (including the run-off of all current and planned technical provisions as well as deposits, issued debt and other liabilities). For with-profit products in the Life/Health business segment, the options and guarantees embedded in insurance contracts – including policyholder behavior – are taken into account.

Smaller related undertakings in the European Economic Area which are not covered by the internal model are reflected with their standard formula results. At the Group level, the Solvency Capital Requirements for smaller insurance undertakings outside the European Economic Area with only immaterial impact on the Group's risk profile are accounted for by means of book value deduction.[2]

Risk capital related to our European banking operations is allocated to the Corporate and Other business segment and calculated based on the approach applied by banks in accordance with the local requirements resulting from the Basel regulation (Basel standards). As the capital requirement for the banking business is only approximately 0.8% (2019: 0.9%) of our total pre-diversified Group Solvency Capital Requirement, risk management for the banking operations is not discussed in greater detail.

1_Allianz Life Insurance Company of North America is based on third-country equivalence.

2_Under book value deduction, the book value of the respective entity is deducted from eligible Own Funds of the Group.

For our Asset Management business segment, we assign internal risk capital requirements based on sectoral regulatory capital requirements. The Asset Management business is affected mainly by operational risks. However, since most of our Asset Management business is not located in the Eurozone, at Group level its participation value bears a foreign exchange rate risk. Our Asset Management business is covered by adequate risk controlling processes, including qualitative risk assessments (such as Top Risk Assessment) set up by the respective entities, with key results regularly reported to the Group. As the impact on the Group's total Solvency Capital Requirement is minor, risk management with respect to Asset Management is not discussed in greater detail.

In view of the above, Allianz's risk capital framework covers all material and quantifiable risks. Risks not specifically covered by the internal model include strategic, liquidity, and reputational risks.

ASSUMPTIONS AND LIMITATIONS

RISK-FREE RATE AND VOLATILITY ADJUSTMENT

When calculating the fair values of assets and liabilities, the assumptions regarding the underlying risk-free yield curve are crucial in determining and discounting future cash flows. For liability valuation, we apply the methodology provided by the European Insurance and Occupational Pensions Authority (EIOPA) as part of its technical documentation (EIOPA-BoS-20/109) to extrapolate the risk-free interest rate curves beyond the last liquid tenor.[1]

In addition, we adjust the risk-free yield curves by a volatility adjustment (VA) in most markets where a volatility adjustment is defined by EIOPA and approved by the local regulator. This is done to better reflect the underlying economics of our business, as the cash flows of our insurance liabilities are largely predictable. The advantage of being a long-term investor is the opportunity to invest in bonds yielding spreads over the risk-free return and earning this additional yield component over the duration of the bonds. Being a long-term investor mitigates much of the risk of having to sell debt instruments at a loss prior to maturity.

We take account of this by applying the volatility adjustment to mitigate the credit spread risk, which we consider to be less meaningful for long-term investors than the default risk. Allianz also models the volatility adjustment dynamically within our approved internal model, which differs from the static EIOPA VA concept applied in the standard formula. For risk capital calculations, we assume a dynamic movement of the volatility adjustment broadly consistent with the way the VA would react in practice; however, we base the movement on our own portfolio rather than the EIOPA portfolio. To account for this deviation, Allianz applies a more conservative, reduced application ratio for the dynamic volatility adjustment. Validation is performed regularly to verify the appropriateness and prudency of the approach.

VALUATION ASSUMPTIONS: REPLICATING PORTFOLIOS

We replicate the liabilities of our Life/Health insurance business. This technique enables us to represent all product-related options and guarantees, both contractual and discretionary, by means of standard financial instruments. In the risk calculation, we use the replicating portfolio – together with a Least Square Monte Carlo approach for risks that are not covered by the replication – to determine and revalue these liabilities under all potentially adverse Monte Carlo scenarios.

DIVERSIFICATION AND CORRELATION ASSUMPTIONS

Our internal model considers concentration, accumulation, and correlation effects when aggregating results at the Group level. The resulting diversification reflects the fact that all potential worst-case losses are not likely to materialize at the same time. As we are an integrated financial services provider offering a variety of products across different business segments and geographic regions, diversification is key to our business model.

Diversification typically occurs when looking at combined risks that are not, or only partly, interdependent. Important diversification factors include regions (for example, windstorm in Australia vs. windstorm in Germany), risk categories (for example, market risk vs. underwriting risk), and subcategories within the same risk category (for example, commercial vs. personal lines of property and casualty risk). Ultimately, diversification is driven by the specific features of the investment or insurance products in question and their respective risk exposures. For example, an operational risk event at an Australian entity can be considered to be highly independent of a change in credit spreads for a French government bond held by a German entity.

Where possible, we derive correlation parameters for each pair of market risks through statistical analysis of historical data, considering observations over more than a decade. In case historical data or other portfolio-specific observations are insufficient or unavailable, correlations are set by the Correlation Settings Committee, which combines the expertise of risk and business experts in a well-defined and controlled process. In general, when using expert judgment we set the correlation parameters to represent the joint movement of risks under adverse conditions. Based on these correlations, we use an industry-standard approach, the Gaussian copula, to determine the dependency structure of quantifiable sources of risk within the applied Monte Carlo simulation.

ACTUARIAL ASSUMPTIONS

Our internal model also includes assumptions on claims trends, liability inflation, mortality, longevity, morbidity, policyholder behavior, expense, etc. We use our own internal historical data for actuarial assumptions wherever possible, additionally considering recommendations from the insurance industry, supervisory authorities, and actuarial associations. The derivation of our actuarial assumptions is based on generally accepted actuarial methods. Within our internal risk capital and financial reporting framework, comprehensive processes and controls exist for ensuring the reliability of these assumptions.

MODEL LIMITATIONS

As the internal model is based on a 99.5% confidence level, there is a low statistical probability of 0.5% that actual losses could exceed this threshold at the Group level in the course of one year.

We use model and scenario parameters derived from historical data, where available, to characterize future possible risk events. If future market conditions were to differ substantially from the past, for example, in an unprecedented crisis, our VaR approach might be too conservative or too liberal in ways that are difficult to predict. In order

1_Due to late availability of EIOPA's publication, the risk-free interest rate term structure used might slightly differ from the one published by EIOPA.

to mitigate reliance on historical data, we complement our VaR analysis with stress testing.

Furthermore, we validate the model and parameters through sensitivity analyses, independent internal peer reviews, and, where appropriate, independent external reviews, focusing on methods for selecting parameters and control processes. To ensure that the model is validated adequately, we have established an Independent Validation Unit (IVU) within Group Risk, responsible for validating our internal model within a comprehensive model validation process. Any limitations identified during the validation process are remedied after consultation with the Group regulator. Overall, we believe that our validation efforts are effective and that the model adequately assesses the risks to which we are exposed.

The construction and application of the replicating portfolios mentioned are subject to the set of replicating instruments that are available and might be too simple or restrictive to capture all factors affecting the change in value of liabilities. As with other model components, the replication framework is subject to independent validation and to suitability assessments as well as to stringent data and process quality controls. Therefore, we believe that our liabilities are adequately represented by the replicating portfolios.

Since the internal model takes into account the change in the economic fair value of our assets and liabilities, it is crucial to estimate the market value of each item accurately. For some assets and liabilities it may be difficult, if not impossible – notably in distressed financial markets – to either obtain a current market price or apply a meaningful mark-to-market approach. For such assets we apply a mark-to-model approach. For some of our liabilities, the accuracy of their values also depends on the quality of the actuarial cash flow estimates. Despite these limitations, we believe the estimated fair values are appropriately assessed.

REGULATORY AND MODEL CHANGES IN 2020

In 2020, our internal model was further enhanced based on regulatory developments, model validation results, and the feedback received in the course of our consultations with regulators.

The net impact of regulatory and model changes on the Solvency II risk capital of the Group in 2020 was € (0.6) bn. This reduction in SCR is mainly driven by the introduction of several minor and immaterial model changes at both the Group and entity levels and the implementation of the final aspects of the cross-effect model change. Cross-effects are defined as the effects arising due to the interaction between different risk categories and/or risk types. This is partly offset by impacts of the regulatory change of a reduction in the ultimate forward rate (UFR) and the refinement of the calibration of equity volatility. The change in the modeling approach for surplus funds of Allianz Lebensversicherungs-Aktiengesellschaft contributed to the significant reduction of the capital add-on.

In all subsequent sections, the figures including model changes will form the basis for the movement analyses of our risk profile in 2020. As our general capital steering continues to focus on the Solvency II ratio impacts excluding the application of transitional measures for technical provisions, the figures in the following table exclude transitional measures unless specifically stated.

Allianz Group: Impact of regulatory and model changes – allocated risk according to the risk profile (total portfolio before non-controlling interests)
€ mn

	Market risk		Credit risk		Underwriting risk		Business risk		Operational risk		Diversification		Total	
As of 31 December	2019[1]	2019[2]	2019[1]	2019[2]	2019[1]	2019[2]	2019[1]	2019[2]	2019[1]	2019[2]	2019[1]	2019[2]	2019[1]	2019[2]
Property-Casualty	5,638	5,632	2,286	2,283	11,542	11,529	692	691	1,604	1,602	(6,266)	(6,259)	15,495	15,478
Life/Health	17,749	17,859	2,711	2,726	437	439	2,839	2,855	1,527	1,536	(4,907)	(4,934)	20,356	20,481
Corporate and Other	1,940	1,955	471	474	127	127	-	-	403	406	(720)	(726)	2,220	2,237
Total Group	**25,327**	**25,446**	**5,467**	**5,484**	**12,105**	**12,095**	**3,530**	**3,546**	**3,534**	**3,545**	**(11,893)**	**(11,918)**	**38,071**	**38,196**
												Tax	(5,481)	(5,434)
												Capital add-on	1,042	1,506
												Third country equivalent	3,218	3,218
												Sectoral requirement	2,038	2,038
												Total Group	**38,888**	**39,525**

1_2019 risk profile figures adjusted based on the 2020 model changes impact.
2_2019 risk profile figures as reported previously.

In 2020, the impact of model changes to our internal model concerned the following risk categories:

MARKET RISK

The overall decrease in market risk especially for the Life/Health business segment is mainly driven by the impacts of minor and immaterial model changes and the cross-effect model change. This is partly compensated by the regulatory change – the reduction in the ultimate forward rate that is mostly allocated to market risk –, the refinement of calibration of equity volatility, and the modeling of cross-effects in the surplus funds of Allianz Lebensversicherungs-Aktiengesellschaft. The combined impact on the market risk of Allianz Group was a decrease of € 0.1 bn to € 25.3 bn (2019: € 25.4 bn).

CREDIT RISK

No material model change was applied to the risk capital model for credit risk in 2020. However, minor model changes and model updates in the credit risk model as well as model changes in other risk modules that affect the credit risk model resulted in a marginal decrease of credit risk.

UNDERWRITING, BUSINESS AND OPERATIONAL RISKS

The changes to these risk categories shown in the table above are driven by minor and immaterial model changes.

CAPITAL ADD-ONS

The decrease of the risk capital requirement of € 0.5 bn is mainly driven by the reversal of the capital add-on introduced previously to reflect not modeled cross-effects in the surplus funds of Allianz Lebensversicherungs-Aktiengesellschaft. This add-on is no longer necessary due to the approach introduced for modeling these cross-effects.

IMPACT OF MODEL CHANGES ON ELIGIBLE GROUP OWN FUNDS

The regulatory and model changes in 2020 resulted in a € 1.0 bn decrease of Own Funds which was mainly driven by the adjustment of the UFR by - 15 basis points and the model changes at Allianz Lebensversicherungs-Aktiengesellschaft and Allianz Private Krankenversicherungs-Aktiengesellschaft such as the introduction of a simplified look-through on asset participations and the implementation of model changes in cashflow modeling.

IMPACTS OF TRANSITIONAL MEASURES

The application of transitional measures on technical provisions for Allianz Lebensversicherungs-Aktiengesellschaft and Allianz Private Krankenversicherungs-Aktiengesellschaft resulted in an increase in the SCR of € 66 mn and an increase in the Own Funds of € 13.6 bn at the Group level.

Allianz risk profile and management assessment

RISK PROFILE AND MARKET ENVIRONMENT

Allianz's core business as a global insurer and asset manager predominantly exposes it to a variety of risks such as underwriting risks, financial market and credit risks, and several other non-financial risks (i.e., operational, reputational, liquidity, and strategic risks). The execution of the Renewal Agenda may impact the potential severity or likelihood of these existing risks, contribute towards concentrations of certain types of risk, or potentially even give rise to new risks within a given risk category. However, from a broad perspective, the overall risk profile of Allianz has remained and is expected to remain stable. "Stable" in this context means a relatively high exposure to market and credit risks, a moderate exposure to underwriting risks and a modest exposure to operational, business, and other risks (i.e., measured as a share of the Allianz Group's Solvency II risk capital). Please refer to section Solvency II regulatory capitalization for further details.

To support the development of a risk appetite and a risk management framework for these core risks, the Allianz Group has elaborated the following risk management philosophy:

- Financial risks: Allianz Group's ultimate objective is to assure that financial risk taking is in line with risk bearing capacity at the Group and legal entity level and it creates shareholder's equity. To manage financial risk effectively and avoid accumulated losses in times of financial crisis, it is essential to clearly identify, measure, monitor and control the risks inherent in the investment portfolios and in insurance products including the development of new products.
- Underwriting risks: Exposures to these risks are required to serve customers and generate shareholder value. Quality control mechanisms are applied to ensure adherence to Allianz's underwriting standards and monitor the quality of the portfolio and underwriting process. The underwriting processes must support sustainable and profitable business, secure consistency, align with the risk appetite of the Group and of the operating entities as well as avoid undesired and/or excessive risks and accumulations. The full economic consequences of a pandemic event such as COVID-19 are uninsurable. The required capital for an effective protection against such an accumulation of risks would require premium rates, that are unattractive for the customers, if not unaffordable. In addition, a pandemic affects multiple factors such as business interruption, impact on global capital markets, increase in medical costs, and mortality.
- Other non-financial risks: These risks are inherent to the Group's core business and need to be carefully managed via continuous improvements in risk identification, risk assessment and control environments. This occurs through elements of the Group Risk management framework such as the Top Risk Assessment (TRA), Integrated Risk and Control System (IRCS), Reputational Risk Management Framework, and Liquidity Risk Management.

POTENTIAL RISKS IN THE FINANCIAL MARKET AND IN OUR OPERATING ENVIRONMENT

Financial markets are characterized by historically low interest rates and risk premiums, causing some investors to look for higher-yielding – and potentially higher-risk – investments. In addition to sustained low interest rates, the challenges of implementing long-term structural reforms in key Eurozone countries, the uncertainty about future monetary and fiscal policies, rising populism, amplified geopolitical tensions and economic nationalism amid the pandemic, which weigh on global trade with the potential of prompting long-term structural shifts in global supply chains may lead to increasing market volatility. The increasing reliance on digital technologies which has been greatly accelerated by the COVID-19 pandemic – to ensure business continuity and enhance efficiency and competitiveness – increases the risk of technology obsolescence, cyber-attacks, data breaches, system failures as well as the risk of non-compliance with increasing regulation covering IT-related business processes.

The uncertainty around the evolution of the COVID-19 pandemic remains a significant risk. The approval, production, distribution, and correct administration of the vaccines are critical in alleviating the social, economic, and financial repercussions of the pandemic. The steps are subject to a number of challenges such as the efficacy of the vaccines, high-quality mass production, potential long-term side effects, and the willingness of a majority of the population to get vaccinated. Full economic recovery is not expected to occur until the health concerns are forcefully and credibly addressed, i.e., for herd immunity to be achieved. Global vaccination is expected to be eventually successful; however, the timing and progress appear uncertain. Residual risks will remain such as further virus mutations, emerging side effects, length of the immunity, or refusal to take vaccines by the majority of the population as most authorities do not intend to make vaccination compulsory. The extended containment (lockdown) measures risk delaying economic recovery, with significant credit implications in some industries. The pace and timing of recovery, the overall economic cost, and credit implications will depend on an effective transition to post-COVID policies, as less supportive fiscal packages could hurt employment and the solvency of small or more exposed businesses.

Another strain is the future relationship between the United Kingdom and the European Union as the Trade and Cooperation Agreement negotiated between them enters into force in 2021.

Therefore, we continue to closely monitor political and financial developments as well as the global trade situation to manage our overall risk profile to specific event risks.

REGULATORY DEVELOPMENTS

Our approved internal model has been applied since the beginning of 2016 when Solvency II became effective. There is some uncertainty about future regulatory requirements resulting from the potential introduction of future global capital requirements and from the current Solvency II review.

The frameworks for potential future capital requirements for Internationally Active Insurance Groups (IAIGs) and Global Systemically Important Insurers (G-SIIs) are yet to be finalized by the International Association of Insurance Supervisors (IAIS) and the Financial Stability Board (FSB).In addition, the European Commission is conducting a review of the Solvency II directive as foreseen in European legislation. The review covers an extensive list of topics from a wide variety of areas, from capital requirements to reporting and on to proportionality, for which EIOPA provided technical advice to the European Commission in December 2020, suggesting amendments in each area. Based on this and further input from stakeholders, the European Commission is expected to provide a first legislative proposal by the third quarter of 2021, followed by trilog negotiations at the European level before changes to the directive can become effective. Depending on circumstances, a further transposition into national law will be required, so that final implementation is not expected before end of 2022. In this context, the Allianz Group is actively participating in discussions with the European Commission, EIOPA, local regulators, Insurance Europe, and GDV.

Therefore, future Solvency II Capital Requirements might change depending on the outcome of the 2020 review of the Solvency II framework by EIOPA. Concrete effects of the Solvency II review for the Group, however, can only be assessed after final results are available.

Finally, the potential for a multiplicity of different regulatory regimes, capital standards, and reporting requirements will increase operational complexity and costs.

MANAGEMENT ASSESSMENT

The management feels comfortable with the Group's overall risk profile, and confident that the effectiveness of its risk management framework meets both the challenges of a rapidly changing environment and day-to-day business needs. This confidence is based on several factors:

- Due to its effective capital management, the Allianz Group is well capitalized and has met its internal, rating agency, and regulatory solvency targets as of 31 December 2020. Allianz remains one of the most highly rated insurance groups in the world, as reflected by our external ratings.
- The Group has a conservative investment profile and disciplined business practices in the Property-Casualty, Life/Health, and Asset Management business segments, leading to sustainable operating earnings with a well-balanced risk-return profile.
- As a result of COVID-19 pandemic, the Group experienced the following:
  - Losses in the Property-Casualty business segment resulted from business interruption coverage and accumulations from the entertainment sector. The Group also lost revenue in the travel and credit business lines.
  - Higher market risk mainly due to the volatility of equity prices and interest rates. The Group implemented risk mitigating measures such as equity sales, increasing asset duration, and the purchase of credit default swap protection.
  - Elevated reputational risk, as law suits with respect to business interruption policies could affect our purpose statement depending on media coverage and public perception. In addition, increased regulatory pressure can be observed regarding dividend payments of insurance companies, premium deferrals, or customer friendly interpretation of policy cover.
  - Business continuity and employer liability remain a focus area. The implementation of a new work model is key to addressing employer liability risks resulting from the accelerated trend by COVID-19 to work from home. This is accompanied with respective changes in IT risk management.
- Allianz is well positioned to deal with potentially adverse future events such as the COVID-19 pandemic – due to our strong internal limit framework, stress testing, internal model, and risk management practices.
- Finally, the Group has the additional advantage of being well-diversified, both geographically and across a broad range of businesses and products.

Based on the information available to us at the moment of report completion, including the known impacts of COVID-19, we expect the Group to continue to be sufficiently capitalized and compliant with both the regulatory Solvency Capital Requirement and minimum consolidated Group Solvency Capital Requirement. However, we are carefully monitoring the development of the COVID-19 pandemic and managing our portfolios to ensure that the Group and its entities have sufficient resources to meet their solvency capital needs.

SOLVENCY II REGULATORY CAPITALIZATION

The Allianz Group's Own Funds and capital requirements are based on the market value balance sheet approach, which is consistent with the economic principles of Solvency II[1]. Our regulatory capitalization is shown in the following table.

Allianz Group: Solvency II regulatory capitalization[1]

As of 31 December		2020	2019
Own Funds	€ bn	84.9	84.0
Capital requirement	€ bn	40.9	39.5
Capitalization ratio	%	207	212

1_Excluding the application of transitional measures for technical provisions

In the second quarter of 2020, Allianz has been granted approval for the application of transitionals on technical provisions for the two entities Allianz Lebensversicherungs-Aktiengesellschaft and Allianz Private Krankenversicherungs-Aktiengesellschaft. Including the application of transitional measures for technical provisions, the Own Funds and SCR as of 31 December 2020 amounted to € 98.5 bn and € 40.9 bn leading to a Solvency II ratio of 240 %. Our general capital steering, however, continues to focus on the previous approach, i.e., excluding the application of transitional measures for technical provisions. Consequently, the figures in all subsequent sections exclude transitional measures unless otherwise stated.

The following table summarizes our Solvency II regulatory capitalization ratios disclosed over the course of the year 2020:

Allianz Group: Solvency II regulatory capitalization ratios
%

	31 Dec 2020	30 Sept 2020	30 Jun 2020	31 Mar 2020	31 Dec 2019
Capitalization ratio	207	192	187	190	212

Compared to year-end 2019, our Solvency II capitalization ratio declined by 5 percentage points to 207% (2019: 212%) since the slight increase in Own Funds was overcompensated by the increase of the Solvency II Capital Requirement. The decrease of the Solvency II ratio was mainly driven by the COVID-19 triggered negative market developments ((27) percentage points) especially due to the decline in interest rates. Taxes and other changes ((8) percentage points) also contributed negatively. This was partially compensated by operating Solvency II capital generation and business evolution (23 percentage points), model changes (1 percentage point), and (capital) management actions (7 percentage points). The latter was mostly driven by the issuance of subordinated debts in May and November 2020 as well as de-risking measures (e.g., duration management and reduction of equity exposure). The impacts are partially offset by the executed share buy-back in the first quarter of 2020, dividend accrual, and M&A transactions (e.g., acquisition of SulAmerica and Control Expert as well as the joint venture with BBVA).

The following table presents the sensitivities of our Solvency II capitalization ratio under certain standard financial market scenarios.

1_Own Funds and capital requirement are calculated under consideration of volatility adjustment and yield curve extension, as described in section "Risk-free rate and volatility adjustment".

Allianz Group: Solvency II regulatory capitalization ratio sensitivities
%

As of 31 December	2020	2019
Base capitalization ratio	207	212
Interest rates up by 0.5 %[1]	214	217
Interest rates down by 0.5 %[1]	198	203
Equity prices up by 30 %	222	225
Equity prices down by 30 %	193	197
Combined scenario: Equity prices down by 30 % Interest rate down by 0.5 %[1]	185	190

1_Non-parallel interest rate shifts due to extrapolation of the yield curve beyond the last liquid point in line with Solvency II rules.

The Allianz Group is a financial conglomerate within the scope of the Financial Conglomerate Directive (FCD). The FCD does not impose a materially different capital requirement on Allianz Group compared to Solvency II.

Quantifiable risks and opportunities by risk category

This Risk and Opportunity Report outlines the Group's risk figures, reflecting its risk profile based on pre-diversified risk figures and Group diversification effects.

At the Allianz Group, we measure and steer risk based on an approved internal model which quantifies the potential adverse developments of Own Funds. The results provide an overview of how our risk profile is distributed over different risk categories, and determine the regulatory capital requirements in accordance with Solvency II.

With the exception of the Asset Management business segment, all business segments are exposed to the full range of risk categories. As mentioned earlier, the Asset Management business segment is predominantly exposed to operational and market risks and to a lesser extent to credit risk. The risk capital for the Asset Management business segment is allocated to sectoral requirement.

The pre-diversified risk figures reflect the diversification effect within each modeled risk category (i.e., market, credit, underwriting, business, and operational risk), but do not include the diversification effects across risk categories. Group diversified risk figures also capture the diversification effect across all risk categories.

The Group diversified risk is broken down as follows:

Allianz Group: Allocated risk according to the risk profile (total portfolio before non-controlling interests)
€ mn

	Market risk		Credit risk		Underwriting risk		Business risk		Operational risk		Diversification		Total	
As of 31 December	2020	2019[1]	2020	2019[1]	2020	2019[1]	2020	2019[1]	2020	2019[1]	2020	2019[1]	2020	2019[1]
Property-Casualty	4,439	5,638	2,334	2,286	11,300	11,542	749	692	1,530	1,604	(6,843)	(6,266)	13,508	15,495
Life/Health	21,264	17,749	3,241	2,711	652	437	2,255	2,839	1,442	1,527	(4,534)	(4,907)	24,321	20,356
Corporate and Other	1,609	1,940	526	471	207	127	-	-	363	403	(651)	(720)	2,054	2,220
Total Group	**27,313**	**25,327**	**6,101**	**5,467**	**12,159**	**12,105**	**3,004**	**3,530**	**3,335**	**3,534**	**(12,028)**	**(11,893)**	**39,883**	**38,071**
												Tax	(5,879)	(5,481)
												Capital add-on	970	1,042
												Third country equivalent	3,326	3,218
												Sectoral requirement	2,650	2,038
												Total Group	**40,950**	**38,888**

1_2019 risk profile figures adjusted based on the 2020 model changes impact.

The following sections explain the evolution of our risk profile per modeled risk category. All risks are presented on a pre-diversified basis and concentrations of single sources of risk are discussed accordingly.

As of 31 December 2020, the Group-diversified risk capital, which reflects our risk profile before considering non-controlling interests, amounted to € 40.9 bn (2019: € 39.5 bn). This represents a slight decrement in the diversification benefit – before tax – of 0.6% to 23.2 %. The increase in Solvency II Capital Requirement was mainly due to market impacts driven by adverse market movements especially in the first half of 2020 triggered by the COVID-19 pandemic. Business evolution also contributed slightly to a higher SCR, driven by the net earned premiums in the Property-Casualty business segment. Other effects such as model updates or the loss in diversification benefit further contributed to the increment. This was partially compensated by management actions such as risk mitigating measures, including, but not limited to equity de-risking, increasing asset duration, and the purchase of credit default swap protection to dampen the impacts of COVID-19.

MARKET RISK

The following table presents our group-wide risk figures related to market risks by business segment and source of risk.

Allianz Group: Risk profile – market risk by business segment and source of risk (total portfolio before tax and non-controlling interests)
pre-diversified, € mn

	Interest rate		Inflation		Credit spread		Equity		Real estate		Currency		Total	
As of 31 December	2020	2019[1]	2020	2019[1]	2020	2019[1]	2020	2019[1]	2020	2019[1]	2020	2019[1]	2020	2019[1]
Property-Casualty	(464)	(397)	(2,478)	(1,528)	3,548	2,700	2,341	3,193	1,339	1,422	152	248	4,439	5,638
Life/Health	1,032	2,480	(372)	(131)	10,997	7,279	8,083	6,841	1,609	1,515	(83)	(236)	21,264	17,749
Corporate and Other	225	250	(364)	(272)	424	563	1,101	1,152	120	204	103	43	1,609	1,940
Total Group	**793**	**2,332**	**(3,214)**	**(1,931)**	**14,969**	**10,542**	**11,525**	**11,187**	**3,068**	**3,142**	**172**	**55**	**27,313**	**25,327**
												Share of total Group pre-diversified risk	46.4%	45.0%

1_2019 risk profile figures adjusted based on the 2020 model changes impact.

The Group's total pre-diversified market risk increased by € 2.0 bn, which was mainly driven by credit spread risk, especially in the Life/Health business segment, due to higher exposures and lower policyholder participation following the decline in interest rates. The lower interest rates together with lower interest rate volatilities contributed to lower interest rate risk, which was supported by management actions – in particular duration management measures – that improved the interest rate risk profile. The volatility in equity markets caused by the COVID-19 pandemic resulted in equity de-risking activities at most entities and investment in alternatives and infrastructure. However, most equity indices fully recovered from the COVID-19 shock in the first half of the year. This effect combined with the lower policyholder participation increased the equity risk. Real estate risk remained broadly unchanged. The higher inflation risk was mainly driven by exposure especially in the Property-Casualty business segment. The overall increase in market risk was also supported by business growth, while exposure changes due to asset/liability management measures and the corresponding effects on the diversification between market risk factors reduced the impact to some extent.

INTEREST RATE RISK

As of 31 December 2020, our interest-rate-sensitive investments excluding unit-linked business – amounting to a market value of € 486.5 bn (2019: € 460.8 bn)[1] – would have gained € 58.6 bn (2019: € 49.8 bn) or lost € 49.8 bn (2019: € 42.8 bn)[2] in value in the event of interest rates shifting by -100 and +100 basis points, respectively. However, these impacts would have been partially offset by policyholder participation. In addition, the Solvency II Own Funds effect is much more limited due to our active duration management, limiting the duration mismatch of the Group to negative 0.1 years, representing Solvency II liabilities of longer duration than assets.

EQUITY RISK

As of 31 December 2020, our investments excluding unit-linked business that are sensitive to changing equity markets – amounting to a market value of € 66.6 bn[3] (2019: € 75.7 bn) – would have lost € 17.9 bn[4] (2019: € 20.0 bn) in value assuming equity markets had declined by 30%. However, this impact would have been partially offset by policyholder participation.

REAL ESTATE RISK

As of 31 December 2020, about 5.4% (2019: 5.5%) of the total pre-diversified risk was related to real estate exposures.

CREDIT RISK

The following table presents our group-wide risk figures for credit risks by business segment.

Allianz Group: Risk profile – allocated credit risk by business segment (total portfolio before tax and non-controlling interests)
pre-diversified

As of 31 December		2020	2019[1]
Property-Casualty	€ mn	2,334	2,286
Life/Health	€ mn	3,241	2,711
Corporate and Other	€ mn	526	471
Total Group	**€ mn**	**6,101**	**5,467**
Share of total Group pre-diversified risk	%	10.4	9.7

1_2019 risk profile figures adjusted based on the 2020 model changes impact.

Throughout 2020 and the COVID-19 pandemic, there were no material events with regard to credit migration risk and default risk.

The overall credit risk for the Allianz Group increased by € 0.6 bn to € 6.1 bn (2019: € 5.5 bn). This was mainly driven by the lower interest rate environment compared to the previous year, which generally increased credit risk exposures, thereby increasing credit risk. This also contributed to a decrease in the loss-absorbing capacity of technical provisions in the traditional life business, which increased the credit risk after considering policyholder participation.

CREDIT RISK – INVESTMENTS

As of 31 December 2020, the credit risk arising from our investment portfolio accounted for 81.5 % (2019: 80.6%) of our total Group pre-diversified internal credit risk[5].

Credit risk in the Life/Health business segment is primarily driven by long-term assets covering long-term liabilities. Typical investments are government bonds, senior corporate bonds, covered bonds, self-originated mortgages and loans, and a modest amount of derivatives. In the Property-Casualty business segment, fixed-income securities tend to be short- to mid-term, due to the nature of the business, which explains the lower credit risk in this segment.

The counterparty credit risk arising from derivatives is low, since derivatives usage is governed by the group-wide internal guideline for collateralization of derivatives, which stipulates master netting and collateral agreements with each counterparty and requires high-quality and liquid collateral. In addition, Allianz closely monitors counterparties' credit ratings and exposure movements.

1_The stated market value includes all assets whose market value is sensitive to interest rate movements (excluding unit-linked business) reflecting the Solvency II framework, and therefore is not based on classifications given by accounting principles.
2_The effects do not consider policyholder participation.
3_The stated market value includes all assets whose market value is sensitive to equity movements (excluding unit-linked business) reflecting the Solvency II framework, and therefore is not based on classifications given by accounting principles.
4_The effect does not consider policyholder participation.
5_Additionally, 8.7 % (2019: 7.4 %) of our total Group pre-diversified internal credit risk is allocated to receivables, potential future exposure for derivatives and reinsurance, and other off-balance sheet exposures.

As of 31 December 2020, the rating distribution based on issue (instrument) ratings of our fixed-income portfolio was as follows:

Rating distribution of Allianz Group's fixed-income portfolio[1] – fair value
€ bn

Type of issuer	Government / agency		Covered bond		Corporate		Banks		ABS / MBS		Short-term loan		Other		Total	
As of 31 December	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
AAA	49.5	46.5	47.7	46.4	3.2	2.5	3.0	2.7	19.1	20.5	0.0	-	-	0.0	122.5	118.7
AA	111.5	105.0	18.2	17.2	24.3	20.7	4.3	5.2	6.2	5.6	0.6	1.1	0.1	0.1	165.3	154.8
A	43.4	37.0	0.4	6.8	71.1	69.1	19.0	19.3	0.9	1.2	0.5	0.6	0.0	0.2	135.3	134.2
BBB	41.9	37.3	0.4	0.7	124.8	116.6	8.2	6.6	1.2	0.7	0.4	0.5	1.7	1.7	178.7	164.2
BB	6.7	5.0	-	0.0	10.5	5.9	1.0	1.3	0.1	0.1	0.0	0.0	0.0	0.0	18.4	12.2
B	3.6	5.1	-	-	4.0	2.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	-	8.0	7.7
CCC	0.3	0.0	-	-	0.2	0.2	0.0	0.0	0.1	0.1	0.0	0.0	-	-	0.6	0.4
CC	0.0	0.4	-	-	0.0	0.0	0.0	0.0	0.1	0.1	-	-	-	-	0.1	0.4
C	0.0	-	-	-	-	-	-	0.0	0.0	0.0	-	-	-	-	0.0	0.0
D	0.0	-	-	-	0.1	0.0	-	0.0	0.0	0.0	-	0.0	-	-	0.1	0.1
Not rated	1.5	2.0	0.1	0.2	11.2	11.6	0.2	0.5	0.1	0.1	0.2	0.2	7.2	6.6	20.4	21.2
Total	**258.5**	**238.1**	**66.7**	**71.3**	**249.5**	**228.9**	**35.9**	**35.8**	**28.1**	**28.5**	**1.8**	**2.5**	**9.1**	**8.6**	**649.5**	**613.9**

1_In accordance with practice adhered to in our Group Management Report, figures stated include investments of Banking and Asset Management. Table excludes private loans. Stated market values include investments not in scope of the Solvency II framework.

CREDIT RISK – CREDIT INSURANCE

As of 31 December 2020, 8.6% (2019: 11.0%) of our total Group pre-diversified internal credit risk was allocated to Euler Hermes credit insurance exposures.

CREDIT RISK – REINSURANCE

As of 31 December 2020, 1.2% (2019: 1.1%) of our total Group pre-diversified internal credit risk was allocated to reinsurance exposures.

Of the Allianz Group's reinsurance recoverables, 75.5% (2019: 82.4%) were distributed among reinsurers that had been assigned an investment-grade rating; the remaining 24.4% (2019: 17.5%) were non-rated reinsurance recoverables. The movements in the reinsurance exposure are mainly due to an expanded reinsurance program. For substantial single-name reinsurance exposures or exposures to non-rated captives, risk-mitigating techniques such as collateral agreements or funds-withheld concepts are in place. In particular, the economic reinsurance exposure to General Electric was reduced in 2020 by increasing the amount of trust assets and obtaining credit protection.

Reinsurance recoverables by rating class[1]
€ bn

As of 31 December	2020	2019
AAA	0.02	-
AA+ to AA-	5.67	6.12
A+ to A-	3.24	2.32
BBB+ to BBB-	8.03	8.36
Non-investment grade	0.01	0.03
Not assigned	5.49	3.57
Total	**22.46**	**20.39**

1_Represents gross exposure for external reinsurance, broken down by rating classes.

UNDERWRITING RISK

The following table presents the pre-diversified risk calculated for underwriting risks associated with our insurance business.

Allianz Group: Risk profile – allocated underwriting risk by business segment and source of risk (total portfolio before non-controlling interests)[1]
pre-diversified, € mn

	Premium natural catastrophe		Premium terror		Premium non-catastrophe		Reserve		Biometric		Total	
As of 31 December	2020	2019[2]	2020	2019[2]	2020	2019[2]	2020	2019[2]	2020	2019[2]	2020	2019[2]
Property-Casualty	806	927	17	29	4,195	4,952	6,115	5,521	167	112	11,300	11,542
Life/Health	-	-	-	-	-	-	-	-	652	437	652	437
Corporate and Other	-	-	-	-	-	-	-	-	207	127	207	127
Total Group	**806**	**927**	**17**	**29**	**4,195**	**4,952**	**6,115**	**5,521**	**1,026**	**676**	**12,159**	**12,105**
Share of total Group pre-diversified risk											20.66%	21.52%

1_As risks are measured in an integrated approach and on an economic basis, internal risk profile takes reinsurance effects into account.
2_2019 risk profile figures adjusted based on the impact of the 2020 model changes.

During 2020, the total Group pre-diversified underwriting risk capital increased marginally by € 54 mn.

PROPERTY-CASUALTY

The decrease in Property-Casualty underwriting risk was mainly driven by premium non-catastrophe risk due to model and exposure updates. This was partly offset by reserve risk which increased in line with the underlying reserve level.

Overall, the underwriting risk profile for the Allianz Group is not expected to change much, as we do not plan to significantly change our underwriting standards (Allianz Standard for P&C Underwriting) or our risk appetite with regards to natural catastrophe, man-made, or terror risks and our corresponding retrocession reinsurance strategy.

Nevertheless, the underwriting guidelines were refined to mitigate significant future accumulations from pandemics and an additional retrocession cover for natural catastrophe frequency losses was placed.

The loss ratios for the Property-Casualty business segment are presented in the following table:

Property-Casualty loss ratios[1] for the past ten years
%

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Loss ratio	69.5	68.0	66.0	66.5	65.6	66.2	66.0	65.9	68.3	69.9
Loss ratio excluding natural catastrophes	67.8	66.5	64.0	64.2	64.2	64.6	65.1	63.0	66.6	65.5

1_Represents claims and insurance benefits incurred (net), divided by premiums earned (net).

The top three perils contributing to the natural catastrophe risk as of 31 December 2020 were: windstorms in Europe, floods in Germany, and earthquakes in Australia.

LIFE/HEALTH

The underwriting risk capital contribution of biometric risk increased by € 0.35 bn compared to the previous year. This is mainly due to the impact of lower interest rates and other adverse market movements triggered by the COVID-19 pandemic on the longevity risk for most major Life/Health portfolios. Contributions from the Property-Casualty and the Corporate and Other business segments are generated by the longevity risk of the internal pension schemes they contain.

Due to effective product design and the diversity of our products, there were no significant concentrations of underwriting risks within our Life/Health business segment.

BUSINESS RISK

The risk capital contribution of business risk decreased by € 0.5 bn compared to the previous year. This is driven by the impact of lower interest rates and other adverse market movements triggered by the COVID-19 pandemic on the lapse and lapse mass risk for most major Life/Health insurance portfolios.

OPERATIONAL RISK

The decrease in risk capital for operational risks was driven by the regular annual update of local parameters. The decrease is largely due to reduced regulatory risks based on observed fines in the industry, e.g., for the General Data Protection Regulation (GDPR), but also due to a reduction of the originally too conservatively set prudency margin in the estimation of internal frauds. The increasing risk due to the pandemic was compensated by the decrease of operational risk in case of business continuity events based on the observed effectiveness of business continuity measures during the COVID-19 crisis. This finally led to a neutral risk capital impact of COVID-19 on operational risk capital. Foreign currency exchange effects played a minor role.

LIQUIDITY RISK

Detailed information regarding the Allianz Group's liquidity risk exposure, liquidity, and funding – including changes in cash and cash equivalents – is provided in Liquidity and Funding Resources and in notes 13, 19 and 34 to the Consolidated Financial Statements. As can be inferred from the section on the management of liquidity risks, while these are quantified and monitored through regular stress test reporting as well as properly managed, they are not quantified for risk capital purposes.

INTEGRATED RISK AND CONTROL SYSTEM FOR FINANCIAL REPORTING

The following information is provided pursuant to § 289 (4) and § 315 (4) of the German Commercial Code ("Handelsgesetzbuch – HGB").

In line with both our prudent approach to risk governance and compliance with regulatory requirements, we have created a framework and processes to identify and mitigate the risk of material errors in our Consolidated Financial Statements (this also includes our market value balance sheet and risk capital calculation risks). The Integrated Risk and Control System (IRCS) is regularly reviewed and updated. It covers three buckets of risks: financial reporting risks, compliance risks, and other operational risks (including IT risks). The IT controls are based on COBIT 5 and include, for example, controls for access right management, project and change management. In addition, our Entity Level Control Assessment (ELCA) framework contains controls to monitor the effectiveness of our system of governance.

ACCOUNTING AND CONSOLIDATION PROCESSES

The accounting and consolidation processes we use to produce our Consolidated Financial Statements are based on a central consolidation and reporting IT solution and local general ledger solutions. The latter are largely harmonized throughout the Group, using standardized processes, master data, posting logics, and interfaces for data delivery to the Holding. Access rights to accounting systems are managed according to strict authorization procedures.

Accounting rules for the classification, valuation, and disclosure of all items in the balance sheet, the income statement, and notes related to the annual and interim financial statements are defined primarily in our Group accounting manual. Internal controls are embedded in the accounting and consolidation processes to safeguard the accuracy, completeness, and consistency of the information provided in our financial statements.

INTERNAL RISK AND CONTROL SYSTEM APPROACH

Our approach can be summarized as follows:

- We use a centrally developed risk catalog which is linked to individual accounts. This risk catalog is reviewed on a yearly basis and is the starting point for the definition of the Group's as well as the operating entities' scope of financial reporting risks. The methodology is described in our IRCS Guideline. In the course of the scoping process, both materiality and susceptibility to a misstatement are considered simultaneously. In addition to the quantitative calculation, we also consider qualitative criteria, such as the expected increase in business volume or the complexity of transactions.
- Based on the centrally provided risk catalog, our local entities identify risks that could lead to material financial misstatements.
- Preventive and detective key controls addressing financial reporting risks have been put in place to reduce the likelihood and impact of financial misstatements. When a potential risk materializes, actions are taken to reduce the impact of the financial misstatement. Given the strong dependence of financial reporting processes on information technology systems, we have also implemented IT controls.
- Last but not least, we focus on ensuring that controls are appropriately designed and effectively executed to mitigate risks. We have set consistent process and documentation requirements across the Allianz Group for elements such as the design of key controls and evidence of their execution as well as related control design and effectiveness testing procedures. We conduct an annual assessment of our internal control system to maintain and continuously enhance its effectiveness. Group Audit and local internal audit functions ensure that the overall quality of our control system is subject to regular control testing, in order to assure reasonable design and operating effectiveness. Internal Audit does so through a comprehensive risk-based approach that assesses the key controls of the company's internal procedures and processes, including local and group-internal controls over financial reporting risks, from an integrated perspective.

GOVERNANCE

The Group center functions, the Group Disclosure Committee, and our operating entities support the Allianz SE Board of Management to ensure the completeness, accuracy, and reliability of our Consolidated Financial Statements.

The Group Disclosure Committee ensures that the board members are made aware of all material information that could affect our disclosures, and assesses the completeness and accuracy of the information provided in the quarterly statements, half-year and annual financial reports as well as in the Solvency II qualitative reports[1]. In 2020, the Group Disclosure Committee met on a quarterly basis before the quarterly statements and financial reports were issued. An additional meeting was held prior to issuance of the Solvency II qualitative reports.

Subsidiaries within the scope of our control system are individually responsible for adhering to the Group's internal governance and control policy and for creating local Disclosure Committees that are similar to the Group-level committee. The entities' CEOs and CFOs provide periodic sign-offs to the management of Allianz SE, certifying the effectiveness of their local systems of internal control as well as the completeness, accuracy, and reliability of financial data reported to the Holding.

1_Solvency and Financial Condition Report and Regular Supervisory Report.