



2018 annual report and CSR report

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Foreword



Dear readers and shareholders,

When I look back at 2018, I summarise the topics that are the most relevant to me with “three keywords”: geopolitics, monetary policy and the global economy. After all, the past year was marked by ongoing discussions, such as the trade dispute between the US and China, the debt crisis in Italy and Brexit negotiations. In light of and with regard to the worst December on the stock exchanges since 1931, we consider 2018 a weak year on the capital market.

And yet we note a great deal of interest from our retail and institutional clients in investment funds solutions. This was reflected in respectable new business: Overall, we achieved net sales of EUR 15.3 billion last year. Thus, the sales result was above the average of the last ten years and 2018 was one of the best years in terms of sales in the history of Union Investment overall. Thanks to our good new business, we kept assets under management almost stable at EUR 323 billion, despite the weak capital market. Operating income amounted to EUR 502 million.

The focus of our retail clients’ interest was once again on instalment-based investment funds, open-ended real-estate funds and multi-asset solutions. Cooperating with 915 cooperative banks, we were also successful in addressing the long-term benefits of a balanced asset structure among our customers, even in difficult periods on the capital market. The very dynamic development in the fund savings plans should be emphasised, whose number has almost doubled in the last three years to 2.3 million savings plans.

The interest of institutional investors in sustainable investment solutions remained high. Thus Union Investment expanded its

portfolio of sustainably managed assets across all customer groups to more than EUR 40 billion in 2018. The figures show that sustainability is on its way to becoming the fourth dimension of investment alongside return, security and liquidity. In 2018, as much as a quarter of all institutional mandates we recorded in the institutional sector were related to sustainability.

Looking ahead: The demand of institutional customers for sustainable investments that optimise return remained high even in this complex capital market environment. Thanks to our many years of expertise in risk management combined with our acknowledged competence in sustainability, we are well prepared for these challenges. In business with retail clients, we continue to see high interest in investment funds, not least because of the low interest rate environment. We want to use this interest to broaden the idea of balanced saving and to attract more people to the investment fund. Despite growing challenges, we see more opportunities for Union Investment than risks, as funds provide diverse solutions to long-term investment challenges for both institutional and private investors.

Happy reading

A handwritten signature in blue ink, appearing to read 'H.J. Reinke', written in a cursive style.

Hans Joachim Reinke
Chief Executive Officer
Union Asset Management Holding AG

Report of the Supervisory Board



Supervisory Board and Executive Committee

In the 2018 financial year, the Supervisory Board and its Executive Committee monitored the management activities of the Board of Managing Directors in accordance with the applicable legal provisions and the Articles of Association and decided on items of business that required their consent.

To carry out its responsibilities and in compliance with the applicable legal provisions, the Supervisory Board formed an Executive Committee that operates, in particular, as a Human Resources Committee and Audit Committee and prepares the resolutions of the Supervisory Board. The Executive Committee met twice in 2018. The Supervisory Board was regularly reported to on its activities.

The former President of the National Association of German Cooperative Banks (BVR), Uwe Fröhlich, left the Supervisory Board at the end of the Annual General Meeting on 4 May 2018. The Supervisory Board would like to thank Uwe Fröhlich for the many years of committed and valuable support. On 4 May 2018, the Annual General Meeting elected Marija Kolak, current President of the National Association of German Cooperative Banks (BVR), as his successor. The Supervisory Board would like to wish Marija Kolak all the best and every success in her role as member of the Supervisory Board. The former CEO of DZ BANK AG, Wolfgang Kirsch, who has been Chairman of the Supervisory Board and the Executive Committee since 7 November 2007, left the Supervisory Board and the Executive Committee on 31 December 2018. The Supervisory Board and the Executive Committee would like to thank Wolfgang Kirsch for his many years of committed and valuable support. With effect from 1 January 2019, Dr Cornelius Riese, Co-CEO of DZ BANK AG, was elected as new Chairman of the Supervisory Board and the Executive Committee. The Supervisory Board would like to wish Dr Cornelius Riese all the best

and every success in his role as Chairman of the Supervisory Board and the Executive Committee.

Cooperation with the Board of Managing Directors

The Board of Managing Directors provided the Supervisory Board with regular, timely and comprehensive written and oral reports on the position and performance of the company and the group and on general business developments. The Board of Managing Directors also regularly informed the Supervisory Board about ongoing operations and future business policy, including the corporate strategy and organisational structures of the Union Investment Group.

The Supervisory Board reviewed the risk position of the company and the group, in addition to the development of the systems and procedures used to manage operational, market and credit/guarantee risks, and examined other material risks specific to fund management business.

Supervisory Board meetings

The Supervisory Board held four meetings in the past financial year. At these meetings and by way of regular reports, in particular the quarterly reports, the Supervisory Board was regularly and comprehensively informed of the current position of the company and the group, primarily with regard to general business performance, key individual transactions and any personnel developments. The Supervisory Board was informed comprehensively and promptly of the work carried out by the Executive Committee. The Supervisory Board also approved material business action plans. Other key issues covered in the Supervisory Board meetings included budgeting, the effect of regulatory changes on the Union Investment Group's business, the sale of the Polish subsidiary Union Investment TFI and IT issues of strategic importance to Union Investment.

Between its meetings, the Supervisory Board was informed by the Board of Managing Directors in writing about important events such as personnel matters. In urgent cases, the Supervisory Board approved significant transactions between meetings by adopting resolutions by written procedure. Outside the meetings, the Chairman of the Supervisory Board, who also chairs the Executive Committee, also held regular discussions with the Chief Executive Officer regarding important decisions and specific individual transactions.

Report in accordance with Section 289f (4) in conjunction with (2) no. 4 of the German Commercial Code (HGB)

In 2017, the Supervisory Board set targets for the proportion of women on the company's Supervisory Board and Board of Managing Directors pursuant to Section 111 (5) of the German Stock Corporation Act (AktG), to be met by 31 December 2021.

The target set for the Supervisory Board by the Supervisory Board to be met by 31 December 2021 in accordance with Section 111 (5) AktG is 20% (3 out of 15). In the period under review the proportion of women on the Supervisory Board following the Annual General Meeting on 4 May 2018, in which Marija Kolak, President of the National Association of German Cooperative Banks (BVR) was elected as a member of the Supervisory Board, was 20% (3 out of 15) and 13.3% prior to that (2 out of 15).

In 2017, the proportion of women on the Board of Managing Directors in the reporting period was 0%. The Supervisory Board has set a target of maintaining the status quo until 31 December 2021.

In 2017, the Board of Managing Directors also defined targets in accordance with Section 76 (4) AktG for the two management levels below the Board of Managing Directors; these targets are to be met by 31 December 2021. The target is 25% at head of division level (the first level below the Board of Managing Directors) and 0% at head of department level (the second level below the Board of Managing Directors). The aforementioned targets were met in the period under review.

Cooperation with the auditors

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Eschborn, Frankfurt am Main, was elected as the auditor by the Annual General Meeting on 4 May 2018 and subsequently engaged by the Supervisory Board to perform the audit.

In its capacity as the auditor, Ernst & Young GmbH confirmed that the separate financial statements for the company prepared and submitted by the Board of Managing Directors, the consolidated financial statements including the accounting system and the management reports for the company and the group for the 2018 financial year, and the report on relationships with affiliated companies as prepared and submitted by the Board of Managing Directors complied with the applicable legal provisions. The auditors issued an unqualified audit opinion for each of these items. In connection with the audit of the report submitted by the Board of Managing Directors on relationships with affiliated companies, Ernst & Young GmbH confirmed that, after due audit and assessment, the actual disclosures in the report were accurate, the consideration paid by the company for the transactions listed in the report was not inappropriately high and, as regards the activities listed in the report, there were no circumstances that would support an assessment materially different from that arrived at by the Board of Managing Directors.

The audit reports were submitted to the members of the Supervisory Board, who discussed them in detail. The Supervisory Board agrees with the findings of the audit.

Adoption of the annual financial statements

The Executive Committee (Audit Committee) chaired by Dr Cornelius Riese prepared for the final examination of the Supervisory Board by reviewing the separate financial statements, the management report, the dependent company report by the Board of Managing Directors and the proposal for the appropriation of profits which was then given a detailed review by the full Supervisory Board, which also held detailed discussions on these matters in the presence of the

auditors. No reservations were expressed. The Supervisory Board also reviewed in detail the consolidated financial statements and the group management report and, here too, held detailed discussions on these matters in the presence of the auditors. No reservations were expressed here either.

The Supervisory Board also acknowledged and approved the findings of the audit of the separate financial statements, the consolidated financial statements, the management report for the company, the group management report and the dependent company report conducted by the auditors. In a resolution adopted on 1 March 2019, the Supervisory Board approved the separate financial statements prepared by the Board of Managing Directors; these financial statements were thereby formally adopted. The Supervisory Board also agreed with the proposed appropriation of profits. In a resolution adopted today, the Supervisory Board approved the consolidated financial statements prepared and submitted by the Board of Managing Directors.

Following the concluding findings of the review conducted by the Supervisory Board, no reservations were expressed regarding the concluding statement by the Board of Managing Directors in the dependent company report.

The Supervisory Board wishes to thank the Board of Managing Directors and all employees for their valuable contribution in 2018.

Frankfurt am Main, 28 March 2019

**Union Asset Management Holding AG,
Frankfurt am Main**



Dr Cornelius Riese
Chairman of the Supervisory Board

Group management report

2018 financial year

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Group management report of Union Asset Management Holding AG for the financial year from 1 January to 31 December 2018

Note

This management report should be read in the context of the audited financial data and disclosures in the notes to the consolidated financial statements. The management report also includes forward-looking statements that are based on current planning, assumptions and estimates rather than on historical facts. Forward-looking statements always apply to the time the statements are made. Union Asset Management Holding AG (UMH) is under no obligation to revise these statements when new information becomes available. Forward-looking statements are always subject to risks and uncertainty. We therefore explicitly note that actual events can differ significantly from those forecast as a result of a number of factors. Factors that currently appear to be material are described under 'Forecast, report on risks and opportunities' and in other sections of this report.

Note: Tables and references may contain rounding differences compared with the precise mathematical figures (monetary units, percentages, etc.).

A Basic information on the group

Union Asset Management Holding AG and its subsidiaries (Union Investment) form part of the Genossenschaftliche FinanzGruppe Volksbanken Raiffeisenbanken cooperative financial network. The objectives and strategies pursued by Union Investment are therefore shaped by the guiding principles of the Genossenschaftliche FinanzGruppe, which focus on mutual benefit and decentralisation. In this structure, the local primary banks and their members are supported by specialist service providers that pool expertise in particular types of products and services and operate at a national level. The range of services provided by Union Investment – highly professional, innovative asset management products and solutions with competitive terms and conditions – is aimed at both retail and institutional clients.

In retail business, Union Investment services are exclusively available to the retail clients of the partner banks ('Verbund first'). Union Investment offers precisely tailored support for the client advisory process conducted by the partner banks, which involves a two-stage sales approach. As a solutions provider, it identifies and stimulates retail client needs. It then provides targeted support in the form of suitable products and services to cover the entire partner value chain, enabling the partner to offer the best possible range of asset management options.

The portfolio of services for institutional clients is designed with discerning institutional investors of varying sizes in mind. These clients are partner banks, the other specialist institutions of the Genossenschaftliche FinanzGruppe and the corporate clients of the cooperative partner banks. Union Investment also competes for institutional investors' investment capital outside of the Genossenschaftliche FinanzGruppe group, for example with pension funds.

The core geographical area of the retail client activities of Union Investment is the territory covered by the Genossenschaftliche FinanzGruppe (Germany) and by the cooperative banks in Austria. The institutional clients business also has a regional focus in Germany, although there are some activities in other markets on a selective basis. The main locations of the Union Investment asset management units are Frankfurt, Hamburg, Luxembourg, Vienna and Warsaw.

The Union Investment Group comprises various single entities, with Union Asset Management Holding AG (UMH) as the parent holding company. The consolidated group of UMH currently consists of 21 entities.¹⁾ The most significant equity investments in the UMH portfolio can be broken down as follows:

- **Asset management companies in Germany and abroad:**
Bundling of asset management expertise for different management styles, asset classes or regional capital markets.
- **Financial service providers:**
Offering of sophisticated portfolio management, investment consulting, sales and support services.
- **Banks:**
Provision of investment accounts for retail clients.
- **Service companies:**
Provision of fund management services and infrastructure.
- **Securities trading companies:**
Bundling of fund brokerage, investment custody business and funds sales for various companies based in Luxembourg.

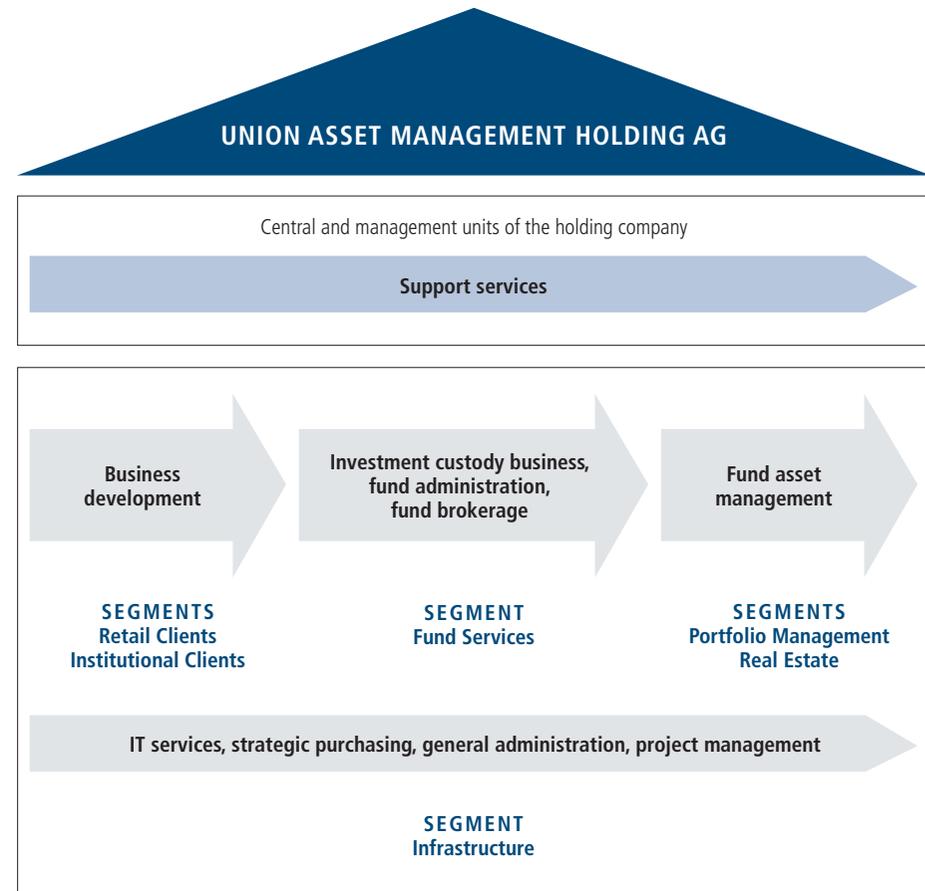
¹⁾ Comprises the companies included in the UMH Group's scope of consolidation as at 31 December 2018.

Specifically, there are the following companies:

UNION ASSET MANAGEMENT HOLDING AG				
Germany			Rest of world	
Asset management companies	Service companies	Financial service providers	Asset management companies	Financial service providers
Union Investment Privatfonds	Union IT-Services	Quoniam Asset Management	Union Investment Luxembourg	Union Investment Austria Vienna*
Union Investment Institutional	Union Service-Gesellschaft	VisualVest	Union Investment TFI Warsaw	Securities trading companies
Union Investment Real Estate	UIR Verwaltungsgesellschaft		BEA Union Investment Hong Kong	Union Investment Financial Services Luxembourg
Union Investment Institutional Property			Union Investment Real Estate Austria Vienna	attrax Luxembourg
Banks	Associates			
Union Investment Service Bank	R+V Pensionsfonds	VR Consultingpartner		
	compertis	ZBI Partnerschafts-Holding		

* Investment firm pursuant to Section 3 (1) of the Austrian Securities Supervision Act 2018 (WAG 2018).

For external purposes, the Union Investment Group is managed by the individual companies as legal entities. Internally, the management concept at Union Investment is defined by uniform company- and location-wide organisation according to segments. The core competencies of business development and portfolio management are both organised into two segments: Retail Clients and Institutional Clients for the former, and Portfolio Management and Real Estate for the latter. There are two further segments known as Fund Services (fund administration, investment custody business, fund brokerage) and Infrastructure (IT, strategic purchasing, general administration, project management).



All the companies of the Union Investment Group are allocated to these segments. In some cases, individual units within a company are assigned to different segments. Exceptions to this are non-integrated companies, such as joint ventures (for example, BEA Union Investment) on account the ownership structure, and Union Investment equity investments in which self-contained management is beneficial because of the business model involved (for example, Union Investment TFI). These companies are managed through their respective supervisory bodies.

As an asset manager, Union Investment systematically and successfully focuses on the investment needs of retail and institutional clients. It offers retail investors products and services covering a range of requirements, including personal pension products, investment solutions and asset accumulation. Currently, the most successful solutions are the Riester pension plan product from Union Investment, UniProfiRente, and the Privatfonds series. Other options offered to retail investors include equity funds, fixed-income funds, money-market funds, open-ended real-estate funds, mixed funds, funds of funds and capital preservation funds.

Union Investment stands out as an innovative, reliable and progressive investment expert based on its detailed understanding of the specific needs of institutional investors and on the transparency of its day-to-day activities. As one of the largest fund management companies in Germany, it is able to offer an extensive range of diverse investment strategies to satisfy the needs of its clients. These strategies include traditional special funds, a number of institutional funds with varying structures, advisory and outsourcing mandates and institutional asset management.

UMH's business purpose is essentially the acquisition, management and disposal of equity investments, in particular in asset management companies in Germany and abroad, for its own account. Furthermore, its business purpose is the performance of other services exclusively for its subsidiaries, provided that the law does not require a special permit for this, and transactions and activities directly or indirectly necessary or useful for achieving its business purpose.

No changes under company law or material changes in business policy affected the companies included in UMH's consolidated group in the year under review.

B Economic report

I. General economic and industry conditions

1. Capital markets

The capital markets initially carried the positive momentum from the final months of the previous year into 2018. Prices were supported by synchronous global economic growth that was stronger than many economists had predicted as well as the positive development of company revenue and profits in the reporting season for the final quarter of the previous year. However, the synchrony of global economic growth decreased considerably over the course of the year. While the USA experienced a boom as a result of President Trump’s tax reform, the economies of the emerging markets and Europe slowed significantly. Although global growth remained robust overall, weak leading economic indicators and cautious company outlooks triggered economic concerns in the fourth quarter of 2018.

The trade disputes instigated by the USA and focused on China in particular are one reason for the stronger divergence in economic trends. The Americans introduced multiple tariffs on imports from China and the Chinese reacted with countermeasures relating to imports from the USA.

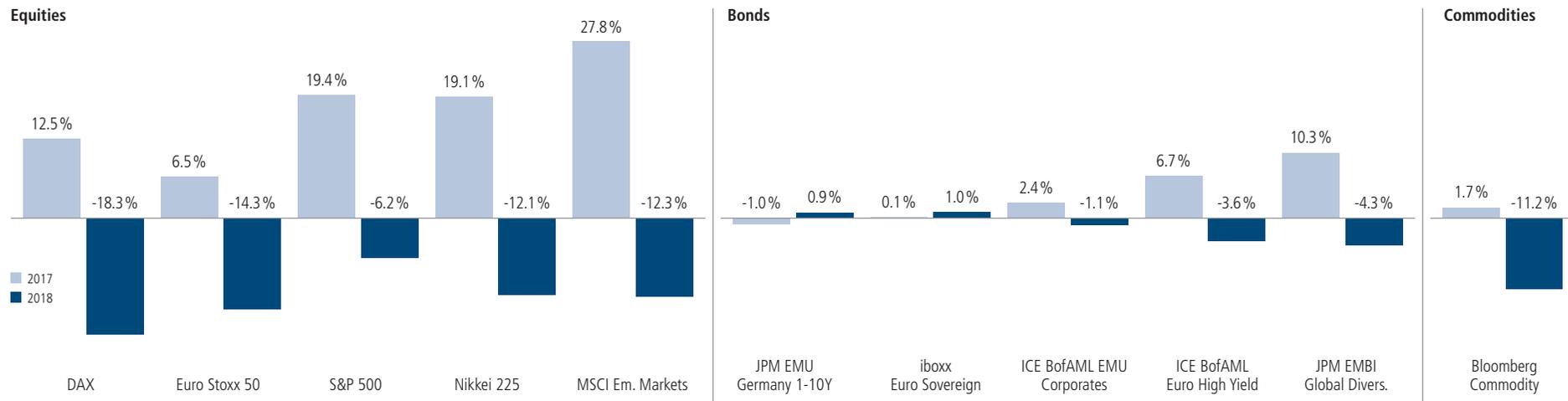
No end to this escalation is yet in sight. Beyond this, the Americans have not yet implemented the import tariffs they threatened to impose on vehicles and have concluded a successor agreement to the North American Free Trade Agreement (NAFTA) with Mexico and Canada. Beside trade disputes, 2018 was impacted by a number of other (geo)political factors. Firstly, the formation of a government by the populist Five Star and Northern League parties and their subsequent plans for the Italian state budget created uncertainty in Europe. The negotiations regarding the United Kingdom’s exit from the European Union (EU) were a further area of focus. Several emerging markets were burdened by elections, home-made political or economic problems and other conflicts.

The key central banks continued on their course of monetary policy normalisation. The US Federal Reserve (Fed) raised key interest rates further in each quarter and the European Central Bank (ECB) resolved to end its bond-buying programme at the end of the year.

Weak global economic momentum, political uncertainties and increasing interest rates in the USA led to significant adjustment of profit valuations on the global stock markets and thus to an unsatisfactory year for equity investors. While losses on the key US indices were in the high

2018: Largely significant losses on the capital markets

Performance in local currency



Source: Thomson Reuters Datastream. Union Investment; correct as at 31 December 2018.

single-digit range, stock exchanges in Europe and the emerging markets mostly made clear double-digit losses. In addition to the impact of exchange rate trends, this was primarily due to greater geopolitical and trade-related uncertainty.

On the bond markets this caused yields for safe-haven government bonds (such as German Bunds) to decrease substantially again despite the prevailing upward pressure from rising key interest rates and yields in the US. While Italian government bonds rallied in the final weeks of 2018, leading to an appeasing result for the year, yield premiums in all other bond segments increased. It was not possible to earn money with investments in EUR corporate bonds (investment grade and high-yield) or emerging market securities in 2018.

The same applies to commodities. With tight supply overall, oil prices initially benefited from the robust global economy and increasing geopolitical risks (e.g. USA-Iran) but concerns regarding high oversupply in 2019 more than eroded profits in the fourth quarter. For their part, industrial metals suffered as a result of the trade dispute and fears of weaker growth in China. Gold was under pressure for most of the year, mainly due to a rising US dollar, but was largely able to recoup the accumulated losses owing to the many uncertainties towards the end of the year.

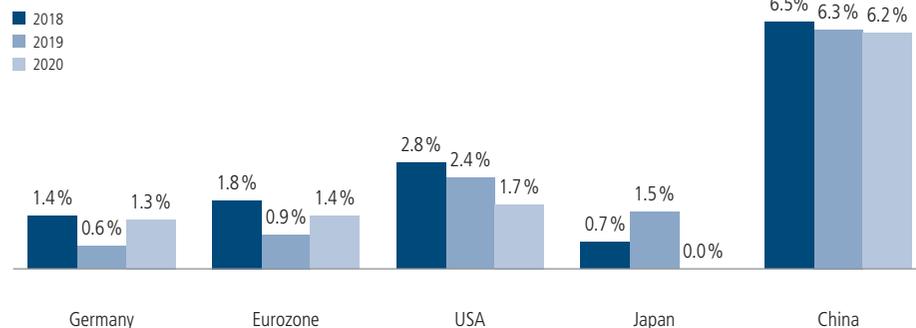
A key driver for the stock exchanges in 2019 will be the issue of the sustainability of the US economic cycle. Although the global economy will continue to grow next year, the environment is becoming increasingly late cycle, particularly in the USA, the world's leading economy. This makes an economic slowdown more likely, which may affect sentiment in the capital markets. However, America's economy is not expected to slide into recession. US growth may reach 2.4% in 2019, due partly to the boom brought on by the Trump tax reform.

The economic environment is also becoming more challenging in other regions. This especially applies to the eurozone, where our economists have substantially reduced their forecast for gross domestic product (GDP) growth in 2019 to 0.9% following weak growth momentum at the end of 2018. The growth forecast for Germany has been revised even more sharply to 0.6% due to the lull in the automotive industry. Furthermore, foreign trade is suffering due to the rising tide of protectionism. The situation is further exacerbated by the political uncertainties in Europe, which are paralysing economic stakeholders. Although a viable compromise appears to have been found between the populist government coalition and the EU Commission in the conflict regarding Italy's budget deficit, the political situation remains tense, particularly in view of the European elections that are due to take place this spring. The high level of uncertainty with regard to the issue of Brexit is also ongoing. All the key questions regarding the United Kingdom's future relationship with the European Union are likely to remain unresolved at the time it is scheduled to exit the EU at the end of March 2019 and will only be negotiated during the subsequent transition period.

Given the combination of declining growth momentum and increased political risks and with inflationary pressure remaining relatively weak, the key central banks will continue on their course of modest monetary tightening. The US Federal Reserve will react more strongly to data in 2019 and will not raise interest rates more than twice. However, it may end any interest rate hikes early in the event of an inversion of the yield curve or a further economic slowdown. In Europe, the ECB will not change its interest rate policy until the second half of 2019 and should initially raise the deposit rate out of negative territory to the zero mark.

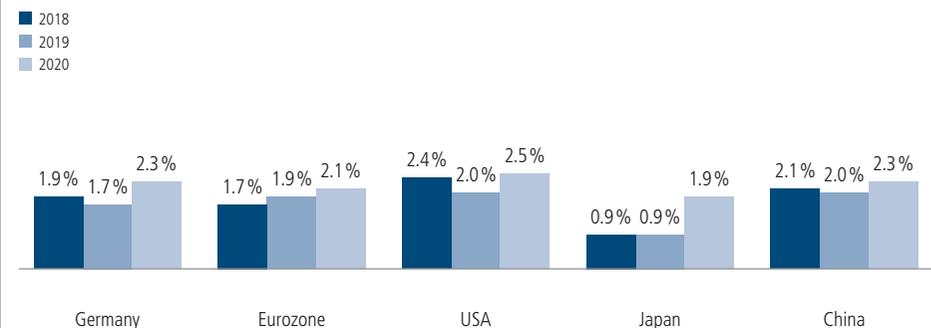
Global economic growth levels off – differences to increase in 2019

GDP forecasts



Source: Union Investment; correct as at 15 January 2019.

Inflation forecasts



The signs thus point to moderate yield increases for safe-haven fixed-interest securities such as German Bunds and US Treasuries. We anticipate a 3.2 % rise for ten-year US government bonds by the end of September 2019; prices should subsequently recover again slightly. We also expect yields for ten-year German Bunds to rise over the course of the year (forecast for the end of 2019: 0.8 %). The negative impact of changes in monetary policy, growing opportunity costs as a result of rising interest rates and higher risks may endure in the spread segments, causing yield premiums to increase further.

The tailwind for equities is slowly easing in the late-cycle capital market environment. Although the global economy is expected to lose momentum in 2019, the companies' profit situation should remain sound. However, valuations are not expected to increase, restricting the growth potential of the equity markets to the level of profit growth, which we are currently forecasting at around 6 %. Generally speaking, the differences within the equity market will increase in the late-cycle environment, in terms of both regions and sectors. The headwind will increase in 2019, particularly for cyclical and interest rate-sensitive sectors. Fluctuations on the equity markets will remain high. Activity and selection are thus the key factors for successful investment in 2019.

The commodities sector continues to be impacted by both the positive influences of the late-cycle economic environment and the effects of the geopolitical and trade-related tensions. Despite the slowdown in China many industrial metals remain fundamentally well supported by supply deficits. The oil market is expected to move into a supply deficit again over the course of 2019 due to the reduction in production resolved by OPEC and Russia at the end of 2018. However, the price potential for crude oil is likely to be relatively limited as long as the demand situation remains weak. By contrast, investors continue to focus on precious metals as a "safe haven", although the global central banks' more restrictive monetary policies and the associated rising interest rates still represent headwind for the sector.

2. Real estate markets

In 2018, the global real estate markets again benefited from the strong economic situation and low interest rates. Many companies expanded again and were in search of office space, which was already in short supply in many towns and cities. Given this situation, real estate investments were an attractive form of investment and demand was correspondingly high.

The majority of European office markets developed positively again in 2018. In many places the strong demand for space was not sufficiently met by expanding the supply of office space; market activity was therefore mostly defined by falling vacancy rates. Against this backdrop, the average prime office rent in the 12 most important European locations increased by 5.7 % over the course of 2018. Rental price increases were especially pronounced in Madrid, Lisbon

and Stockholm. The German office markets also continued to see encouraging development. The positive performance of the US office real estate markets also continued, with rents rising and vacancy rates falling in most locations. Performance on the significant office markets in the Asia-Pacific region was positive. The high demand for office space caused the average vacancy rate to decline across the five largest locations. In view of this, all the locations surveyed exhibited rent growth. In particular, Singapore and Sydney saw vacancy rates fall sharply and rents rise.

The ongoing attractive conditions for real estate investors led to higher global demand for commercial real estate in 2018. However, demand considerably outstripped supply. The global transaction volume for commercial real estate was EUR 633 billion at the end of 2018, putting it slightly above the previous year's figure. Worldwide, the highest transaction volume was achieved on the European continent again. Around EUR 248 billion was invested in commercial real estate here in 2018; this equates to a supply-related decrease of 6.0 % year-on-year. In the Americas commercial real estate worth around EUR 245 billion was traded in 2018, meaning investments were 12.4 % up on the previous year. In the Asia-Pacific region, the transaction volume for commercial real estate totalled approximately EUR 140 billion. This represents a 6.7 % increase in the transaction volume compared with the previous year.

Global interest rates still remain very low, historically speaking, despite the slight increase. This will continue to prop up demand for real estate investments in 2019, although only a few investors will be willing to sell their properties in the current market phase. There will be further rent growth in the majority of real estate markets in 2019. Investors continue to focus on core real estate, as their appetite for risk is low on the back of the current global uncertainties. This will likely result in even greater purchase price increases in the core segment.

3. Sales and fund assets

Sector situation: mutual funds

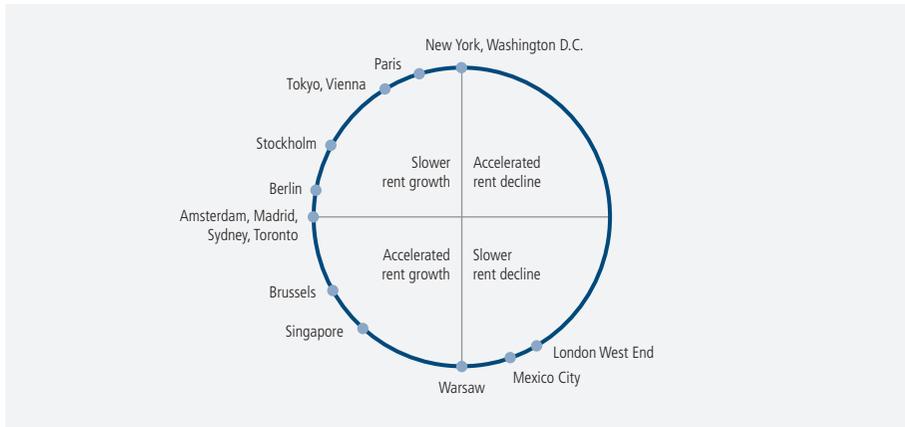
The German investment industry reported total net inflows of EUR 15.4 billion in open-ended mutual securities funds in 2018. In particular, this benefited mixed funds (EUR 21.6 billion) and money-market funds (EUR 2.4 billion). Investors primarily sold capital preservation funds (EUR -1.6 billion) and fixed-income funds (EUR -5.7 billion). The other asset classes in the area of mutual securities funds together accounted for net outflows of EUR 1.3 billion. Open-ended real-estate funds achieved net sales of EUR 6.4 billion (source: BVI investment statistics, 12/2018).

Sector situation: special funds

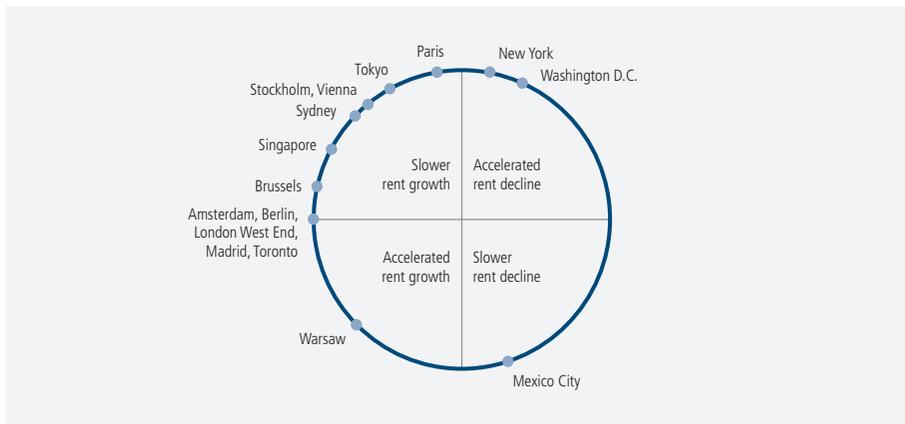
The German investment industry generated net inflows of EUR 69.4 billion in the open-ended special securities funds under its management in 2018 (as at 30 November 2018). This was up on the previous year's figure of EUR 64.3 billion (as at 30 November 2017). The volume under

Global markets: dominated by rent growth

Office property clock – Q4 2017



Office property clock – Q4 2018



The local market

- The clock shows where the respective office market is within the rent cycle.
- The local market can move in various directions.
- The positions are not necessarily representative of the investment market.

management in open-ended special securities funds totalled EUR 1,540.1 billion at the end of November 2018, and was therefore up slightly on the previous year's figure of EUR 1,518.8 billion (as at 30 November 2016) (source: BVI statistics).

Sector situation: real-estate funds

As in 2017, the market for German open-ended real-estate funds remained divided in the 2018 financial year. According to BVI, 14 of the 55 open-ended real-estate funds (not including open-ended special funds) were being closed at the end of November 2018, a figure that remained unchanged. Products being actively marketed brought the industry a net total of approximately EUR 5.7 billion in new funds by the end of November 2018. This is proof positive of investors' fundamental confidence in this asset class.

Source: Jones Lang LaSalle; Union Investment; correct as at 31 December 2018.

II. Specific business performance

1. Overview of assets under management and performance

1.1 Fund business/assets under management

The number of products set up by or managed by UMH investees under fund management mandates was 1,160 in 2018, up slightly on the prior-year level of 1,151.

The volume of assets under management declined from EUR 323.9 billion as at 31 December 2017 to EUR 323.4 billion in 2018, a decrease of EUR -0.5 billion. This decrease was primarily attributable to negative performance in the international capital markets. This was counteracted by positive net inflows.

The development of assets under management in 2018 can be summarised as follows:

The volume of mutual funds decreased by EUR -6.8 billion to EUR 183.6 billion.

The volume of special funds increased by EUR 5.2 billion to EUR 101.0 billion.

The volume of other formats (advisory mandates and asset management) less outsourced mandates was up year-on-year at EUR 38.7 billion (previous year: EUR 37.6 billion).

Volume of assets under management

The volume of assets under management within the Union Investment Group was as follows as at the end of the reporting period:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Fund assets	284,648,502	286,295,264	-1,646,762
Volume in other formats	50,082,791	49,832,446	250,346
of which unit-linked asset management	1,686,748	1,488,560	198,188
of which institutional asset management	9,961,356	9,653,521	307,835
of which advisory and outsourcing	38,434,687	38,690,365	-255,678
Accounts managed by third parties	-11,361,446	-12,208,709	847,263
Total	323,369,848	323,919,001	-549,153

Under the UMH banner, the Union Investment Group had total assets under management of EUR 323 billion as at the end of the reporting period (previous year: EUR 324 billion). The fund assets comprise equity funds, fixed-income funds, money-market funds, mixed funds, other securities funds, capital preservation funds, real-estate funds, alternative investment funds and hybrid funds issued by the Union Investment Group.

The Union Investment Group also manages assets as part of its unit-linked asset management and institutional asset management business, under advisory and outsourcing mandates and private banking. The volume of the funds issued by the Union Investment Group for which portfolio management has been outsourced is shown as a deduction. The definition of assets under management is based on the aggregate statistics of the German Investment Funds Association (BVI), Frankfurt am Main.

Net inflows to assets under management

The table below gives a breakdown of the net inflows to assets under management within the Union Investment Group:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Net inflows (fund assets)	12,516,894	21,874,255	-9,357,361
Net inflows (other formats)	2,811,098	3,451,116	-640,018
of which institutional asset management	709,043	-1,939,235	2,648,278
of which advisory and outsourcing	1,857,292	4,747,798	-2,890,506
Net change in accounts managed by third parties	-12,371	-187,646	175,275
Total	15,315,621	25,137,725	-9,822,104

Net inflows to assets under management constitute the balance of inflows to and outflows from the product formats that make up assets under management. This figure was EUR 15 billion in the financial year (previous year: EUR 25 billion).

Volume of fund assets

The volume of fund assets of the Union Investment Group was as follows as at the end of the reporting period:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Mutual funds	183,607,343	190,405,564	-6,798,221
Equity funds	41,947,604	46,169,944	-4,222,340
Fixed-income funds	42,851,407	48,037,824	-5,186,417
Money-market funds	3,257,964	3,037,672	220,292
Mixed funds	49,708,142	47,498,281	2,209,861
Other securities funds	1,440,628	1,336,295	104,333
Capital preservation funds	7,019,845	8,711,102	-1,691,257
Open-ended real-estate funds	35,398,738	33,256,296	2,142,442
Alternative investment funds	1,192,708	1,369,723	-177,015
Hybrid funds	790,307	988,427	-198,120
Special funds	101,041,158	95,889,700	5,151,458
Equity funds	586,768	627,943	-41,175
Fixed-income funds	15,269,983	14,482,537	787,446
Mixed funds	64,493,238	62,147,429	2,345,809
Other securities funds	716,029	703,072	12,957
Capital preservation funds	13,130,116	12,656,222	473,894
Alternative investment funds	181,843	162,488	19,355
Special real-estate funds	6,663,181	5,110,009	1,553,172
Total	284,648,502	286,295,264	-1,646,763

Net inflows to fund assets

The table below gives a breakdown of the net inflows to the fund assets of the Union Investment Group:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Mutual funds	4,430,183	16,215,666	-11,785,483
Equity funds	924,587	2,348,377	-1,423,790
Fixed-income funds	-3,640,343	3,830,218	-7,470,561
Money-market funds	210,745	380,141	-169,396
Mixed funds	6,298,494	8,049,063	-1,750,569
Other securities funds	247,191	296,182	-48,991
Capital preservation funds	-1,388,415	-1,983,352	594,937
Open-ended real-estate funds	1,945,460	2,789,829	-844,369
Alternative investment funds	-27,260	271,422	-298,682
Hybrid funds	-140,277	233,786	-374,063
Special funds	8,086,711	5,658,589	2,428,122
Equity funds	36,024	-256,057	292,081
Fixed-income funds	1,089,414	309,511	779,903
Mixed funds	4,800,227	3,825,688	974,539
Other securities funds	-5,050	10,882	-15,932
Alternative investment funds	18,095	25,274	-7,179
Capital preservation funds	830,666	662,566	168,100
Special real-estate funds	1,317,334	1,080,725	236,609
Total	12,516,894	21,874,255	-9,357,361

Number of investment funds managed

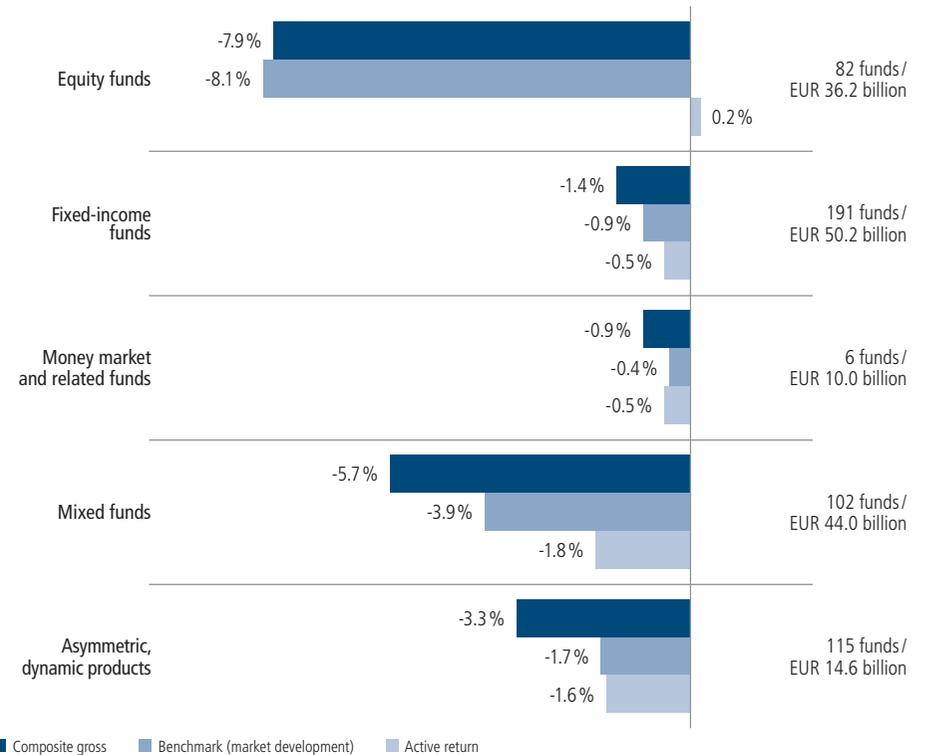
The number of investment funds managed at the end of the reporting period was as follows:

	2018 Number	2017 Number	Change Number
Mutual funds	849	836	13
Equity funds	205	194	11
Fixed-income funds	170	173	-3
Money-market funds	11	12	-1
Mixed funds	364	344	20
Other securities funds	15	14	1
Capital preservation funds	45	57	-12
Open-ended real-estate funds	17	17	–
Alternative investment funds	20	17	3
Hybrid funds	2	8	-6
Special funds	394	385	9
Equity funds	6	6	–
Fixed-income funds	40	40	–
Mixed funds	252	248	4
Other securities funds	2	2	–
Alternative investment funds	3	3	–
Capital preservation funds	71	68	3
Special real-estate funds	20	18	2
Total	1,243	1,221	22

1.2 Performance of Union Investment Group funds²⁾

The very negative development of many capital market segments over the course of 2018 is also reflected in the absolute figures for equity, fixed-income and mixed funds. In addition, the difficult environment in the bond markets with yields and risk premiums increasing at times also left its mark on the relative performance of fixed-income and mixed funds.

2018*: Stock selection works – negative impact of bonds



* Performance since 31 December 2017; rounding differences are possible.

Source: Union Investment; correct as at 31 December 2018.

²⁾ All the following performance figures are based on gross performance, i.e. are cost-adjusted and relate to the 2018 financial year.

The equity funds under management lost an average of 7.9 % in absolute terms, 0.2 percentage points less than the average of their benchmarks. The funds with a focus on Aktien Nordamerika (+0.7 %) and Aktien Global (-4.0 %) performed best in 2018. Europe equity funds saw high single-digit losses (-9.8 %), while eurozone and Germany equity funds moved down even more significantly by -13.3 % and -19.3 % respectively. While the main European equity composites fell slightly behind their respective benchmarks, positive active returns were achieved in the Aktien Global, Aktien Emerging Markets and Aktien Nordamerika composites. The latter performed particularly convincingly, outstripping its benchmark by 1.8 percentage points.

The performance of the fixed-income funds of the key composites Renten EUR Staatsanleihen (-0.5 %) and Renten EUR Aggregate (-0.8 %) was slightly negative. By contrast, increasing risk premiums led to pronounced absolute price losses (-4.3 % to -6.9 %) and in some cases also relative price losses, particularly for the emerging markets composites. Funds with a focus on EUR IG corporate bonds (with no fixed time to maturity; -2.0 %) and money-market and related funds (-0.9 %) also declined due to rising risk premiums on corporate bonds.

The mixed funds lost 5.7 % on average, 1.8 percentage points more than their benchmarks. Asymmetric, dynamic capital preservation products closed the last year with a loss of 3.3 %. In terms of absolute return, on average the funds were significantly more heavily in the minus range than their money market benchmark at -5.3 %.

Real-estate funds for retail investors

The open-ended real-estate mutual funds managed by Union Investment for retail investors reported annual returns of +2.8 % (Unilmmo: Deutschland), +2.6 % (Unilmmo: Europa) and +2.1 % (Unilmmo: Global) as at 31 December 2018. While Unilmmo: Deutschland and Unilmmo: Europa proved stable over the year, the performance of Unilmmo: Global dropped slightly at the start of the year but stabilised at this level over the course of 2018 as a whole. Following improving performance, immofonds 1 reported an annual return of 2.3 % as at the end of the reporting period. In July 2017, Union Investment and Zentral Boden Immobilien AG entered into a strategic partnership to set up the Unilmmo: Wohnen ZBI fund, which reported an annual return of +2.2 % at the end of the year.

Real-estate funds for institutional investors

Business with institutional real estate investors continued to expand in 2018. Performance contributions by the special funds managed, DEFO-Immobilienfonds 1, UII Hotel Nr. 1, DIFA-Fonds Nr. 3 and German^M, were greater than planned. All the funds successfully acquired properties over the course of the year. The UII Shopping Nr.1 and Urban Campus Nr.1 funds as well as the Urban Living Nr. 1 fund launched in the 2017 financial year fell slightly short of their planned values at the end of the year. The institutional mutual funds Unilnstitutional European Real Estate and Unilnstitutional German Real Estate realised a total of six purchases in 2018, each achieving a gain of +2.7 % by the end of December.

Immobilien-Spezialfonds Real Value Berlin (formerly Residential Value), Residential Value Germany, R+V Deutschland Real, VGV Immobilienfonds II and Redos Einzelhandel Deutschland, which were created as service asset management mandates, are in the continuing investment phase. Initial acquisitions were made for Wohnen Deutschland Spezial and Redos Einzelhandel Deutschland II. Property Invest Germany also carried out its first investment and the investor brought two additional properties into PSD KN ImmoInvest Geschlossene Investment KG. VGV Immobilienfonds I was merged with VGV Immobilienfonds II at the investors' request and the investment phase for the five external asset managers now engaged was extended. Furthermore, some properties were sold in the reporting period in order to optimise the portfolio and exploit market opportunities. The revenue is to be reinvested gradually. BAEV Immobilienfonds I is being partially wound up due to restructuring of the allocation of real estate among investors and initial sales are in the pipeline.

The Wannsee Immo Fonds I was newly issued as an individual mandate for a pension scheme. This fund is aiming for a target volume of over EUR 1 billion.

As in the previous years, VPV Invest enjoyed positive development. New investments for the fund were indirectly made in the target fund and the capital commitment for another target fund already in the portfolio was increased with a further capital commitment of EUR 31.1 million.

The capital pledged for the two Unilnstitutional Infrastruktur SICAV-SIF subfunds (approximately EUR 133 million) has been drawn in full since 2016. The fund liquidity was used to make a total of nine investments in the areas of wind power and photovoltaics. The portfolio is highly diversified in terms of investment locations and technologies. Based on 146.6 MW of installed capacity, the entire fund is spread as follows: 33 % in Ireland, 29 % in Germany, 24 % in France and 14 % in the UK.

The purchase of a further turbine for the Carrowleagh wind farm (Ireland) and acquisition of a rooftop PV system in Dieburg (Hesse) are being reviewed for 2019.

In 2018, various operational measures were initiated and in some cases completed in order to further increase the efficiency of the fund. In addition to technical measures such as analysis of nacelle misalignments and the sustainability of expected wind yields, the Gibbet Hill wind farm in Ireland and Lilbourne wind farm in England were also successfully refinanced.

Many sunny days, warm temperatures, hardly any precipitation and unfortunately also very low wind speeds were recorded in the 2018 calendar year. This affects all the regions in which the fund is invested. In total, 317.5 million kWh of electricity were fed into European networks in the calendar year. This equates to 86.9 % of the long-term expectations and is chiefly attributable to below-average wind speeds all over Europe. Production output in the last 12 months

meets the energy requirements of over 97,400 households and over 195,400 tonnes of CO₂ were saved compared to conventional power generation (source: the German Environment Agency (UBA)).

A sum of EUR 24.00 per share was paid out from the net profit for the year in December 2018 for subfund 1, while EUR 26.00 per participation certificate was paid out to the investors for subfund 2. For both subfunds, this equates to a distribution return of around 2.5 %.

1.3 Awards, rankings and ratings

For the 16th time in a row, the renowned German business magazine Capital awarded Union Investment the highest rating of five stars in 2018 – it is the only investment company to achieve this. Financial magazine Euro also recognised the company with 15 awards for individual funds at the Euro FundAwards 2018. In the “Deutschland Beste” study conducted by the IMWF Institut für Management- und Wirtschaftsforschung on behalf of Focus and Focus Money, Union Investment was ranked first among 64 companies in the fund investment company sector. In November, Union Investment was named best asset manager in Germany, Austria and Switzerland for the fourth time in a row, receiving the “Scope Award 2019” in the “Socially Responsible Investing” category.

In the ranking of asset management companies performed by Scope as at 31 December 2018, Union Investment was ranked 12th with a ratio of 48.2 % of funds with a top rating, making it the second-best German asset management company (Deka: 9th place, 51.0 %; Allianz Global Investors: 22nd place, 40.6 %; DWS: 31st place, 34.7 %).

In the rankings issued by the Morningstar ratings agency as at 31 December 2018 that compare Union Investment against its main competitors in Germany, Union Investment was ranked third over one year and fourth over both three years and five years. The proportion of funds in the upper half of each peer group was 46.2 % over a one-year period, and 35.4 % and 46.4 % respectively over the longer analysis periods.

2. Development in sales and fund assets

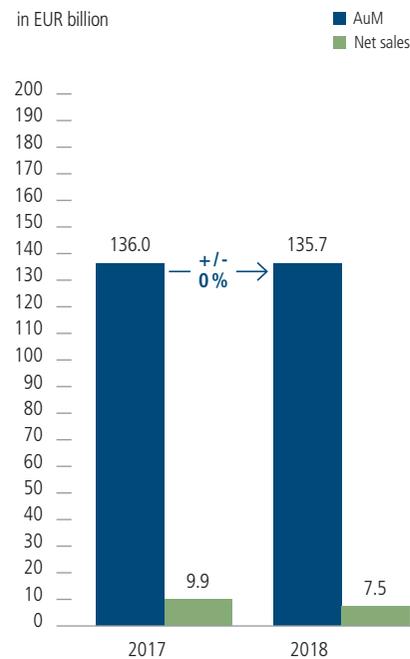
2.1 Union Investment Group sales and fund assets

The Union Investment Group had total assets under management of EUR 323.4 billion as at 31 December 2018 (2017: EUR 323.9 billion). It achieved a market share of 14.7 % of the assets under management across the sector according to the investment statistics of the German Investment Funds Association (BVI) (as at December 2017: 15.0 %); this equates to second place overall in the market (2017: second place). Its assets were distributed across the two business divisions of retail and institutional clients.

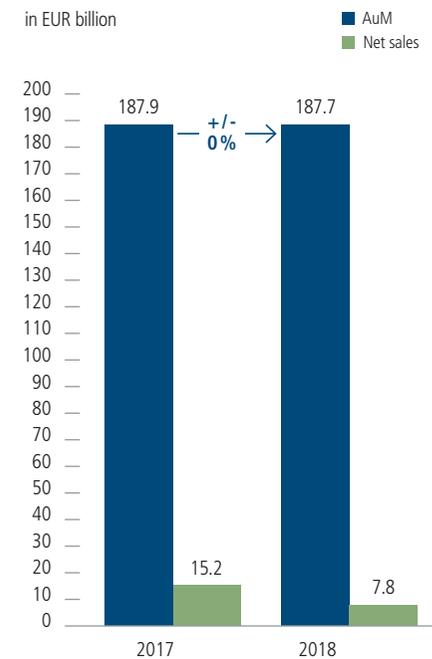
Retail investors – development in sales and assets

All funds under the Union Investment brand are offered to retail clients exclusively via our partner banks in the cooperative financial network. This approach distinguishes Union Investment from most of its competitors.

Assets under management and net sales in the Retail Clients segment

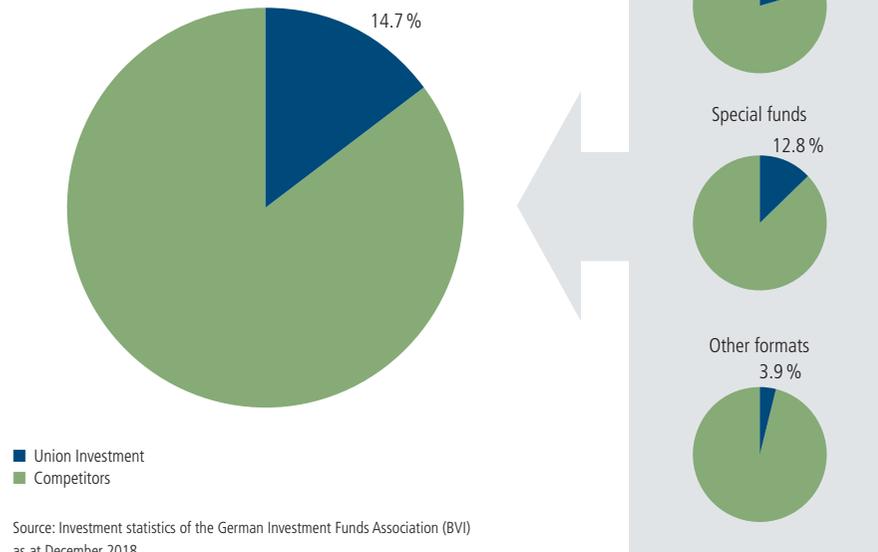


Assets under management and net sales in the Institutional Clients segment



Market shares

Assets under management



Source: Investment statistics of the German Investment Funds Association (BVI) as at December 2018.

Historically, this strategy of clearly focusing on the Genossenschaftliche FinanzGruppe Volksbanken Raiffeisenbanken cooperative financial network has formed the basis for the exceptional level of successes enjoyed by the Union Investment Group in the marketplace. The close cooperation within the Genossenschaftliche FinanzGruppe again proved its worth in 2018.

At EUR 26.5 billion, gross sales in retail client business were once again high in 2018 (2017: EUR 30.1 billion). Net inflows amounted to EUR 7.5 billion (2017: EUR 9.9 billion). The inflows were aimed at the asset classes of mixed funds and open-ended real-estate funds in particular. By contrast, clients withdrew funds from fixed-income and capital preservation funds.

The volume of assets under management in business with retail clients remained almost the same as at 31 December 2018 at EUR 135.7 billion (2017: EUR 136.0 billion).

According to the investment statistics of the German Investment Funds Association (BVI), the Union Investment Group's share of the managed mutual funds market was 20.6% at the end of 2018 (2017: 20.8%). Union Investment was therefore the second-largest manager of mutual funds in Germany (2017: second).

Institutional investors – development in sales and assets

The volume of assets under management for institutional investors also remained at the previous year's level at EUR 187.7 billion in 2018 (2017: EUR 187.9 billion). The assets under management in special funds for institutional investors increased to EUR 93.1 billion (2017: EUR 88.4 billion). Assets under management in other institutional business formats (mutual funds, advisory and institutional asset management) amounted to EUR 94.5 billion (2017: EUR 99.5 billion).

In 2018, institutional business generated net inflows of EUR 7.8 billion (2017: EUR 15.2 billion). Special funds and advisory services were particularly sought after.

According to the BVI investment statistics, the Union Investment Group's share of the special funds market was 12.8% at the end of 2018 (2017: 13.1%). The group is therefore still the second-largest manager of special funds in Germany.

2.2 Custody business and fund brokerage

As at the end of 2018, the Union Investment Group managed more than 4.5 million client custody accounts with portfolios of the group's own and third-party investment funds. The portfolio volume was increased by EUR 1.0 billion from EUR 120.1 billion in total to EUR 121.1 billion.

The number of managed custody accounts with third-party funds (funds from asset management companies outside the group) was around 357,000 as at the end of the period under review (2017: 337,000 custody accounts). The volume of assets invested in third-party funds was EUR 6.3 billion at the end of 2018 (2017: EUR 6.1 billion).

Union Investment Service Bank AG handled a total of around 78.7 million customer transactions in 2018, which can be broken down as follows:

- 51.6 million savings plans, withdrawal plans, employer-funded capital formation schemes, etc.,
- 24.8 million income distributions/reinvestment and custody account fees,
- 2.0 million online transactions, and
- 0.3 million manual, offline-only special postings.

1.7 million transactions were entered directly by the end investor and banks using the online service. Automated processing accounts for 99.3% of the transactions processed (previous year: 99.2%), still the optimum level from a business perspective.

The fund brokerage business processed a total of around 1.9 million attrax S.A. client orders with a volume of approximately EUR 44.8 billion in the year under review. 0.1 million orders worth EUR 7.6 billion were posted in Union Investment Group funds.

The volume of assets held in custody for attrax clients was EUR 60.1 billion as at the end of the year under review (previous year: EUR 60.4 billion). EUR 19.2 billion of this was held for cooperative partner banks (previous year: EUR 18.9 billion) and EUR 40.9 billion for institutional clients (previous year: EUR 41.5 billion). The volume of fees and commission paid as trail commission in 2018 amounted to approximately EUR 127.8 million (previous year: EUR 116.1 million).

The fund brokerage business actively managed 167 cooperative banks, while the number of institutional clients managed fell from 139 to 137 as at the end of 2018.

III. Business environment

The ECB is an EU body and constitutes the single monetary authority of the member states of the European Monetary Union. Its main tasks include determining monetary policy with the aim of maintaining price stability, regulating the quantity of money in circulation, supporting economic policy in general and promoting the smooth functioning of payment systems.

In order to perform these tasks the ECB has the exclusive right to approve the issue of banknotes denominated in the euro currency within the EU. However, coins denominated in euro can be issued directly by the member states within the eurozone, albeit in an amount approved by the ECB in advance.

The Governing Council of the ECB, consisting of the six members of the Executive Board of the ECB and the presidents of the national central banks of the 19 member states of the eurozone, continues to assume as in previous years that bank lending must be further stimulated by low key interest rates in order to boost the economy in euro countries. For this reason the following resolutions were passed in 2018:

- the interest rate for the Eurosystem's main refinancing operations, this being the rate at which banks can borrow money from the ECB on a weekly basis at a fixed rate of interest and against collateral in order to lend it to others, will be left unchanged at a record low of 0.00 %.
- the interest rate at which banks can temporarily deposit surplus funds with the ECB (known as the deposit facility) will continue unchanged at -0.40 %.
- the marginal lending facility, that is the interest rate at which banks obtain overnight liquidity, will also be left unchanged at a level of 0.25 %.

The Governing Council of the ECB currently assumes that these key ECB interest rates will remain at this level until at least summer 2019 in order to ensure that inflation continues to develop in line with current expectations. The aim here is to ensure inflation remains below but close to 2.0 % in the medium term.

The ECB's existing asset purchase programme (APP), which is designed to boost consumption and investment in the eurozone, amounted to EUR 30 billion per month as of January 2018. Its scope was reduced to EUR 15 billion per month from September to the end of December 2018. At its meeting on 13 December 2018, the Governing Council of the ECB resolved to end the APP at the end of 2018. Notwithstanding this, it intends to use the repayment amounts from the assets acquired, particularly securities, to purchase new securities so as to continue to provide favourable liquidity conditions for companies. With this in mind, it remains to be expected that investors will still have to take greater risks to generate an adequate return after deducting inflation and taxes.

In October, the German government estimated GDP growth of 1.8 % for 2018. One month later the EU Commission predicted growth of just 1.7 %. For 2019, the German Council of Economic Experts (Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung) even forecast an increase of just 1.5 %.

The United Kingdom of Great Britain and Northern Ireland's exit from the European Union (Brexit) scheduled for the end of March 2019 had no relevant impact on business performance. Nevertheless, 2018 was characterised by consideration and assessment of the effects of this. Further developments will be closely monitored to allow for an appropriate response if necessary.

Union Investment played an increasingly proactive, targeted and successful part in shaping the conditions for investment funds national and international level. For example, at European level Union Investment participated in a wide variety of working groups set up by the European Fund and Asset Management Association (EFAMA). At national level, Union Investment participated in the committees of the BVI and the National Association of German Cooperative Banks (BVR). Furthermore, dialogue increasingly took place with other European regulatory authorities and information was successfully shared among political representatives at both regional and European levels.

Tax regulations

Under the amended German Investment Tax Act (InvStG), the legislature comprehensively reformed investment taxation as at 1 January 2018. Since then, an opaque taxation system has applied to mutual funds. Mutual funds are now subject to corporation tax on German investment income and German real estate income. In addition, dividend payments on mutual funds are generally subject to taxation from 2018.

As compensation for these amendments to the tax system, flat-rate tax-free percentages (so-called partial exemptions) have been stipulated for fund income, depending on the investor and fund category. In place of the previous reinvestment approach, a flat fee paid in advance is also being introduced, which is subject to taxation on the part of the investor on the first working day of the following year. Additionally, the portfolio tax protection for fund units purchased prior to 1 January 2009 has been lifted. However, realised and unrealised gains on such 'old units' remain tax-exempt up to 31 December 2017. A new allowance of EUR 100,000 per person is being introduced for the performance of these old units as at 1 January 2018.

In contrast, the existing transparent taxation system for special funds essentially remains in place, although here, too, income on German investments and real estate is taxed at the fund level. Furthermore, as of 2018, gains realised at the fund level are subject to taxation at the investor level after 15 years and following the offsetting of any losses incurred in the meantime.

As a result of the transition to the new taxation system, both mutual and special fund units were notionally divested and repurchased at the same unit price as at 31 December 2017. The resulting taxes on this notional income are, however, only incurred if the respective units actually are sold. In addition, the tax account for all funds was notionally balanced on 31 December 2017. Any ordinary income accrued up to that point in the financial year was reinvested and subject to taxation at the investor level to facilitate a transition to the new system.

Based on the investment tax reform, at the start of 2019 fund savers can for the first time obtain a deduction for "fund tax" as the investment tax reform provides for funds that do not make any distributions or sufficiently large distributions to be taxed on a flat-rate basis. The tax authority assumes a notional income for this flat fee paid in advance. The "notional income" (basic income) for 2018 is to be calculated by the institutions maintaining the custody accounts in Germany at the start of 2019. The basic income corresponds to the redemption price of the fund unit at the start of 2018 multiplied by 70 % of a basic interest rate that the German Bundesbank calculates and publishes each year (basic interest rate for calculating the flat fee paid in advance as at 1 January 2019: 0.87 %). The basic income is limited to the additional amount arising between the first and the last redemption price determined in the calendar year plus the distributions within the calendar year. The institutions maintaining the custody accounts may collect the contributions required for the payment of tax in the amount of the flat fee paid in advance directly from the current account or another deposit account of the investor, in which case the investor's consent is not required, or sell a corresponding amount of units. However, a debit can only be made or units can only be sold if the income exceeds any exemption order issued.

Initial amendments were made to the investment tax reform in the German Tax Act for the Prevention of VAT Revenue Losses from Trading with Goods over the Internet and Amendment of Further Tax Provisions (Gesetz zur Vermeidung von Umsatzsteuerausfällen beim Handel mit

Waren im Internet und zur Änderung weiterer steuerlicher Vorschriften; formerly the "Annual Tax Act 2018" ("Jahressteuergesetz 2018")). In addition, a comprehensive circular from the German Federal Ministry of Finance (BMF) expected in 2019 is to explain the individual regulations of the investment tax reform.

Implementation of the General Data Protection Regulation

Companies were required to implement the European General Data Protection Regulation (Regulation (EU) 2016/679 of 27 April 2016; GDPR), which came into force in 2016, by no later than 25 May 2018. The aim of the GDPR is to ensure an equivalent level of protection for natural persons during the processing of personal data in member states of the EU. Union Investment ensured its timely implementation via a project.

In material terms the GDPR regulates, in particular, increased transparency and information requirements as well as companies' accountability in relation to data processing and the erasure of personal data following achievement of the purpose for which the data were collected. All existing processes, insofar as they involve the processing of personal data, needed to be analysed based on the new requirements and the necessary adjustments implemented.

With regard to the increased transparency requirements, the general public is becoming increasingly aware of the issue of data protection, which is developing into a key consumer protection issue. It can be assumed that evidence of compliance with data protection requirements and data security will play a steadily increasing role in the future.

At the national level, the German Act to Adapt Data Protection Law to Regulation (EU) 2016/679 and to Implement Directive (EU) 2016/680 (DSAnpUG-EU) was passed on 12 May 2017. Furthermore, the German Federal Ministry of the Interior, Building and Community (BMI) submitted a draft of the Second Act to Adapt Data Protection Law to Regulation (EU) 2016/679 and to Implement Directive (EU) 2016/680 (2. DSAnpUG-EU) on 21 June 2018. This draft act provides for the amendment of a total of 152 federal laws and may, if the act is passed un-amended, require further adjustments to existing processes.

Requirements of the Benchmark Regulation

European Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (known as the Benchmark Regulation) has been required to be applied since 1 January 2018, although a transition period applies for specific regulations.

The particular aim of the Benchmark Regulation is to ensure that benchmarks created or used within the EU are robust, reliable, representative and suitable for their intended purpose. In this context a benchmark is understood to mean an index or an indicator for pricing financial instruments and financial contracts or measuring the performance of investment funds.

As at 1 January 2020, benchmarks can generally only still be used if they are provided by an index provider (administrator) and the administrator is entered in a public register kept by the European Securities and Markets Authority (ESMA). Union Investment is carrying out a project to ensure the effects of this are examined and any necessary adjustments, particularly in relation to the funds managed, are implemented.

Legislative proposals for promoting a sustainable financial system

The EU Commission submitted several legislative proposals for promoting a sustainable financial system on 24 May 2018. The legislative package is based on the action plan on financing sustainable growth published on 8 March 2018 and contains a proposal for introducing a standard EU classification system for sustainable assets (a "taxonomy"). Based on harmonised criteria the taxonomy is to make it possible to determine whether an economic activity is "ecologically sustainable". While the term sustainability is usually understood to comprise three areas, namely environmental, social and governance (ESG), the EU Commission's proposal initially concentrates on the area of environmental and, in particular, climate-related aspects.

The taxonomy is to be developed in stages and facilitate more informed investment decisions. In the view of the EU Commission, the planned taxonomy can serve as the basis for any future introduction of standards and labelling for sustainable financial products.

The EU Commission's proposals also include a proposal for amending the Delegated Regulation on MiFID II for the purpose of taking sustainability preferences into account in investment advice and suitability tests. In accordance with this, investment advisors are explicitly to ask their clients about their sustainability preferences in the future. The guidelines on suitability are to be adapted accordingly. However, an explicit obligation to enquire about sustainability preferences will increase the complexity of investment advice even further. In view of this it is to be expected that a revised draft will be submitted in this regard at the start of 2019.

In addition, the EU Commission suggests introducing standard benchmarks within the EU for low CO₂ investments and investments with a favourable CO₂ balance ("sustainability benchmark"). This proposal contains requirements for methods and disclosure obligations in relation to sustainability benchmarks of this kind. The aim is to remove the existing fragmentation within the internal market and ensure a high degree of investor protection due to harmonisation.

The European Parliament and European Council are taking different approaches to push ahead with the legislative proposals submitted by the EU Commission. The report adopted by the European Parliament's Committee on Economic and Monetary Affairs (ECON) at the start of November 2018 contains amendments compared with the EU Commission's draft. The scope is thus to be extended to include all existing financial products and provision is made for a more comprehensive definition of sustainability risks.

The ECON committee held a vote on 13 December 2018 regarding the introduction of benchmarks for low CO₂ investments and investments with a favourable CO₂ balance and voted in favour of optional rather than mandatory use of sustainability benchmarks.

Implementation of the Money Market Funds Regulation

Regulation (EU) 2017/1131 on money-market funds (known as the Money Market Funds Regulation), which was adopted in June 2017 and came into force in 2018, aims to ensure money-market funds are set up in such a way as to render them more stable and less vulnerable to potential crises. The regulation contains strict provisions on the diversification, liquidity and transparency of money-market funds that invest in short-term assets and focus on returns in line with the money market rate and/or maintaining the value of the investment. External support from third parties as well as borrowing for money-market funds will also be expressly prohibited in future.

The Money Market Funds Regulation also provides for a new categorisation of money-market funds. Within the Union Investment Group a money-market fund managed by Union Investment Privatfonds GmbH is to be designed as a fund with variable net asset value (VNAV) in the future.

The new requirements are to be applied to existing money-market funds by no later than 21 January 2019.

MiFID amendment

With implementation of the amended European Markets in Financial Instruments Directive (Directive 2014/65 EU, also referred to as MiFID II) and the two Level 2 implementing regulations issued in relation to this (Commission Delegated Regulation (EU) 2017/593 and Commission Delegated Regulation (EU) 2017/565) in German law, two key regulatory frameworks came into force as at 3 January 2018 in the form of the new German Securities Trading Act (WpHG) and the updated German Investment Services Conduct of Business and Organisation Regulation (WpDVerOV). Delegated Regulation (EU) 2017/565 applies directly in parallel to this. The new requirements, which include yet further Level 3 implementing measures (e.g. ESMA guidelines and Q&A lists) at the European Union level, have been applicable as at 3 January 2018. At the national level, the circular published by the German Federal Financial Supervisory

Authority (BaFin) on 19 April 2018 on the Minimum Requirements for the Compliance Function and Additional Requirements Governing Rules of Conduct, Organisation and Transparency (MaComp; BaFin circular 05/2018 (WA)) were also to be observed in this regard in particular.

A MiFID II project was initiated within Union Investment in April 2015 in order to implement MiFID II. Union Investment identified a need for action in the key areas of “cost information”, “benefits”, “target market definition/review”, “adequacy review”, “quarterly report” and “adaptation of information materials”. The project goals for compliance with the MiFID II requirements were implemented within the time limit. There were also close links with the Markets in Financial Instruments Regulation (MiFIR) and Packaged Retail and Insurance-based Investment Products (PRIIPs) regulatory projects in particular. The ex-post cost information for the UnionDepot managed by Union Investment Service Bank AG that must be prepared for the first time in 2019 for the 2018 reporting year is currently being implemented. The MiFID II project is scheduled to end in June 2019. Union Investment is extensively involved in the BVR project for implementing MiFID II/MiFIR and is participating in the preparation of standards for the implementation of MiFID II for institutions of the Genossenschaftliche FinanzGruppe.

Key information documents for packaged investment products for retail investors

European Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs Regulation) came into force on 1 January 2018. In particular, packaged investment products include investment funds. A standard key information document must be issued for these products. The PRIIPs Regulation specifies both the form and content of this key information document and the requirements for the provision of the key information document by the manufacturer and/or persons advising on or selling a packaged product. However, UCITS funds and investment funds for which the investor information significant under national law is prepared in line with the provisions for UCITS funds are subject to a transitional provision until 31 December 2019.

On 3 December 2018 the ECON committee resolved to extend the transitional provision for these investment funds by two years until 31 December 2021.

The ECON committee also resolved to postpone the planned review of the PRIIPs Regulation by one year until the end of 2019.

The ECON committee’s vote sends out a strong signal for the upcoming plenary vote in the EU Parliament. In the view of the Austrian presidency there is also a majority in the European Council for extending the exception for funds. Due to the expected postponement the key investor information for the funds can continue to be provided until 31 December 2021.

IV. Research and development

1. Retail clients

In 2018, product policy in the Retail Clients segment continued to focus primarily on the clients’ needs. Business development focused on investing and optimising assets, old-age provision and savings. Product policy issues for retail business are handled collectively by the Product Management department of Union Investment Privatfonds GmbH (UIP), also comprising the funds of the affiliates Union Investment Luxemburg S.A. (UIL) and Union Investment Real Estate GmbH (UIR) and cooperative business with R+V.

Investing and optimising assets

In the area of investing and optimising assets, the focus is on improving the asset structure for clients with high levels of liquidity or one-product portfolios for further diversification. In 2018, measures to this end were linked in communications with the new key phrase for the area of need, “widely spread”.

UniStruktur

The investment objective of the defensive global multi-asset UniStruktur fund is to manage value fluctuations within the investment portfolio. The fund, which was launched at the beginning of 2017, reported steady inflows and had a volume of EUR 592.1 million as at 31 December 2018.

UniProInvest: Struktur and UniProInvest: Chance

To begin with, both funds were dominated by money-market-related investments and fixed-income investments with subsequent gradual restructuring into a target portfolio.

The target portfolio for the UniProInvest: Struktur fund has corresponded to the defensive UniStruktur mixed fund since August 2018. The fund has recorded falling inflows since June 2017. In view of UniProInvest: Struktur’s low fund volume (EUR 132.8 million as at 31 December 2018) and the product benefit of smooth entry into a multi-asset portfolio now no longer applicable, investors are to be given the opportunity to participate in economies of scale and lower costs over the long term via the merger of UniProInvest: Struktur and UniStruktur on 4 January 2019.

The UniProInvest: Chance fund was launched in mid-June 2017. By June 2019 it will be restructured into the target portfolio, which corresponds to that of a global equity fund that is managed in conformity with the investment process for UniFavorit: Aktien. As at 31 December 2018, the fund had a volume of EUR 42.0 million.

UniAbsoluterErtrag

The UniAbsoluterErtrag fund, which involves a dynamic combination of market-based investments in promising asset classes and sectors as well as market-neutral strategies, enjoyed total net inflows of EUR -294.0 million in the current year. Outflows amounted to EUR 475.6 million (including a unit class with no front-end fee in each case). After a good start to 2018, the increasing impact of rising protectionism in the USA became clear in the following months. The fund was not able to escape the difficult market environment and decreased further in the context of heavily politicised stock exchanges. However, we still believe that a concept such as this generates benefit for the client in the medium to long term. The fund volume currently amounts to around EUR 1.6 billion (as at 31 December 2018).

Open-ended real-estate funds

In 2018, sales of [open-ended real-estate funds](#) again continued to be influenced by sizeable investor demand in the low-interest environment on the one hand and by the global challenges of buying quality real estate on the other. In this environment, the open-ended [Unilmmo: Wohnen ZBI](#) real-estate fund launched in July 2017 as part of a strategic partnership with residential property specialist ZBI was authorised for sale for six weeks in the first quarter from 5 February 2018 to 16 March 2018. One-time investments generated inflows of EUR 304 million. A second contingent phase for Unilmmo: Wohnen ZBI was initiated on 10 September 2018. It ended on 19 October 2018. An overall contingent in the amount of EUR 680 million was made available and drawn. A third contingent phase commenced on 26 November 2018 for [Unilmmo: Deutschland](#). An overall contingent amounting to EUR 500 million was allocated. The contingent period included the turn of the year and ended on 18 January 2019. There are already signs that this contingent will also be very well placed by the VR banks.

PrivatFonds products

[PrivatFonds](#) products enjoyed inflows overall. The focus continued to be on PrivatFonds: Kontrolliert and PrivatFonds: Kontrolliert pro. The net inflow since the start of the year amounted to EUR 3.0 billion (as at 31 December 2018), with EUR 3.0 billion attributable to PrivatFonds: Kontrolliert and EUR 277 million to PrivatFonds: Kontrolliert pro. PrivatFonds: Kontrolliert is thus currently the largest mutual fund launched in Germany. The total fund value for PrivatFonds products is now EUR 22.2 billion.

UniAusschüttung

The fund volume of [UniAusschüttung](#) (including a unit class with no front-end fee), a global mixed fund with the aim of generating regular income that is generally distributed on a quarterly basis, was EUR 266.2 million as at 31 December 2018.

Old-age provision

Pensions

With the Riester products [UniProfiRente](#) and [UniProfiRente Select](#), Union Investment continued to dominate the market for Riester investment fund savings plans in 2018 with a market share of 56.9 % (as at 30 September 2018) and was hence able to defend its position as the market leader over the whole of the Riester product market by offering solutions for insurance, home savings, funds and banking. Overall, Union Investment managed around 1.87 million Riester contracts as at 31 December 2018. The total volume of Riester pension products was EUR 16.7 billion.

The [cooperative business](#) with R+V-Versicherung is another important mainstay in the Retail Clients segment. The total volume here was around EUR 7.2 billion as at 31 December 2018. The joint sales concept of Union Investment and R+V for unit-linked pension insurance (FRV) and rule-based investment strategies (RBA) continues to be well received. The "RBA 3 Märkte" product launched in 2016 had reached a volume of EUR 190 million as at 30 November 2018. The current RBA family portfolio totals nearly EUR 3.6 billion.

Savings

Marketing activities continue to prioritise the focal area of savings. The aim remains stronger growth in savings plan business and especially to acquire new customers and expand the breadth of advisory expertise. With nearly 665 thousand newly opened savings plans as at 31 December 2018, the high level achieved in the same month of the previous year was surpassed (654 thousand new savings plans in 2017). The twelve-month savings volume for Union investment fund savings plans amounted to EUR 4.3 billion as at 31 December 2018, equating to a year-on-year increase of around 22.6 %. Since the measures were introduced, the fund savings plan has established itself as an entry product for new customers. As at the end of December 2018, 60 % of newly opened master securities accounts contained a savings plan.

Other developments in the product range

Further development of new launches

The global [UniIndustrie 4.0](#) equity fund with a focus on investments in "Industry 4.0" companies and an active management approach of selecting the most attractive assets for a concentrated portfolio was launched as at 28 February 2018. The fund offers investors the possibility to participate in the long-term opportunities of the 4.0 megatrend. As at 31 December 2018 the fund volume amounted to EUR 69.7 million, with 13 thousand savings plans concluded for the fund to date.

Financial portfolio management

The **MeinInvest** solution for financial portfolio management has been widely available as a white label solution for all distribution partners since April 2018. MeinInvest offers three portfolios with different risk orientations. The portfolios include Union and third-party funds. As at the reporting date of 31 December 2018, 254 banks had actively introduced MeinInvest, via which 7,606 custody accounts had been concluded at that time. Almost 88 % of these are associated with a savings plan. The investment volume amounted to EUR 11.7 million and the savings instalments paid in up to that point totalled EUR 3.0 million.

Fund measures

In terms of **fund measures**, over the course of 2018 nine static guarantee and one fixed-term bond fund were repaid at the end of their terms. The two dynamic capital preservation funds UniProtect: Europa and UniProtect: Europa II were also closed as at 29 March and 30 September 2018 respectively, as economic management and thus also optimum achievement of investment objectives could no longer be guaranteed over the long term on account of the comparatively low fund volume. Furthermore, as at 30 September 2018 the UniSector: Klimawandel fund was merged with the UniNachhaltig Aktien Global fund in order to generate a larger fund volume and thus reduce the long-term cost burden for investors.

2. Institutional investors

In the company, 30 new special AIFs and seven advisory or insourcing mandates as well as one mutual investment fund were developed and launched or transferred to management functions in 2018. The company continues to exhibit steady growth in advisory and insourcing mandates. To this end, it already provides portfolio management services for numerous master asset management companies and clients. The company's high process and service quality is regularly evidenced by the annual reports on controls (audit according to ISAE 3402 standard) compiled by an audit firm.

The Institutional Clients segment of Union Investment was extremely successful in the past financial year. Its net sales (including advisory and institutional asset management mandates) amounted to EUR 7.2 billion (compared with EUR 15.2 billion in the previous year). It gained a total of 64 new clients in the reporting year (2017: 78), 63 of which came from outside the cooperative sector. Net sales generated by new clients amounted to EUR 1.6 billion.

Given the significant reduction in risk budgets, the key challenge for institutional investors is to achieve the minimum required rates of return in a risk-controlled manner in a sustained low-interest environment. This has affected asset allocation. As an alternative to the previously dominant eurozone government bonds, it was in particular focused equity strategies and loan securitisations that were sought after. Institutional investors also increasingly turned to real estate, though the market had little to offer.

Quoniam Asset Management GmbH, Frankfurt am Main, (Quoniam), which is part of the Union Investment Group, enjoyed success in the year under review. Its customer base was strengthened by seven new clients with additional assets under management of EUR 0.6 billion. Quoniam operates as a specialist in quantitative investment strategies across all asset classes. The company currently manages assets of EUR 28.8 billion in 151 institutional portfolios.

Union Investment TFI S.A., Warsaw, which is likewise part of the Union Investment Group, generated net sales of EUR 0.1 billion in the financial year.

BEA Union Investment Management Limited, Hong Kong, the joint venture set up with Hong Kong-based The Bank of East Asia Limited, generated net sales of around EUR 0.4 billion (not including funds of funds) and therefore remains successful. Its assets under management (in local currency) remained the same as in 2017.

3. 2019 outlook

3.1 Retail clients

In addition to regularly adjusting its product range, Union Investment attaches great importance to updating its existing products. Against a backdrop of legislative changes and persistently low interest rates, the Retail Clients segment is endeavouring to offer investors funds and solutions that reflect the current market environment and that make the most of all available opportunities to generate attractive value added. The marketing priorities for 2019 are derived from the three focal areas of investing and optimising assets, savings and old-age provision.

As the importance of sustainability has steadily increased over recent years, a further pillar has been added to the PrivatFonds family as at 2 January 2019 with the launch of the **PrivatFonds: Nachhaltig** fund. This multi-asset solution combines the dynamic and flexible volatility management offered by PrivatFonds: Kontrolliert with a comprehensive sustainability approach.

The Retail Clients segment additionally runs an innovation process known as ideas screening once a year. The workshops held as part of this process present new product ideas, with the best being selected for launch. These will be added to the product launch schedule for 2019. In this context, preparation is currently underway for the launch on 1 April 2019 of the very defensively structured global multi-asset fund **UniAnlageMix: Konservativ**, which is to be marketed as a conservative entry-level investment fund product in line with the new customer strategy.

A new opportunity-oriented direct insurance product is being launched in connection with occupational pension provision as at 1 February 2019 as part of the cooperative business with R+V-Versicherung. This product comprises three investment components. Union Investment investment funds are used in two of the three components.

In addition, the coming year will see a number of maturities, for which corresponding sales support is provided as part of marketing. A total of 11 capital preservation funds and one fixed-term bond fund including a unit class with no front-end fee will come to the end of their term. Marketing activities in 2019 will again prioritise the focal area of savings. The aim remains to generate stronger growth in savings plan business and especially to acquire new customers and expand the breadth of advisory expertise. In the area of “investing and optimising assets”, the focus will remain on improving the asset structure for customers with high levels of liquidity in keeping with the key phrase “broadly diversified”.

3.2 Institutional clients

It seems increasingly unlikely that the earnings dilemma in the eurozone will end this decade. At the same time, restrictions for institutional investors are on the rise. Investors are having to spread their investments more broadly in order to achieve the yields that they urgently require.

Institutional clients need to take advantage of the available investment opportunities with greater flexibility. Above all, this means adopting a more international investment focus, generating more market-based and market-neutral risk premiums, and properly networking their yield sources. Sufficient yields are now only possible by taking greater risks. Against this backdrop, there is greater demand than ever for active-dynamic asset management and risk management – not only defensively in order to limit losses but also and in particular offensively in terms of seizing the opportunities for yields in the market.

Union Investment supports institutional investors by providing them with exactly the solutions they need in the present capital environment. Union Investment will continue to expand its role as a leading provider of sustainable products in 2019.

V. Dependent company report

The company received appropriate consideration for the transactions and measures listed in the dependent company report, based on the circumstances known to the Board of Managing Directors at the time such transaction and measures were performed or taken. The company was not disadvantaged as a result of measures being taken.

The company has not, at the instigation or in the interests of DZ BANK AG Deutsche Zentral-Genossenschaftsbank (DZ BANK AG), Frankfurt am Main, or one of its affiliated companies, neglected to carry out any measure that could have been beneficial to the company based on the circumstances known to the Board of Managing Directors at the time.

VI. Position of the company

1. Result of operations

	2018 EUR million	2017 EUR million	Change EUR million
Interest-based business			
Interest income from lending and money market business and from fixed-income securities	-0.7	-0.1	-0.6
Current income from variable-yield securities	9.6	14.2	-4.6
Interest expenses	-1.0	-1.0	–
Allowances for losses on loans and receivables	0	0	–
Net interest income after allowances for losses on loans and receivables	7.9	13.1	-5.2
Commission-based business			
Fee and commission income	2,448.3	2,312.8	135.5
Fee and commission expenses	-1,032.4	-898.2	-134.2
Net fee and commission income	1,415.9	1,414.6	1.3
Net income from investment securities	-23.0	8.2	-31.2
Other net remeasurement income on financial instruments	-50.9	13.3	-64.2
Net income from companies accounted for using the equity method	17.1	15.9	1.2

	2018 EUR million	2017 EUR million	Change EUR million
Administrative expenses			
Staff costs	-405.6	-395.2	-10.4
Other administrative expenses	-450.6	-427.2	-23.4
Depreciation and amortisation expense	-38.5	-36.0	-2.5
Administrative expenses	-894.7	-858.4	-36.3
Other operating result	29.4	3.4	26.0
Consolidated earnings before taxes	501.7	610.1	-108.4
Income taxes	-154.8	-188.8	34.0
Consolidated net income	346.9	421.3	-74.4
Attributable to:			
Shareholders of Union Asset Management Holding AG	339.0	413.8	-74.8
Non-controlling interests	7.9	7.5	0.4
	2018	2017	Change
Assets under management (final volumes) in EUR billion	323.4	323.9	-0.5
Cost/income ratio (CIR)	64.1 %	58.5 %	5.6 %

Net interest income after allowances for losses on loans and receivables in the year under review was well below the previous year's level at EUR 7.9 million. The decline was primarily the result of lower distributions from own-account fund investments.

Net fee and commission income breaks down as follows:

	2018 EUR million	2017 EUR million	Change EUR million
Fee and commission income	2,448.3	2,312.8	135.5
from sales commission	310.0	30.9	279.1
from management fees	1,979.8	2,021.4	-41.6
from securities investment funds	1,649.7	1,701.9	-52.2
of which performance-related fees	16.4	122.4	-106.0
from real-estate investment funds	330.1	319.5	10.6
from securities custody accounts	52.3	51.3	1.0
Other	106.2	209.2	-103.0
Fee and commission expenses	-1,032.4	-898.2	-134.2
for volume-based commission	-680.1	-689.8	9.7
Other	-352.3	-208.4	-143.9
Total	1,415.9	1,414.6	1.3

The key drivers in net fee and commission income are the assets under management for the respective financial year. Growth in assets under management is mainly determined by net new business and the performance of the capital markets. Assets under management decreased slightly by EUR -0.5 billion in 2018 to EUR 323.4 billion at the end of the year. This decrease was primarily attributable to negative developments in the international capital markets. High net inflows had a positive effect, however.

More than 80 % of net fee and commission income, specifically the main share of income from management fees (not including performance fees) and expenses for volume-related fees and commission (comprising trail commission, sales commission and other fees and commission), is determined by the volume of assets under management. In net terms, these two items increased sharply by EUR +74.1 million. This was as a result of the considerably higher average volume of assets under management (up +6.5 %).

The increase in management fees from real-estate investment funds was due in particular to the significantly higher average volume of real-estate investment funds (up +7.8 %). In contrast, transaction fees declined sharply in the property area. Income from performance-based management fees was down sharply year-on-year at EUR 16.4 million (EUR +122.4 million).

Due to the first-time application of IFRS 15, income from management fees in the reporting year takes account of expenses that are offset against income from management fees, including those incurred in connection with the management of investment funds such as fees for services

performed by the custodian, the depository and the auditor of the investment fund. As the law requires these service providers to be independent, the subsidiaries of the UMH Group only offer these services to clients under asset management contracts in the intermediary capacity of agent for these providers. Unlike under IAS 18 (previous year's figure), under IFRS 15 the amounts paid to these third parties for such services must be deducted from the transaction price for administration of the investment fund. In the previous year, custodian and depository fees were reported under fee and commission expenses. Auditor services for investment funds were recognised under administrative expenses in the previous year.

In the year under review income from sales commission contained the gross amount of the front-end fees generated due to the first-time application of IFRS 15. In accordance with IAS 18, fee and commission income in the previous year contained only the net sales commission from front-end fees charged on the sale of investment funds that remained in the UMH Group. In accordance with IFRS 15, the full amount of the front-end fee generated was recognised in the year under review and compared under other fee and commission expenses with the shares paid to distribution partners as sales commission.

Gross sales of investment funds with a front-end fee were up year-on-year, resulting in a significant increase in this earnings item overall when taking the associated fee and commission expenses into account.

In addition, there was a sharp drop in other fee and commission income. The decline was primarily the result of the application of IFRS 15. With regard to fund brokerage with third-party funds, attrax only acts as an agent within the meaning of IFRS 15 and as of 2018 only reports the sales commission margin it retains under other fee and commission income in accordance with IFRS 15. In the previous year the commission paid to distribution partners was reported under other fee and commission expenses. Investment fund-related services were recognised under other fee and commission income, boosting earnings.

The change in [income from investment securities](#) was primarily the result of gains and losses realised on the sale of own-account fund investments. The result in the previous year was attributable to the reversal of impairment on the equity carrying amount of BEA Union Investment Management Limited, Hong Kong.

[Other net remeasurement income on financial instruments](#) amounted to EUR -50.9 million after EUR 13.3 million in the previous year. The sharp decline was primarily the result of a negative contribution from guarantee pledges measured, a negative performance contribution from own-account fund investments and a negative contribution from the remeasurement of liabilities from contingent purchase price payments that were contractually agreed in connection with the acquisition of shares in ZBI Partnerschafts-Holding GmbH, Erlangen.

[Net income from companies accounted for using the equity method](#) was considerably higher year-on-year at EUR 17.1 million (EUR 15.9 million) and primarily related to the share of the profit or loss of ZBI Partnerschafts-Holding GmbH, Erlangen, and of BEA Union Investment Management Limited, Hong Kong. This item also reflects the Union Investment Group's share of the profit or loss of R+V Pensionsfonds Aktiengesellschaft, Wiesbaden, compertis Beratungsgesellschaft für betriebliches Vorsorgemanagement mbH, Wiesbaden, and VR Consultingpartner GmbH, Frankfurt am Main.

[Administrative expenses](#) were slightly higher year-on-year at EUR -894.7 million, rising by EUR -36.3 million (previous year: EUR -858.4 million):

The slight increase in staff costs is largely attributable to the average salary adjustments as well as recruitment for new and vacant positions. By contrast, voluntary bonuses decreased due to the development of key earnings figures.

[Other administrative expenses](#) were slightly higher year-on-year at EUR -450.6 million, rising by EUR -23.4 million (previous year: EUR -427.2 million):

	2018 EUR million	2017 EUR million	Change EUR million
Total	-450.6	-427.2	-23.4
IT expenses	-104.9	-106.3	1.4
Public relations/marketing	-78.1	-75.1	-3.0
Consulting	-66.0	-65.4	-0.6
Office expenses	-51.2	-53.0	1.8
Property and occupancy costs	-42.0	-41.2	-0.8
Miscellaneous	-108.4	-86.2	-22.2

Other administrative expenses rose primarily as a result of research services, which Union Investment took onto its own books for the first time in 2018 (recognised under "miscellaneous").

[Depreciation and amortisation expense](#) was considerably higher year-on-year at EUR -38.5 million, rising by EUR -2.5 million (previous year: EUR -36.0 million). This was primarily due to a higher level of capitalised software.

The [other operating result](#) amounted to EUR 29.4 million in the period under review and was therefore well above the previous year's figure of EUR 3.4 million. This rise was mainly attributable to the removal of the expenses from the "Next Generation Sourcing" reconciliation of interests included in the previous year and to higher income from the remeasurement of provisions.

Based on a group tax rate of 31.19 %, the effective tax rate within the UMH Group was 30.86 % (previous year: 30.95 %). **Income tax expense** fell by EUR 34.0 million year-on-year to EUR -154.8 million in the year under review. It comprises current tax expense of EUR -175.5 million (previous year: EUR -187.6 million) and deferred tax income of EUR 20.7 million (previous year: tax expense of EUR -1.2 million). The decrease in current tax expense was caused by the lower consolidated earnings before taxes. The deferred tax income was largely due to the recognition of deferred tax assets for liability derivatives and the reversal of deferred tax liabilities for investment securities.

Overall, the developments described led to a significant year-on-year decline in **consolidated earnings** of EUR -74.4 million to EUR 346.9 million (2017: EUR 421.3 million).

In addition, the low **cost/income ratio** (CIR) of 64.1 % is testimony to the efficient use of resources within the Union Investment Group. The CIR rose by 5.6 percentage points year-on-year.

Comparison with earnings originally forecast for 2018

The original forecasts for consolidated earnings in 2018 were significantly exceeded. The main reason for this positive development was an increase in average assets under management, which resulted in a substantial rise in volume-based income. A rise in performance-related management fees also resulted in a further increase in income. Administrative expenses fell slightly compared with expectations. Property and occupancy costs decreased. Utilisation of external IT support services (programming, software maintenance and application management) was reduced. Expenses for public relations/marketing, external research and depreciation and amortisation expense also fell. In net terms, this resulted in a strong improvement in earnings and a significantly improved CIR compared with the original planning.

Distribution

As in previous years, a very substantial proportion of UMH's earnings will be distributed to its shareholders. The payment of a dividend of EUR 8.47 per share will be proposed at the Annual General Meeting on 10 May 2019. This equates to a total dividend payment of EUR 246.0 million. The Supervisory Board of UMH approved the proposed appropriation of profit at its meeting held on 1 March 2019.

2. Financial position and liquidity

2.1 Financial position

Principles and objectives of financial management

All cash and cash equivalents available in the group's own bank accounts and investment accounts are referred to as financial resources. The investment strategy of Union Investment is a conservative one.

Cash flows are analysed on an ongoing basis and monitored as part of a rolling liquidity planning process so that prompt action can be taken to counter any liquidity problems that may be identified. Liquidity management begins with the management of cash flows from the group's operating activities. This is supported by tactical liquidity management, which focuses specifically on the selection of investment alternatives. Stress tests are regularly carried out as a further element in this strategy in order to assess the effect of changes in interest rates on the group's cash positions.

The interest rate sensitivity analysis on financial resources is not disclosed here as the calculation of interest rate sensitivities is only possible with sufficient certainty for resources invested in money-market and fixed-income funds.

Financial resources are classified according to the following criteria:

Liquidity (investments for liquidity management purposes): If the identified investment duration of the company's resources is less than three years, they are allocated to the liquidity category. Investments for liquidity management purposes include cash accounts, time deposits, money-market funds, fixed-income funds investing in short-term fixed-interest securities and other products suitable for short-term investment.

Funding: Initial funding of funds may be necessary to place a new product on the market. The amount required is decided upon on a case-by-case basis. Funding is generally repaid within six months with an option for extension. This category also includes financial resources with contractual commitments.

Employee investments: All cash invested by employees as part of pension plans and employee retention programmes is allocated to employee investments.

Strategic investments (longer-term capital investments): Strategic investments are investments in funds or securities that are selected on the basis of risk/reward criteria and are expected to be held for at least three years as part of long-term liquidity planning. The expected term of the investment is determined when the group enters into the transaction concerned.

The four categories of financial resources are subject to constant risk monitoring and are broken down as follows:

	31 Dec. 2018		31 Dec. 2017		Change EUR million
	EUR million	%	EUR million	%	
Short-term investments for liquidity management purposes	346.1	34.9	512.4	37.6	-166.3
of which fixed-income funds	326.3	32.9	441.9	32.4	-115.6
of which money-market funds	19.8	2.0	70.5	5.2	-50.7
Strategic investments	586.9	59.1	787.3	57.7	-200.4
of which fixed-income funds	548.3	55.2	635.4	46.6	-87.1
of which money-market funds	33.7	3.4	0	0	33.7
of which real-estate funds	4.5	0.5	4.6	0.3	-0.1
of which equity funds	0.4	0	114.7	8.4	-114.3
of which alternative investment funds	0	0	22.8	1.7	-22.8
of which mixed funds	0	0	9.8	0.7	-9.8
Funding	57.5	5.8	62.1	4.6	-4.6
of which fixed-income funds	38.9	3.9	33.1	2.4	5.8
of which alternative investment funds	7.0	0.7	8.3	0.6	-1.3
of which mixed funds	3.9	0.4	3.9	0.3	0.0
of which equity funds	2.3	0.2	8.9	0.7	-6.6
of which money-market funds	0	0	1.8	0.1	-1.8
of which real-estate funds	1.1	0.1	1.1	0.1	0.0
of which other funds	4.3	0.4	5.0	0.4	-0.7
Employee investments	2.4	0.2	2.5	0.2	-0.1
of which fixed-income funds	1.9	0.2	1.9	0.1	0.0
of which mixed funds	0.5	0	0.6	0.1	-0.1
of which equity funds	0	0	0	0	0.0

	31 Dec. 2018		31 Dec. 2017		Change EUR million
	EUR million	%	EUR million	%	
Total securities	992.9	100.0	1,364.3	100.0	-371.4
of which fixed-income funds	915.4	92.2	1,112.3	81.5	-196.9
of which money-market funds	53.5	5.4	72.3	5.3	-18.8
of which alternative investment funds	7.0	0.7	31.1	2.3	-24.1
of which real-estate funds	5.6	0.6	5.7	0.4	-0.1
of which mixed funds	4.4	0.4	14.3	1.0	-9.9
of which equity funds	2.7	0.3	123.6	9.1	-120.9
of which other funds	4.3	0.4	5.0	0.4	-0.7

The table below shows total cash and cash equivalents:

	31 Dec. 2018		31 Dec. 2017		Change EUR million
	EUR million	%	EUR million	%	
Securities holdings	992.9	56.0	1,364.3	78.8	-371.4
Bank holdings	781.5	44.0	368.1	21.2	413.4
Total cash and cash equivalents	1,774.4	100.0	1,732.4	100.0	42.0

2.2 Liquidity

Liquidity is constantly monitored to ensure that the companies within the Union Investment Group can meet their payment obligations at all times. Liquidity planning in the individual companies is used as the basis for monitoring the short- and medium-term liquidity situation and for managing liquidity. The objective of liquidity planning is to forecast liquidity trends, determine liquidity and capital needs and manage the liquidity situation accordingly. This planning process is supported by IT systems. It has a monthly rolling structure covering a planning period of 15 months based on the latest earnings forecasts and incorporates the actual figures of the current financial year and the liquidity (balances in the liquidity and strategic investments categories) available on the last day of the month prior to the start of the respective planning period. The liquidity planning structure corresponds to the account-based breakdown of the HGB balance sheet and income statement. The forecast changes in liquidity are derived from the planned cash inflows and outflows associated with the budgeted income and expenses and from changes in statement of financial position items that affect liquidity. All bank account transactions are managed on a day-by-day basis and subsequently checked.

Current liabilities and provisions, i.e. those due within one year, are covered in full by bank balances, loans and receivables with short remaining terms and securities that can be liquidated.

DZ BANK AG has provided UMH AG with a credit facility of EUR 250 million, which was granted under a framework loan agreement and is available until further notice. The credit facility has been provided for refinancing the acquisition of fund units. The current credit facility has not been utilised.

Taking into account the balance of financial resources available as at the end of the reporting period and the changes in liquidity forecast by the monthly rolling 15-month liquidity planning process, all the companies within the Union Investment Group, taking into account the refinancing options available if the planned level of performance is achieved, will be able to meet the financial obligations becoming due in the analysis period from the available cash and cash equivalents at all times.

3. Net assets

3.1 Overview of net assets

The following table shows a summary of the individual items of the consolidated statement of financial position by financial category.

Assets	31 Dec. 2018		31 Dec. 2017		Change EUR million
	EUR million	%	EUR million	%	
Liabilities and advances to					
Banks	772.6	31.1	373.0	15.8	399.6
Customers	83.6	3.4	75.3	3.2	8.3
Asset derivatives	48.9	2.0	37.0	1.6	11.9
Investment securities	998.1	40.2	1,367.8	57.8	-369.7
Shares in companies accounted for using the equity method	111.3	4.5	104.4	4.4	6.9
Property, plant and equipment and intangible assets	164.2	6.6	159.3	6.7	4.9
Income tax assets	61.9	2.5	44.2	1.9	17.7
Miscellaneous assets	197.6	8.0	178.1	7.5	19.5
Assets held for sale	43.1	1.7	27.0	1.1	16.1
Total assets	2,481.3	100.0	2,366.1	100.0	115.2

Equity and liabilities	31 Dec. 2018		31 Dec. 2017		Change EUR million
	EUR million	%	EUR million	%	
Liabilities to					
Banks	19.6	0.8	14.6	0.6	5.0
Customers	1.2	0.0	1.2	0.1	–
Liability derivatives	64.3	2.6	32.0	1.4	32.3
Provisions	208.8	8.4	193.7	8.2	15.1
Income tax liabilities	77.0	3.1	80.1	3.4	-3.1
Miscellaneous liabilities	761.8	30.8	723.6	30.5	38.2
Liabilities held for sale	10.4	0.4	–	–	10.4
Equity	1,338.2	53.9	1,320.9	55.8	17.3
Total equity and liabilities	2,481.3	100.0	2,366.1	100.0	115.2

Consolidated total assets increased by 5 % year-on-year to EUR 2,481.3 million. As is typical for the industry, the assets managed by the Union Investment Group for its clients – investment funds and other asset management formats – are not reported in the statement of financial position.

The assets side of the consolidated statement of financial position is dominated by **cash and cash equivalents**, bank holdings and securities. Total cash and cash equivalents increased by EUR 42.0 million to EUR 1,774.4 million. Bank holdings are included in the **loans and advances to banks** item and rose by EUR 413.4 million to EUR 781.5 million. Securities are mainly recognised under **investment securities**. The securities portfolio moved in the opposite direction, decreasing by EUR -371.4 million to EUR 992.9 million. The breakdown of cash and cash equivalents is explained in the 'Financial position' section.

Asset derivatives include a measured option that entitles UMH to purchase shares in a company in the future.

EUR 3.7 million of the increase in **shares in companies accounted for using the equity method** relates to BEA Union Investment Ltd, Hong Kong, and EUR 3.1 million to ZBI Partnerschafts-Holding GmbH, Erlangen.

Additions to property, plant and equipment of EUR 6.7 million were offset by depreciation of EUR -5.5 million. Including other changes, the net carrying amount of property, plant and equipment fell by EUR 0.1 million from EUR 22.4 million in the previous year to EUR 22.3 million.

Additions to intangible assets of EUR 42.1 million were offset by amortisation in the amount of EUR -33.6 million and impairment of EUR -3.5 million in the year under review. Including other changes, the net carrying amount increased by EUR 5.0 million from EUR 136.9 million in the previous year to EUR 141.9 million.

Miscellaneous assets include receivables from funds of EUR 137.6 million (previous year: EUR 138.0 million) and receivables from other taxes of EUR 31.8 million (previous year: EUR 17.7 million). The receivables from funds largely comprised deferred receivables from management fees and flat-rate fees for the month of December.

EUR 23.4 million of the increase in **assets held for sale** relates to the planned sale of a subsidiary.

Liabilities to banks and customers increased by EUR 5.0 million from EUR 15.8 million to EUR 20.8 million, primarily as a result of commission liabilities in connection with fund unit trading.

Liability derivatives included EUR 56.5 million relating to measured capital preservation commitments in accordance with the German Personal Pension Plan Certification Act (AltZertG) and minimum payment commitments in connection with actual guarantee funds (previous year: EUR 27.0 million). The item also includes an amount of EUR 7.8 million relating to measured options under which shares in a company can be tendered to UMH in the future (previous year: EUR 5.0 million).

	31 Dec. 2018 EUR million	31 Dec. 2017 EUR million	Change EUR million
Provisions for employee benefits	191.9	175.2	16.7
Provisions for defined benefit obligations	121.7	109.2	12.5
Provisions for other long-term employee benefits	69.5	64.4	5.1
Provisions for termination benefits	0.7	1.6	-0.9
Other provisions	16.9	18.5	-1.6
Total	208.8	193.7	15.1

Provisions increased by EUR 15.1 million from EUR 193.7 million to EUR 208.8 million. Provisions for defined benefit obligations rose by EUR 12.5 million from EUR 109.2 million to EUR 121.7 million. Provisions for other long-term employee benefits increased by EUR 5.1 million from EUR 64.4 million to EUR 69.5 million. Termination benefits fell by EUR -0.9 million from EUR 1.6 million to EUR 0.7 million, while other provisions fell by EUR -1.6 million from EUR 18.5 million to EUR 16.9 million.

The full amount of **liabilities held for sale** relates to the planned sale of a subsidiary.

Equity increased by EUR 17.3 million from EUR 1,320.9 million to EUR 1,338.2 million. The increase was primarily due to the dividend for the previous year paid out in the financial year (EUR 320.1 million) compared with total comprehensive income in the year under review (EUR 343.7 million).

The **equity ratio** was 53.9 %, down -1.9 percentage points on the prior-year figure of 55.8 %.

3.2 Non-financial performance indicators

Employees

The Union Investment Group's workforce is critical to its performance, future profitability and competitiveness. The Union Investment Group pursues an innovative, needs-driven professional development strategy in order to provide the best possible framework in which it can nurture the capabilities and commitment of its employees in line with their responsibilities and potential. A total of around EUR 4.2 million was invested in human resource development activities in the 2018 financial year (2017: EUR 3.9 million). Target-driven people management and the use of performance-related remuneration help to ensure that employees at all levels learn to think and act from a business perspective. Employee motivation and commitment to this target-based approach are also encouraged by variable remuneration components based on individual performance targets.

As at 31 December 2018, UMH employed 305 people (2017: 296 employees) with an average age of 42.6 (2017: 42.1) and an average period of service of 10.5 years (2017: 10.0 years). The Union Investment Group employed 3,102 people as at the end of 2018 (2017: 2,945). Across the group, the average age of employees was 42.6 (2017: 42.4) and the average period of service was 10.6 years (2017: 10.4 years).

Brand performance

The figures based on traditional parameters for measuring brand performance remained at a very high level in 2018. Population-based aided awareness of the Union Investment brand climbed from 55.85% in November 2017 to 57.0% as at November 2018. Aided advertising recall remained practically unchanged at 39.5% in November 2018 after 39.74% as at November 2017, as did willingness to purchase, which changed only insignificantly from 26.15% to 26.1% in the same period.

The Real Estate Brand Book 2018 names Union Investment as Germany's most valuable real estate brand in the area of funds/investors. It is the fifth time in a row that Union Investment has received this award.

In 2013, UMH started to record brand strength index data for all target groups relevant to the brand as part of its strategic brand management activities. This index is determined from well-established brand management parameters and is expressed as a value between 0 and 100. Slight index value losses were recorded among UIP's target groups in 2018. The index value for retail investors fell by two points to 68 index points, while the figure for broker banks dropped by three points to 93. The brand strength index figure for institutional investors was 91 in 2017. It was not possible to determine the index in the institutional investors target group in 2018 for technical reasons relating to data collection. It was 86 points at the time of the penultimate measurement in 2015. Due to technical reasons relating to data collection it was

not possible to determine the index value for real estate business partners in 2018 either – in 2017 the index figure declined marginally by one point year-on-year to 84 index points. The brand strength index figure for tenants in properties of UIR/UII was 72.2 index points in 2018. The figure for this target group was 71 points at the time of the last survey in 2016. Given the varying relevance of the brand in the decision-making process within the different target groups, the current values for all the target groups are seen as positive from a brand management perspective.

As brand is becoming more important in the course of digitalisation and has high priority at Union Investment and given that numerous measures are being pursued to strengthen the brand, we expect to consolidate these very good values further in the future. Furthermore, at the start of 2019 UIP is launching a new image campaign in TV, print and online which, based on promising results in the brand perception concept test, should provide additional momentum and have a spillover effect on all UMH's target groups. The new image campaign should also at least compensate the slight brand strength index losses for UIP's target groups.

In a comparison with the performance of competitor brands, the picture established over the last few years has remained largely unchanged: Union Investment remains well ahead of most of its competitors in terms of the strength of its brand. This brand therefore constitutes a valuable asset for the Union Investment Group over the long term.

Client satisfaction

In the 2018 financial year, the satisfaction values for UMH's customer groups remained at a high level while moving in different directions. The average satisfaction score for bank executives was 2.0, compared to 1.8 at the time of the last customer satisfaction survey in 2015, while the figure for bank consultants was 2.1 when last measured at the end of 2017 and thus 0.2 points above the 2015 figure (1.9). The average satisfaction score for retail investors in 2018 was 2.2. The average score for this customer group was 2.5 in 2016.

Internal satisfaction surveys are carried out among Union Investment's institutional investors on a two-year cycle. The surveys are conducted in odd numbered years; accordingly there is no current survey for the reporting year. On a scale of 1 = exceptionally happy to 5 = unhappy, the score for the overall satisfaction of institutional investors with their business relationship with Union Investment changed marginally from an excellent 1.75 in 2015 to 1.80 in the most recent survey, which was carried out in 2017.

The highly regarded independent company Greenwich Associates carries out studies of the German institutional asset management market on an annual basis. Institutional investors are surveyed on the performance of the asset managers they are currently working with. The detailed results must be treated in strict confidence. The Greenwich Overall Quality Index, which includes numerous parameters relating to satisfaction with asset management services

and customer service, rose sharply from 522 points in 2017 to 576 points in 2018, an increase of 54. Based on this figure Union Investment continued to consolidate its position in the first quartile of the competition in 2018.

Satisfaction surveys are conducted annually among tenants of Union Investment Real Estate GmbH and Union Investment Institutional Property GmbH properties in Germany. In 2018 the satisfaction values remained at a good level compared with the time of the previous measurement. On a scale of 1 = exceptionally happy to 5 = unhappy, in 2018 the score for the satisfaction of tenants in Union Investment Real Estate GmbH/Union Investment Institutional Property GmbH properties in Germany was 2.3, as in the previous year.

We are setting ourselves the ambitious goal of maintaining the high customer satisfaction levels in all our target groups in the 2019 financial year. This is due to the fact that customers soon become accustomed to the level of service offered and require this on a permanent basis. For example, a new service feature that enthruses customers the year it is introduced is subsequently required as a normal part of the service and no longer leads to excellent satisfaction scores.

Employee volunteering with the mitMenschen initiative

Socially responsible volunteering by employees forms part of the Union Investment Group's sustainability strategy. The mitMenschen initiative was launched in the 2006 anniversary year, driven by a desire to give something back to the community. This is part of Union Investment's social responsibility as part of the Genossenschaftliche FinanzGruppe and is in line with the company's focus on sustainability. Since November 2012, employees have been able to organise such activities themselves. To this end, Union Investment maintains a database of socially responsible activities on its intranet, and employees are able to add their own activities or register for proposed projects.

18 projects were initiated by employees in 2018, including two projects in Luxembourg, one in Vienna, three in Hamburg and 12 in the Frankfurt region. Group-wide, 812 employees from all hierarchy levels and all locations (Frankfurt, Hamburg, Luxembourg and Vienna) devoted around 3,095 hours of their own time to volunteer for 15 organisations. This work helped socially disadvantaged children, young people and adults and people with disabilities. For instance, employees have been supporting the Frankfurter Tafel food bank for many years or help schoolchildren get started in the world of work through application training. At Christmas, a wishing tree campaign across all the locations makes the Christmas dreams of socially disadvantaged children come true.

3.3 Statement of cash flows

The purpose of the statement of cash flows is to determine and present cash flows generated or used by the Union Investment Group in its operating activities, investing activities and financing activities in the financial year.

A statement of cash flows is not particularly meaningful as far as investment companies are concerned. The Union Investment Group's statement of cash flows does not replace liquidity or financial planning, nor is it used as a management tool.

	31 Dec. 2018 EUR million	31 Dec. 2017 EUR million
Cash flow from operating activities	21.1	426.2
Cash flow from investing activities	304.2	-247.3
Cash flow from financing activities	-325.3	-178.9
= Changes in cash and cash equivalents	0	0
+ Cash and cash equivalents at start of year	0	0
= Cash and cash equivalents at end of year	0	0

Cash and cash equivalents in the statement of cash flows correspond to the cash and cash equivalents item in the statement of financial position, which comprises cash in hand and balances at central banks, plus debt instruments from public sector entities and bills of exchange eligible as collateral for central bank funding if the residual maturity is less than three months and the amounts concerned are deemed to be the retention of liquidity. Loans and advances to banks that are repayable on demand are not included; these items are assigned to operating activities.

Cash flow from operating activities was determined using the indirect method and provides information on cash flows from the results of the main activities recognised in the income statement and from changes in items of the statement of financial position from the Union Investment Group's business activities that are not attributable to investing or financing activities. This cash flow demonstrates the Union Investment Group's ability to generate cash from its operating activities and from its own resources in order to meet its obligations, maintain its operations, pay dividends and support capital expenditure without having to resort to external sources of funding.

The main features of [cash flow from investing activities](#) in the year under review were proceeds of EUR 1,117.1 million from the disposal of investment securities and payments of EUR 764.3 million to acquire investment securities. There were also payments of EUR 42.1 million for the acquisition of intangible assets and payments of EUR 6.7 million for the acquisition of property, plant and equipment.

In accordance with the definition in IAS 7.17, [cash flow from financing activities](#) comprised cash flows arising from transactions with equity holders and other shareholders in consolidated subsidiaries, from other capital and from the utilisation and repayment of loans and other borrowings. Cash flow from financing activities was primarily accounted for by the payment by UMH of the dividend for the 2017 financial year amounting to EUR 320.1 million and the payment of dividends from subsidiaries of UMH to non-controlling interests amounting to EUR 6.3 million. This compares with changes in cash related to other capital in the amount of EUR 1.1 million.

C Corporate governance declaration

Report in accordance with Section 289f (4) in conjunction with (2) no. 4 of the German Commercial Code (HGB)

The company's Supervisory Board has set targets for the proportion of women on the company's Supervisory Board and Board of Managing Directors pursuant to Section 111 (5) of the German Stock Corporation Act (AktG), to be met by 31 December 2021. The target set for the Supervisory Board is 20 % (3 out of 15). In the period under review the proportion of women on the Supervisory Board following the Annual General Meeting on 4 May 2018 was 20 % (3 out of 15) and 13.3 % prior to that (2 out of 15).

The proportion of women on the Board of Managing Directors in the reporting period was 0 %. The Supervisory Board has set a target of maintaining the status quo until 31 December 2021. In addition, the Board of Managing Directors has defined targets in accordance with Section 76 (4) AktG for the two management levels below the Board of Managing Directors; these targets are to be met by 31 December 2021. The target is 25 % at head of division level (the first level below the Board of Managing Directors) and 0 % at head of department level (the second level below the Board of Managing Directors). The aforementioned targets were met in the period under review.

D Forecast, report on risks and opportunities

I. Report on opportunities

Union Investment pursues a value-driven business policy, which means generating a steady increase in enterprise value. This increase is fundamentally to be achieved through lasting and profitable growth, taking into account risk / reward considerations. Specifically, the company sees it as its mission to increase the assets of our customers and to gain their trust. To do this, it addresses the key challenges presented by the capital markets and develops needs-based investment solutions.

The development of the Union Investment Group's business is reflected in its expenses, earnings and profit or loss as reported in the UMH consolidated financial statements. The following opportunities are seen in this context.

The current low level of interest rates, to which there remains no end in sight, means there are only negligible returns on investment. As such, investors can only generate a return if they are prepared to take controlled risks. Union Investment believes there is an opportunity in this environment for it to further consolidate its position as an active risk manager both for retail investors and institutional client groups, and to expand its fund business. For the client group of retail investors, the focus is on funds and solutions that reflect the current market environment in order to generate attractive value added. Institutional investors are focusing on flexible products in order to take advantage of the available investment opportunities. In particular, this means adopting a more international investment focus, generating more risk premiums, and properly networking their yield sources. This is accompanied by a shift away from conventional benchmark thinking and towards active and dynamic management.

Additionally, the clients' security needs boost demand for real assets, in particular real-estate funds. Union Investment's good positioning in this market offers continuing significant sales potential among retail and institutional clients.

In recent years a large number of legislative provisions have already been implemented or initiated with a significant impact on securities business. In light of these developments, Union Investment believes that there is an opportunity to develop customised, solution-oriented products and to strengthen customer loyalty in both retail and institutional client business. Union Investment offers institutional providers solutions that minimise regulatory effort and expense and save equity. Intelligent reporting solutions can further reduce the effort and expense for investors of meeting regulatory requirements.

Digital transformation is steadily coming to all areas of society and business. This development gives Union Investment the potential to create new customer benefits and to improve processes at all stages of the value chain.

The topic of sustainability remains important to the target group of institutional clients. At the same time, the economic benefits of sustainability are becoming increasingly important too. Union Investment offers socially responsible investments (SRI) across many asset classes and provides constructive assistance in the area of corporate governance.

Based on the identified opportunities, Union Investment believes there is the prospect of continually boosting its net sales and the volume of assets under management, thereby further increasing the resulting fee and commission income for the group. Union Investment is also constantly working to improve its processes, thereby saving time and costs. Overall, this results in both expense- and income-based opportunities to generate an excellent earnings performance.

II. Report on risks

1. Proven systems for identifying and managing risks

The Union Investment Group is an asset manager, and its performance is therefore influenced to a large degree by trends in the real estate and capital markets and by the investment behaviour of fund investors. It acts in the interests of fund investors and pursues a value-driven business policy with the long-term objective of generating a sustained increase in enterprise value, taking into account a balance of risks and rewards. The Board of Managing Directors of UMH therefore attaches great importance to the highly skilled management of risks.

The internal management systems are designed such that risks can be identified, monitored on a regular basis and actively managed. The systems aim to ensure that risks potentially leading to negative variances from predicted performance are identified as early as possible and that corrective action is initiated to mitigate the risk. At the same time, the aim is also to ensure that the group can exploit business opportunities, taking into account profitability and the group's risk-bearing capacity.

The Union Investment Group's risk management system (RMS) is a continuous process that incorporates all organisational measures and procedures for identifying, measuring, monitoring and managing risks. The RMS is organised in compliance with regulatory requirements. UMH is a company within the DZ BANK Group and is thus integrated into the risk management system of this group.

The Board of Managing Directors of UMH bears responsibility for risk management within the Union Investment Group. The risk strategy categorises the material types of risk identified, defines the fundamental risk measurement methods used and provides detailed guidance on how to deal with the risk in question. The risk strategy is consistent with the risk strategies implemented within the DZ BANK Group. Risk measurement and management procedures have been devised for all the material risk types, risk concentrations and interaction with investment fund assets identified in the risk inventory. The Risk and Data Quality Management Committee is the central risk committee within the Union Investment Group. At its meetings, it discusses the group's risk situation and prepares decisions for the Board of Managing Directors of UMH. The Risk Manager and the central Risk Management unit are charged by the Board of Managing Directors with ensuring the integrity of the group-wide RMS. Quarterly risk reports on UMH and the main companies within the Union Investment Group are prepared for their senior management teams and supervisory boards as part of the regular reporting cycle.

The details of the RMS, including all policies and strategies, are documented in the Union Investment Group's risk manual.

The Internal Audit department carries out an annual review of the RMS to ensure that it is fully operational.

The following sections describe the key components of the RMS within the Union Investment Group:

Analysis of risk-bearing capacity

In order to ensure that the Union Investment Group and its companies continue to survive as going concerns, their ability to bear risk is regularly monitored as part of the economic risk and capital management system. The material types of risk are limited in accordance with the risk strategy and the aggregate risk cover available and are backed by risk capital. This involves limiting the maximum risk permitted by risk propensity in the form of an overall limit in such a way that the survival of UMH and the Union Investment Group as going concerns is not put at risk. This process incorporates the effects of diversification between the different risk types. Independent experts use industry standards and methods to calculate the risk capital requirements and monitor the limits. Union Investment carries out regular stress tests in respect of the main types of risk. The methods used are subject to an annual adequacy review.

Early-warning system

Data on risk indicators is regularly collected and aggregated into 13 categories as part of the early-warning system. If predefined tolerance limits are exceeded or a risk is classed as elevated, an early warning is triggered that prompts those responsible for risk management to conduct a causal analysis and implement risk mitigation measures. The early warnings generated by the system therefore guarantee that corrective action will be initiated in good time. The risk

indicator system essentially covers operational risks, business risks, market risks and risks that can arise from outsourced functions. In addition, the group has an ad hoc reporting system for the early identification of exceptional risk situations that require immediate action.

Risk reporting

The Board of Managing Directors of UMH receives quarterly written reports on changes in the risk position in the reporting period. The risk report describes and assesses the overall risk position. It highlights any critical areas of potential risk and, if necessary, recommends action to eliminate such potential risk. The Board of Managing Directors uses this report as the basis for the information it forwards to the Supervisory Board. In addition to these regular risk reports, any critical risk information is passed to the Board of Managing Directors without delay and, if necessary, is also escalated to the Supervisory Board.

2. Presentation of material risks

The Union Investment Group's risk strategy applies to the risks identified and classified as material in the annual risk inventory. These risks are regularly monitored and managed with the help of the risk management system on the basis of the guidance specified in the risk strategy.

Operational risk

Operational risk is defined as the risk of losses arising from human behaviour, technological failure, process or project management weaknesses or external events. Legal risk and IT risk are included in this definition. Compared to other risks, operational risk is extremely important within the Union Investment Group because the group's activities focus on the provision of services for third parties and not on the assumption of risk on its own account.

Operational risk is quantified centrally by DZ BANK AG using an economic portfolio model. A risk contribution of EUR 94.6 million was calculated for UMH as at 31 December 2018 (previous year: EUR 111.7 million). The warning threshold was EUR 135 million (previous year: EUR 153 million). The risk contribution did not exceed the warning threshold at any point during the course of the year.

The additional risk indicator system triggered warnings for various risk indicators as intended. Corrective action to facilitate risk management was derived from these. There were no indications in the course of the year of any critical situations likely to represent a risk to the group as a going concern.

The group records all losses of EUR 1,000 (gross) or more arising in connection with operational risks in its internal loss database. If such a risk materialises, it can cause not only losses but also delays or interruptions to operations or even subsequently give rise to reputational

risks. The recording of loss events enables Union Investment to analyse operational risks that have become critical and identify trends and concentrations. The action subsequently specified to mitigate the risk or prevent such risk from materialising can then also be refined. Over the course of time, there are regular fluctuations in the pattern of losses as the probability of relatively large losses occurring in individual cases is very low. Losses did not reach a critical level relative to the warning threshold at any time during the reporting period.

The risk profile in connection with operational risks is honed as part of an annual risk self-assessment in which scenario-based analyses are applied. Worst-case scenarios play a key role in this process. They provide indications as to how the group should manage extreme risk events.

The group has implemented various organisational precautions to mitigate or avoid the effects of operational risks:

For all material business transactions, there are guidelines that stipulate people's responsibilities and the procedures. These guidelines are regularly reviewed by the Internal Audit division to ensure that they remain adequate and up to date.

The Union Investment Group's practice of bundling activities and the associated specialisation at individual stages of the value chain fundamentally help to reduce operational risks. For example, IT services and related tasks are outsourced to a specialist IT service provider within the group. Back-office activities are also pooled in the organisational structure.

In addition to the pooling of tasks internally, some services are outsourced to specialist third-party providers. This is the case, for example, in IT operations. The main IT service providers for UMH are T-Systems, Fiducia & GAD, Ratiodata and Computacenter AG & Co. oHG. Other activities, such as in custody business and portfolio management, have also been outsourced.

All planned outsourcing is subject to a standardised outsourcing process, which also includes an analysis of the risks arising in connection with the outsourcing project concerned. Depending on the outcome of the analysis, outsourced activities and processes are included in the risk management system. Existing outsourcing arrangements are monitored and reports are regularly submitted to senior management teams. Any necessary corrective action is initiated, where appropriate.

Various organisational, technical and HR measures have been put in place to improve the stability of processes and reduce risks. These include an internal control system, a centralised body responsible for the prevention of other prosecutable activities, the separation of duties all the way up to the level of the Board of Managing Directors, an appropriate technical infrastructure, the use of suitably skilled and qualified employees and the provision of adequate HR resources.

Within the Union Investment Group, the structure of the remuneration systems is the responsibility of the group HR division and is enshrined in the remuneration policy. The aim of the remuneration systems is to recognise the employees' achievements accordingly and to offer them effective performance incentives. One of the express provisions in the policy and systems is that targets leading to the assumption of excessive risk must not be agreed. This helps to minimise operational risks. The remuneration systems are designed such that they comply with the applicable regulatory requirements.

Insurance policies have been taken out to cover certain risks, some of which cannot be managed or controlled.

Union Investment has a business continuity plan covering emergencies and critical situations. The aim of the plan is to reduce the impact of external risks that could lead to extremely high losses or damage, or even jeopardise the continued existence of the group as a going concern.

Market risk

Market risk comprises market risk in the narrow sense of the term and market liquidity risk.

Market risk in the narrow sense of the term is defined as the risk of losses on financial instruments or other assets arising from changes in market prices or in the parameters that influence prices (for example, interest rate risk, spread risk, migration risk, currency risk, equity risk, real estate risk, fund price risk and asset management risk). Market liquidity risk is the risk of loss arising from adverse changes in market liquidity, for example as a result of a reduction in market depth or market disruption. Market liquidity risk is only of minor significance.

Fund price risk and asset management risk are particularly important for UMH and the Union Investment Group. Fund price risk arises from the own-account investing activities undertaken by the companies within the group. The Union Investment Group adopts a conservative approach to its own-account investing activities, investing primarily in the group's funds. Heightened volatility in financial markets can lead to changes in the value of fund assets, which are then reflected in the income statement. UMH uses a planning committee to monitor and manage its own-account investing and does not undertake trading activities specifically in pursuit of short-term gain. Fund price risk also includes interest rate risks in connection with the measurement of pension obligations. UMH determines the risk from own-account investment twice a month and informs its Board of Managing Directors and the committee responsible for the management of own-account investment on this basis. Fund price risk is quantified as a value at risk with a confidence level of 99.9% and a holding period of one year. The calculation is based on a Monte Carlo simulation, taking into account crisis scenarios and risk mitigation techniques. Asset management risk is the risk arising from contractually agreed obligations to make additional capital payments to fund investors or clients if there is a shortfall in the funds. This risk category is relevant because the risk of such payments may arise

in connection with subsidised pension plan products (Riester pension plan products, particularly UniProfiRente) and guarantee funds. Such additional payments to investors would represent expenses for the company. The risk relating to the pension products is calculated using a simulation of the expected future obligations to make additional capital payments. The risk of possible additional capital payments in connection with guarantee funds is quantified using suitable models and statistical methods depending on the structure of the product concerned. The performance of pension plan products and guarantee funds is constantly monitored.

UMH's market risk is managed directly at the risk capital requirements level and limited by an upper loss limit covering both the fund price risk and asset management risk as well as the decentral capital buffer. The latter amounts to EUR 45 million and anticipates the expected rise in risk capital requirements based on the adjustment of asset management risk methods planned for 2019. The economic risk capital requirements for fund price risk and asset management risk were calculated as EUR 286.0 million as at 31 December 2018 (previous year: EUR 155.6 million). In particular, the falling stock markets in the fourth quarter combined with reduced Bund yields were responsible for the high risk capital requirements. The risk capital requirements for market risk, including the capital buffer, thus amounted to EUR 331.0 million as at 31 December 2018, exceeding the approved upper loss limit of EUR 314 million (previous year: EUR 255 million). The risk capital requirements did not exceed the upper loss limit in any of the other months.

Equity investment risk

Equity investment risk is defined as the risk of losses arising from negative changes in the fair value of that portion of the equity investments portfolio in which the risks are not covered by other types of risk. Equity investment risk only includes equity investments that are not integrated into the differentiated risk measurement process with a look-through approach for the individual risks. If the risk materialises, there may be a need to recognise impairment losses to reduce the carrying amounts of the equity investments concerned. Equity investment risk is quantified centrally by DZ BANK AG. A risk contribution of EUR 70.1 million was calculated for UMH as at 31 December 2018 (previous year: EUR 70.0 million). The warning threshold was EUR 80 million (previous year: EUR 83 million). The risk contribution did not exceed the warning threshold at any point during the course of the year.

Business risk

Business risk is the risk of losses arising from earnings volatility for a given business strategy and not covered by other types of risk. In particular, this comprises the risk that, as a result of changes in material circumstances (such as economic conditions, product environment, customer behaviour, market competitors) corrective action cannot be taken solely at an operational level to prevent the losses. The company would thus report an operating loss if such a risk should materialise.

The economic risk capital requirements are calculated using an earnings-at-risk approach as a value at risk with a one-year time frame and a confidence level of 99.9%. The risk capital requirements were reported as EUR 0 as at 31 December 2018 (previous year: EUR 11.1 million). The upper loss limit was EUR 15 million (previous year: EUR 15 million). The risk capital requirements did not exceed the upper loss limit at any point during the course of the year. The additional risk indicator system triggered warnings for various risk indicators as intended. Corrective action to facilitate risk management was derived from these. There were no indications in the course of the year of any critical situations likely to represent a risk to the group as a going concern.

Reputational risk

Reputational risk is defined as the risk of losses from events that damage confidence, particularly the confidence of clients, distributors, investors, employees, the labour market, the general public and supervisors, in the companies of the Union Investment Group or in the products and services they offer.

Reputational risks affecting the group or the group companies may arise from the management of investment fund assets. If reputational risks were to materialise, this could lead to an outflow of client funds and therefore to lower income in the future. The effects of reputational risks are factored into the measurement of business risk and are covered by the risk capital determined for the latter.

Liquidity risk

Liquidity risk is defined as the loss that can arise if insufficient funds are available to meet payment obligations when due (liquidity risk in the narrow sense of the term) or if any necessary funding can only be obtained on unfavourable terms (refinancing risk). The main items that can give rise to liquidity risk are the payment obligations of the companies within the group. If liquidity risks materialise, the settlement of payment obligations by the group companies could be delayed. To avoid any such scenario, liquidity items are subject to continuous liquidity management. Active planning and control of liquidity aims to ensure that the companies can meet their payment obligations at all times. The liquidity of the Union Investment Group was not in jeopardy at any time in the reporting period.

Credit risk

Credit risk is the risk of unexpected losses due to the default of counterparties. UMH's credit risk primarily results from own-account investments in funds, bank deposits/time deposits, loans and advances to clients and other exposures. The risk is currently not limited at UMH level but is instead included in the central capital buffer requirement at DZ BANK level. Credit risk is quantified semi-annually by UMH on the basis of capital requirements according to the standardised approach to credit risk. This uses all exposures relevant to credit risk to calculate the capital buffer. The central capital buffer requirement for credit risk amounted to EUR 77.7 million as at 31 December 2018 (previous year: EUR 87.7 million).

Total risk

Total risk is calculated on the basis of the individual risk types. Diversification effects are taken into account in aggregation. The central capital buffer requirement is added to the correlated value both on the limit and the risk side. The total capital requirements amounted to EUR 550.4 million as at 31 December 2018 (previous year: EUR 411.1 million). The overall limit was EUR 587.5 million in the reporting period (previous year: EUR 559.3 million). The total capital requirements did not exceed the overall limit at any point during the course of the year.

Risk cover is calculated quarterly using the liquidation approach in line with DZ BANK specifications. Risk cover amounted to EUR 879.6 million as at 31 December 2018 (previous year: EUR 816.9 million). Utilisation of risk cover by the overall limit was 66.8% as at 31 December 2018 (previous year: 68.5%). The Union Investment Group's risk-bearing capacity was ensured at all times during the year.

3. Summary of the risk position in the year under review

The results from the risk monitoring process were discussed at regular meetings of the Risk and Data Quality Management Committee and suitable action was initiated where appropriate. The Board of Managing Directors of UMH was kept abreast of developments relevant to risk by means of the quarterly risk reports and ad hoc notification of any critical issues as necessary. Based on these details, the Board of Managing Directors took action to manage risks and reported to the Supervisory Board of UMH on the risk situation. Individual high-risk trends were mitigated by specific corrective action taken as part of the risk management process.

Over the 2018 financial year as a whole, there were no risks to UMH or the Union Investment Group as a going concern. The analysis of risk-bearing capacity does not highlight any obvious trends that could not be countered by the corrective action taken. The Union Investment Group's risk-bearing capacity was ensured at all times. As dictated by prudent business practice, provisions were recognised in the annual financial statements to cover business and tax risks. The liquidity of UMH and the companies within the Union Investment Group was never in jeopardy at any point in the year under review.

III. Forecast

Please refer to the details in section B VI. 3.2.

This forecast covers the 2019 financial year.

Following the third-highest consolidated earnings in the company's history, a high level of net sales and a high volume of assets under management in the 2018 financial year, Union Investment has again set itself ambitious targets for the 2019 financial year.

Against the backdrop of the persistently difficult environmental conditions – the United Kingdom's upcoming exit from the EU, the behaviour of the USA under a Trump government and the major currency blocks drifting apart, with the associated negative consequences for the global economy – the Union Investment Group wants to consistently continue to take opportunities for positive business performance on the national and international stage.

Union Investment is striving to maintain new business at its currently very high level and expects to see slight growth in assets under management, based on low overall performance assumptions.

Net fee and commission income based on volume-based income is expected to continue at a very high level that is slightly below the previous year's level. The main reason for this is the high level of average assets under management. This already takes account of the contrary effect of the planned sale of the Union Investment Towarzystwo Funduszy Inwestycyjnych S.A. (TFI) company. Furthermore, income from performance-based management fees is expected to drop dramatically.

The financial result – comprising net interest income, net income from investment securities and other net remeasurement income on financial instruments – is expected to rise sharply. This is largely due to expectations of lower expense for guarantee pledges measured and more positive measurement of own-account investments.

Administrative expenses are expected to rise substantially. Staff costs will increase considerably as a result of targeted recruitment in 2019, the full-year effect of appointments, and planned salary adjustments. Operating expenses will increase sharply on account of the new tenancy at the WINX building in 2019 and rising IT costs, particularly in relation to application management and software maintenance. Depreciation and amortisation expense is rising significantly, mainly due to the first-time capitalisation of investments from completed projects. The planned sale of TFI is having a contrary effect on all the items under administrative expenses.

Given the factors described above, consolidated earnings are expected to be at the same level as in the 2018 financial year. The CIR is expected to rise slightly.

E Non-financial statement

For non-financial reporting, please refer to the Non-Financial Report in the management report of DZ BANK AG, in which the Union Investment Group is consolidated. The non-financial corporate statement is available in German at the following website: www.berichte2018.dzbank.de. The reference is indicated without acknowledgement of a legal obligation and is in particular not to be understood as a reference for the purpose of exemption from the reporting obligation according to Section 289b (2) HGB. Neither Union Asset Management Holding AG nor its German subsidiaries fall under the scope of Section 289b HGB, so there is no obligation to provide a non-financial report. The reference to the Non-Financial Report of DZ BANK AG is therefore voluntary. This does not affect the voluntary continuation of the previous sustainability reporting according to the GRI 4.0 standard outside of the management report.

Frankfurt am Main, 11 March 2019

Union Asset Management Holding AG



Hans Joachim Reinke
Chief Executive Officer



Alexander Schindler
Member of the Board
of Managing Directors



Jens Wilhelm
Member of the Board
of Managing Directors

Consolidated financial statements

2018 financial year

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Consolidated financial statements (IFRS) of Union Asset Management Holding AG for the financial year from 1 January to 31 December 2018

Consolidated income statement for the financial year from 1 January to 31 December 2018

UMH Group	Note	2018 EUR thousand	2017 EUR thousand
Net interest income	[25]	7,922	13,089
Interest income and current income		8,880	14,070
Interest expenses		-958	-981
Allowances for losses on loans and receivables	[26]	-27	-15
Net interest income after allowances for losses on loans and receivables		7,895	13,074
Net fee and commission income	[27]	1,415,869	1,414,626
Fee and commission income		2,448,308	2,312,823
Fee and commission expenses		-1,032,439	-898,197
Net income from investment securities	[28]	-23,027	8,204
Other net remeasurement income on financial instruments	[29]	-50,839	13,316
Net income from companies accounted for using the equity method	[30]	17,111	15,938
Administrative expenses	[31]	-894,684	-858,384
Other operating result	[32]	29,419	3,381
Consolidated earnings before taxes		501,744	610,155
Income taxes	[22], [33]	-154,817	-188,813
Consolidated net income		346,927	421,342
Attributable to:			
Shareholders of Union Asset Management Holding AG		339,059	413,889
Non-controlling interests		7,868	7,453

Statement of comprehensive income for the financial year from 1 January to 31 December 2018

UMH Group	Note	2018 EUR thousand
Consolidated net income		346,927
Other comprehensive income		-3,228
Amounts reclassified to profit or loss		1,234
Exchange differences on currency translation of foreign subsidiaries	[35], [54]	-1,657
Share of other comprehensive income of joint ventures and associates accounted for using the equity method	[35], [54]	2,922
Income taxes relating to components of other comprehensive income		-31
Amounts not reclassified to profit or loss		-4,462
Gains and losses from equity instruments for which the fair value OCI option was exercised	[34], [35], [54]	-2,136
Actuarial gains and losses on defined benefit plans		-9,202
Share of other comprehensive income of joint ventures and associates accounted for using the equity method	[35], [54]	-152
Income taxes relating to components of other comprehensive income	[35]	7,028
Total comprehensive income		343,699
Attributable to:		
Shareholders of Union Asset Management Holding AG		336,480
Non-controlling interests		7,219

Comparative information in accordance with IAS 39

UMH Group	Note	2017 EUR thousand
Consolidated net income		421,342
Other comprehensive income		14,770
Amounts reclassified to profit or loss		11,385
Gains and losses on available-for-sale financial assets	[34], [35], [54]	16,172
Exchange differences on currency translation of foreign subsidiaries	[35], [54]	1,773
Share of other comprehensive income of joint ventures and associates accounted for using the equity method	[35], [54]	-6,413
Income taxes relating to components of other comprehensive income	[35]	-147
Amounts not reclassified to profit or loss		3,385
Actuarial gains and losses on defined benefit plans	[35], [54]	4,965
Income taxes relating to components of other comprehensive income	[35]	-1,580
Total comprehensive income		436,112
Attributable to:		
Shareholders of Union Asset Management Holding AG		426,953
Non-controlling interests		9,159

Consolidated statement of financial position as at 31 December 2018

Assets	Note	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand
Cash reserve	[9], [36]	30	18
Loans and advances to banks	[10], [37]	772,643	372,981
Loans and advances to customers	[10], [38]	83,561	75,321
Asset derivatives	[18], [39]	48,924	37,040
Investment securities	[12], [40]	998,052	1,367,845
Shares in companies accounted for using the equity method	[13], [41]	111,302	104,416
Property, plant and equipment	[14], [42]	22,287	22,406
Intangible assets	[15], [43]	141,863	136,921
Income tax assets	[22], [44]	61,933	44,218
Other assets	[45]	197,539	177,863
Assets held for sale	[16], [46]	43,136	27,029
Total assets		2,481,270	2,366,058

Equity and liabilities	Note	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand
Liabilities to banks	[17], [47]	19,635	14,642
Liabilities to customers	[17], [48]	1,221	1,218
Liability derivatives	[18], [49]	64,345	31,989
Provisions	[19], [20], [50]	208,826	193,729
Income tax liabilities	[22], [51]	76,974	80,128
Other liabilities	[52]	761,621	723,432
Liabilities held for sale	[16], [53]	10,399	–
Equity	[54]	1,338,249	1,320,920
Issued capital		87,130	87,130
Capital reserves		18,617	18,617
Retained earnings		843,017	751,331
Fair value OCI reserve		18,701	20,371
Currency translation reserve		11,148	6,413
Reserve from assets held for sale		-3,500	–
Consolidated net profit		339,059	413,889
Non-controlling interests		24,077	23,169
Total equity and liabilities		2,481,270	2,366,058

Statement of changes in equity for the financial year from 1 January to 31 December 2018

UMH Group	Note	Issued capital	Capital reserves	Retained earnings	Fair value OCI reserve	Currency translation reserve	Reserve from assets held for sale	Consolidated net profit	Equity before non-controlling interests	Non-controlling interests	Total equity
		EUR thousand	EUR thousand	EUR thousand	EUR thousand	EUR thousand	EUR thousand	EUR thousand	EUR thousand	EUR thousand	EUR thousand
1 Jan. 2017		87,130	18,617	591,888	5,962	11,309	–	328,377	1,043,283	15,465	1,058,748
Consolidated net income		–	–	–	–	–	–	413,889	413,889	7,453	421,342
Other comprehensive income	[54]	–	–	3,291	14,669	-4,896	–	–	13,064	1,706	14,770
Total comprehensive income		–	–	3,291	14,669	-4,896	–	413,889	426,953	9,159	436,112
Acquisition/disposal of non-controlling interests		–	–	27,915	-260	–	–	–	27,655	4,381	32,036
Changes in the consolidated group		–	–	-20	–	–	–	-11	-31	–	-31
Dividends paid	[54]	–	–	-200,109	–	–	–	–	-200,109	-5,836	-205,945
Appropriation to retained earnings		–	–	328,366	–	–	–	-328,366	–	–	–
31 Dec. 2017		87,130	18,617	751,331	20,371	6,413	–	413,889	1,297,751	23,169	1,320,920
1 Jan. 2018		87,130	18,617	751,331	20,371	6,413	–	413,889	1,297,751	23,169	1,320,920
Consolidated net income		–	–	–	–	–	–	339,059	339,059	7,868	346,927
Other comprehensive income	[54]	–	–	-2,138	-1,676	1,235	–	–	-2,579	-649	-3,228
Total comprehensive income		–	–	-2,138	-1,676	1,235	–	339,059	336,480	7,219	343,699
Dividends paid	[54]	–	–	-320,059	–	–	–	–	-320,059	-6,311	-326,370
Appropriation to retained earnings		–	–	413,889	–	–	–	-413,889	–	–	–
Reclassifications within equity	[54]	–	–	-6	6	3,500	-3,500	–	–	–	–
31 Dec. 2018		87,130	18,617	843,017	18,701	11,148	-3,500	339,059	1,314,172	24,077	1,338,249

Statement of cash flows for the financial year from 1 January to 31 December 2018

UMH Group	2018 EUR thousand	2017 EUR thousand
Consolidated net income	346,927	421,342
Non-cash items included in consolidated net income and reconciliation to cash flows from operating activities		
Depreciation, amortisation, impairment losses and reversals of impairment losses on assets and measurement changes on financial assets and liabilities	63,110	14,792
Non-cash changes in provisions and deferred liabilities	678,415	673,070
Other non-cash income and expenses	132,924	214,307
Gains and losses on the disposal of assets and liabilities	2,294	4,828
Other adjustments (net)	-7,924	-13,093
Subtotal	1,215,746	1,315,246
Cash changes in assets and liabilities arising from operating activities		
Loans and advances to banks	-413,565	-109,809
Loans and advances to customers	-8,266	-9,645
Other assets	-22,821	-12,627
Liabilities to banks	4,993	1,396
Liabilities to customers	3	-88
Asset/liability derivatives	-2,256	-28,879
Other liabilities	-624,096	-537,083
Interest and dividends received	22,631	18,298
Interest paid	-2,043	-1,454
Income taxes paid	-149,206	-209,139
Cash flow from operating activities	21,120	426,216

UMH Group	2018 EUR thousand	2017 EUR thousand
Proceeds from the disposal of:		
Investment securities	1,117,096	790,715
Property, plant and equipment	160	23
Intangible assets	24	–
Payments for the acquisition of:		
Investment securities	-764,286	-964,335
Joint ventures and associates	–	-33,381
Property, plant and equipment	-6,698	-3,452
Intangible assets	-42,145	-36,921
Cash flow from investing activities	304,151	-247,351
Dividend payments to the shareholders of UMH AG and other shareholders	-326,370	-205,946
Changes in cash from other capital	1,111	27,060
Cash flow from financing activities	-325,259	-178,886
Cash and cash equivalents at the beginning of the year	18	39
Cash flow from operating activities	21,120	426,216
Cash flow from investing activities	304,151	-247,351
Cash flow from financing activities	-325,259	-178,886
Cash and cash equivalents at the end of the year	30	18

Cash and cash equivalents in the statement of cash flows correspond to the cash and cash equivalents item in the statement of financial position, which comprises cash in hand and balances at central banks, plus debt instruments from public sector entities and bills of exchange eligible as collateral for central bank funding if the residual maturity is less than three months and the amounts concerned are deemed to be the retention of liquidity. Loans and advances to banks that are repayable on demand are not included; these items are assigned to operating activities.

The statement of cash flows shows a breakdown of, and changes in, cash and cash equivalents during the financial year. It is broken down into operating activities, investing activities and financing activities.

Cash flows from operating activities comprise cash transactions (cash inflows and outflows) in connection with loans and advances to banks and customers, other assets, asset and liability derivatives, liabilities to banks and customers and other liabilities. Interest and dividend payments, together with current income tax payments, are also assigned to cash flow from operating activities.

Cash flow from investing activities shows cash transactions relating to investment securities, property, plant and equipment and intangible assets. This item also includes the effects from changes in the consolidated group.

Cash flow from financing activities comprises proceeds from capital increases, proceeds from the utilisation of loans, loan repayments, dividend payments and changes in cash related to other capital.

A statement of cash flows is not particularly meaningful as far as companies in the asset management sector are concerned. The statement of cash flows for the UMH Group does not replace liquidity and financial planning, nor is it used as a management tool.

Notes to the consolidated financial statements

Basis of preparation

[1] Principles of group accounting

Union Asset Management Holding AG (UMH AG) is the holding company of the Union Investment Group. It is a subsidiary of DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (DZ BANK). The primary purpose of UMH AG's subsidiaries, joint ventures and associates is to issue and sell investment funds, hold these funds in safe custody and provide associated services. The Union Investment Group is also the centre of competence for asset management within the Genossenschaftliche FinanzGruppe.

The registered office of UMH AG is Weissfrauenstrasse 7, 60311 Frankfurt am Main, Germany. The company was entered in the commercial register of the Frankfurt am Main Local Court on 16 June 1999 under HRB 47289. The shares in UMH AG are not publicly traded.

The consolidated financial statements of UMH AG are included in the consolidated financial statements of DZ BANK, which in turn prepares the consolidated financial statements covering the greatest number of entities included in the overall group and is entered in the commercial register of the Frankfurt am Main Local Court under HRB 45651. DZ BANK's annual financial statements are published in the Federal Gazette.

The consolidated financial statements of UMH AG comprise the consolidated income statement, the statement of comprehensive income, the statement of financial position, the statement of changes in equity, the statement of cash flows and the notes to the consolidated financial statements. They comprise the separate financial statements of UMH AG and its subsidiaries (hereinafter also referred to as the 'UMH Group' or 'Union Investment Group'). The consolidated financial statements have been prepared as at the end of

UMH AG's reporting period, 31 December 2018. The subsidiaries included share the same reporting period.

In accordance with standard international practice, the consolidated income statement and statement of financial position are presented in a condensed and clearly structured format in compliance with the requirements of IAS 1. Statement of financial position items are shown in order of liquidity.

The consolidated financial statements have been prepared in euros (EUR). Unless stated otherwise, amounts are presented in thousands of euros (EUR thousand) to ensure that the consolidated financial statements are clear and comprehensible. Rounding differences can occur in tables.

All items in the consolidated financial statements are recognised and measured under the assumption of the going concern principle. Income and expenses are recognised using the accrual method, i.e. they are recognised in the period to which they relate.

With the exception of the contractual maturity analysis as required by IFRS 7.39 (note [61]), the gross carrying amounts pursuant to IFRS 7.35I (note [56]) and the risk concentration of financial assets pursuant to IFRS 7.35M (note [55]), the disclosures on the nature and extent of risks arising from financial instruments (IFRS 7.31–42) are included in the risk report in the group management report.

[2] Accounting policies

The consolidated financial statements and the group management report for the financial year from 1 January to 31 December 2018 have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) and the additional requirements

of German commercial law pursuant to Section 315e (1) of the German Commercial Code (HGB) in conjunction with Section 315e (3) HGB.

The financial statements of the companies consolidated in the UMH Group have been prepared using uniform accounting policies.

Changes in accounting policies

- First-time adoption of IFRS changes in the 2018 financial year

The following new financial reporting standards, amendments and clarifications of IFRSs, interpretations of the IFRS Interpretations Committee (IFRIC interpretations) and the named improvements to IFRSs were adopted for the first time in the UMH consolidated financial statements for the 2018 financial year:

- IFRS 9 Financial Instruments,
- IFRS 15 Revenue from Contracts with Customers,
- Clarifications to IFRS 15 Revenue from Contracts with Customers
- Amendments to IFRS 2 – Classification and Measurement of Share-based Payment Transactions,
- Amendments to IAS 40 – Transfers of Investment Property,
- IFRIC 22 Foreign Currency Transactions and Advance Consideration,
- Annual Improvements to IFRSs 2014-2016 Cycle

The regulations of IFRS 9 Financial Instruments replaced the content of IAS 39 Financial Instruments: Recognition and Measurement from 1 January 2018. IFRS 9 contains provisions on the fundamentally revised regulatory areas of the classification and measurement of financial instruments, accounting for impairment on financial assets and hedge accounting.

With its regulations on classification and measurement, IFRS 9 introduces a reclassification of financial assets. Both the business models of the portfolios and the characteristics of the contracted cash flows for the individual financial assets must be taken into account for the purposes of the reclassification. The individual group companies reclassify in accordance with their individual business models on the basis of central group specifications. Based on this, financial assets can be assigned to the category 'financial assets measured at fair value through profit or loss' (Fair Value PL), 'financial assets measured at fair value through other comprehensive income' (Fair Value OCI) or 'financial assets measured at amortised cost' (AC). In the event of accounting mismatches when allocating individual financial assets to the categories 'financial assets measured at fair value through other comprehensive income' or 'financial assets measured at amortised cost', the standard also affords the reporting entity the option of classifying them as 'financial assets designated at fair value through profit or loss' (fair value option). The fair value option is not used within the UMH Group. Equity instruments which are held for trading must be assigned to the category 'financial assets measured at fair value through profit or loss'. For equity instruments not held for trading that would have been measured at fair value through profit or loss, there is the option of recognising changes in the fair value of these equity instruments irrevocably within the scope of a subsequent measurement in the consolidated income statement (fair value OCI option). This option is used within the UMH Group.

Unlike IAS 39, IFRS 9 specifies that any changes in the value of financial liabilities designated at fair value through profit or loss resulting from a change in credit risk must be recognised in other comprehensive income. The other requirements relating to financial liabilities have been taken over from IAS 39 unchanged.

The new provisions on accounting for impairment of financial assets measured at amortised cost or at fair value in other comprehensive income change their recognition as they require the recognition not only of losses that have already

occurred but also of losses already expected. In determining the extent to which expected losses are recognised, a distinction must be made as to whether the credit risk on financial assets has deteriorated significantly since their addition. If this risk has increased, all losses expected over the entire term must be recognised from this date. Otherwise, only the losses expected from future, possible loss events in the next twelve months have to be recognised. A significant increase in credit risk is generally determined on the basis of a comparison of the actual probability of default over the remaining term of the instrument as at the reporting date and the probability of default originally anticipated over the same period. This review can be supplemented by qualitative, credit risk increasing criteria. In particular, the default of 30 days is used as a qualitative criterion for a significant increase in credit risk. However, default of 30 days is generally reflected by a re-rating directly in the probability of default. In the case of securities with a low credit risk, use is not made within the UMH Group of the exemption from checking for significant increases in the credit risk of instruments with a low credit risk, since no securities holdings are held that fulfil the criterion for cash flows.

The new IFRS 9 hedge accounting model will enable an improved presentation of internal risk management and entails extensive disclosure requirements. The amendments to IFRS 9 on hedge accounting do not affect the requirements for portfolio fair value hedge accounting, for which the regulations of IAS 39 continue to apply. As in the past, the respective risk management strategy and risk management objectives must be documented at the inception of the hedge, though the link between the hedged item and the hedging instrument pursuant to IFRS 9 must be in line with the specifications of the risk management strategy. If this link changes during a hedge but not the risk management objective, the factors included in the hedged item and the hedging instrument must be adjusted without discontinuing the hedge. Under IFRS 9, it will not be possible to discontinue a hedge if the risk management objective continues to be pursued and all other relevant designation criteria continue to be met. The requirements for demonstrating the effectiveness

of hedges have also changed. IFRS 9 has done away with both the retrospective effectiveness assessment and the effectiveness range. Under IFRS 9, under specific circumstances, opposing changes in value on the basis of the economic relationship between the hedged item and the hedging instrument can also be solely qualitative without quantitative limits. No hedge accounting has been used by the UMH Group.

As at the date of first-time application of IFRS 9 on 1 January 2018, no retrospective adjustments of the comparative periods in 2017 were implemented in the UMH Group owing to this option under IFRS 9. Due to the non-retrospective restatement of the comparative period in 2017 to the provisions of IFRS 9, the provisions of IFRS 9 that apply to the 2018 reporting period are always the decisive figures for the recognition in the UMH consolidated financial statements. If the recognition in the reporting period does not differ from that of the comparative period, the disclosures under IAS 39 are disclosed for the comparative period. However, if the recognition in the reporting period differs from the recognition in the comparative period, in the event that corresponding disclosures under IAS 39 are available for the 2017 comparative period, these are published separately under the heading 'Comparative information in accordance with IAS 39'. If no such disclosures are available under IAS 39 for the comparative 2017 period, the relevant comparative information remains unpublished. The approach outlined above is deviated from for the following sections of the financial statements. In equity, the revaluation reserve existing under IAS 39 in the fair value OCI reserve is presented in accordance with IFRS 9. For the statement of comprehensive income, the gains and losses on 'available-for-sale financial assets' pursuant to IAS 39 are transferred to the component of gains and losses from 'debt instruments measured at fair value through other comprehensive income' under IFRS 9 in the statement of comprehensive income.

With the transition to IFRS 9, changes in recognition were made at various points in the UMH consolidated financial statements, which are also included in the reconciliation

tables under 'Effect of transition from IAS 39 to IFRS 9'. Significant changes to the recognition are described below in the order in which they appear in the UMH consolidated financial statements:

There were no value-related effects owing to the first-time application of the provisions under IFRS 9.

Based on the categories 'financial instruments held for trading' (HfT), 'financial assets at fair value through profit or loss' (FVO), 'held-to-maturity financial investments' (HtM) and 'available-for-sale financial assets' (AfS) which came into force under IAS 39 as at 31 December 2017, the financial position items of assets and liabilities, risk provisions and classes in accordance with IFRS 7 are transitioned to the

categories applicable since 1 January 2018 in accordance with IFRS 9 in the tables below.

The gross carrying amounts of the financial position items of the assets and their categories in accordance with IFRS 9 are reconciled from financial position items and categories as defined in IAS 39 to IFRS 9 in the following table:

Financial assets	IAS 39 carrying amount as at 31 Dec. 2017	Reclassification at IAS 39 carrying amount as at 31 Dec.2017 in accordance with gross entitlement to interest payments	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at 1 Jan. 2018
	EUR thousand	EUR thousand	EUR thousand	EUR thousand
Cash reserve	18	18	–	18
of which cash in hand		18	–	18
Loans and advances to banks	372,981	372,981	–	372,981
of which fair value PL				
of which loans and advances to banks – lar		9,393	–	9,393
of which AC				
of which loans and advances to banks – lar		363,587	–	363,587
Loans and advances to customers	75,321	75,321	–	75,321
of which AC				
Loans and advances to customers – lar		75,321	–	75,321
Allowances for losses on loans and receivables	–	–	–	–
Asset derivatives	37,040	37,040	–	37,040
of which fair value PL				
of which asset derivatives – HfT		37,040	–	37,040

Financial assets	IAS 39 carrying amount as at 31 Dec. 2017	Reclassification at IAS 39 carrying amount as at 31 Dec.2017 in accordance with gross entitlement to interest payments	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at 1 Jan. 2018
	EUR thousand	EUR thousand	EUR thousand	EUR thousand
Investment securities	1,367,845	1,367,845	–	1,367,845
of which FVPL				
of which from investment securities – FVO		1,337,221	–	1,337,221
of which from investment securities – AfS at cost		20	–	20
of which fair value OCI option				
of which investment securities – AfS at FV		28,754	–	28,754
of which from investment securities – AfS at cost		1,850	–	1,850
Other assets	142,657	142,657	–	142,657
of which AC				
of which other assets – lar		142,657	–	142,657
Assets held for sale	27,029	27,029	–	27,029
Total	2,022,892	2,022,892	–	2,022,892

As a result of the transition of the categorisation requirements for financial assets from IAS 39 to IFRS 9, the measurement categories at the time of first-time application have changed for the following reasons:

Due to the allocation to the business model, other and management on a fair value basis, financial assets from the IAS 39 category 'loans and receivables' were reclassified to the IFRS 9 category 'assets measured at fair value through profit or loss'.

Due to the allocation to the business model, 'Hold' and fulfilling the criterion for cash flows, financial assets from the IAS 39 category 'loans and receivables' were reclassified to the IFRS 9 category 'financial assets measured at amortised cost'.

Derivative financial instruments were reclassified from the category 'held for trading' pursuant to IAS 39 to the 'financial assets measured at fair value through profit or loss' category pursuant to IFRS 9.

Due to the allocation to the 'Other' business model and non-fulfilment of the cash flow criterion, financial assets from the IAS 39 category 'assets measured at fair value through profit or loss' were reclassified to the IFRS 9 category 'fair value through profit or loss' using the fair value option. The fair value option in accordance with IAS 39 was exercised to achieve harmonisation of the financial management and the presentation of the net assets, financial position and results of operations.

Due to the allocation to the business model 'Hold to collect and sell' and non-fulfilment of the cash flow criterion, financial assets were reclassified from the IAS 39 category 'Available-for-sale financial assets' to the IFRS 9 category 'assets measured at fair value through profit or loss'.

Due to the allocation to the 'Hold to collect and sell' business model and non-fulfilment of the cash flow criterion, financial assets from the IAS 39 category 'assets measured at fair value through profit or loss' were reclassified to the IFRS 9

category 'fair value through profit or loss' using the fair value option.

Equity instruments previously included in the IAS 39 'available-for-sale financial assets' category were recognised using the fair value OCI option under IFRS 9 category 'financial assets at fair value through profit or loss'.

The gross carrying amounts of the financial position items of the liabilities and their categories in accordance with IFRS 9 are reconciled from financial position items and categories as defined in IAS 39 to IFRS 9 in the following table:

Financial liabilities	IAS 39 carrying amount as at 31 Dec. 2017	Reclassification at IAS 39 carrying amount as at 31 Dec.2017 in accordance with gross entitlement to interest payments	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at 1 Jan. 2018
	EUR thousand	EUR thousand	EUR thousand	EUR thousand
Liabilities to banks	14,642	14,642	–	14,642
of which AC				
of which liabilities to banks – AC		14,642	–	14,642
Liabilities to customers	1,218	1,218		1,218
of which AC				
of which liabilities to customers – AC		1,218	–	1,218

Financial liabilities	IAS 39 carrying amount as at 31 Dec. 2017	Reclassification at IAS 39 carrying amount as at 31 Dec.2017 in accordance with gross entitlement to interest payments	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at 1 Jan. 2018
	EUR thousand	EUR thousand	EUR thousand	EUR thousand
Liability derivatives	31,989	31,989	–	31,989
of which fair value PL				
of which liability derivatives – HFT		31,989	–	31,989
Other liabilities	9,178	9,178	–	9,178
of which AC				
of which other liabilities – AC		9,178	–	9,178
Total	57,027	57,027	–	57,027

As a result of the transition of the categorisation requirements for financial liabilities from IAS 39 to IFRS 9, the categories at the time of first-time application have changed for the following reasons:

Due to the previous intention to hold and not exercising the fair value option, financial liabilities were reclassified from the

IAS 39 category 'other financial liabilities' to the IFRS 9 category 'financial liabilities measured at amortised cost'.

Derivative financial liabilities were reclassified from the category 'held for trading' pursuant to IAS 39 to the 'financial liabilities measured at fair value through profit or loss' category pursuant to IFRS 9.

The introduction of IFRS 9 has not resulted in any changes in the classification of financial assets and financial liabilities to the classes of financial instruments under IFRS 7. Due to the reclassification of financial assets and financial liabilities under IFRS 9, there are no changes in the value of the financial asset classes. The carrying amounts are shown in the table below:

	IAS 39 carrying amount as at 31 Dec. 2017	Reclassification at IAS 39 carrying amount as at 31 Dec.2017 in accordance with gross entitlement to interest payments	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at 1 Jan. 2018
	EUR thousand	EUR thousand	EUR thousand	EUR thousand
Classes of financial assets				
Financial assets at fair value through profit or loss				
Financial assets measured at fair value through profit or loss	1,383,675	1,383,675	–	1,383,675
Financial assets measured at fair value through other comprehensive income	30,604	30,604	–	30,604
Financial assets measured at amortised cost	581,566	581,566	–	581,566

	IAS 39 carrying amount as at 31 Dec. 2017	Reclassification at IAS 39 carrying amount as at 31 Dec.2017 in accordance with gross entitlement to interest payments	Effect of transition from IAS 39 to IFRS 9	IFRS 9 carrying amount as at 1 Jan. 2018
	EUR thousand	EUR thousand	EUR thousand	EUR thousand
Classes of financial liabilities				
Financial liabilities measured at fair value through profit or loss	31,989	31,989	–	31,989
Financial liabilities measured at amortised cost	25,037	25,037	–	25,037

The first-time adoption of IFRS 9 in the 2018 financial year results in changes in the disclosure of credit-related disclosures in accordance with IFRS 7. The transition provisions applicable for the first-time application of IFRS 9 stipulate that last year's disclosures in the financial year are to be disclosed in accordance with the requirements of the former IFRS 7. As at 31 December 2017, this applies to EUR 0.4 million of the assets past due, which were not yet impaired in accordance with IFRS 7.37(a).

The regulations of IFRS 15 Revenue from Contracts with Customers will replace the content of IAS 18 Revenue and IAS 11 Construction Contracts as well as the associated interpretations, such as IFRIC 13 Customer Loyalty Programmes, IFRIC 15 Agreements for the Construction of Real Estate, IFRIC 18 Transfers of Assets from Customers and SIC-31 Revenue – Barter Transactions Involving Advertising Services. Under IFRS 15, revenue from contracts with customers is recognised when the customer acquires control of the agreed goods and services and can derive benefits from them. The principles set out in IFRS 15 for the recognition and measurement of contracts with customers are derived from the five steps defined in the standard. The new standard does not differentiate between different types of contracts or services and instead provides uniform criteria for when performance must be recognised at a point in time or over a period of time. IFRS 15 also includes additional qualitative and quantitative disclosure requirements on the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers. The IFRS 15 changes have no impact on the collection of income recognised in relation to financial instruments pursuant to IFRS 9 or on income resulting from insurance contracts pursuant to IFRS 4 or leases pursuant to IAS 17.

The implementation of IFRS 15 may give rise to contract assets and contract liabilities. When either party to a contract has performed, an entity shall present the contract as a contract asset or a contract liability, depending on the relationship between the entity's performance and the customer's payment. Each unconditional right to consider-

ation shall be recognised as a receivable. Impairment on receivables or contract assets accounted for according to IFRS 15 must be calculated according to IFRS 9. IFRS 15 refers to the requirements of the simplified approach of IFRS 9, according to which losses expected over the remaining term must be recognised immediately. The measurement of the significant increase in credit risk in connection with the level transfer does not apply to allowances for losses on items under IFRS 15.

As at the date of first-time application of IFRS 15 on 1 January 2018, no retrospective adjustments of the comparative periods in 2017 have been implemented owing to this option under IFRS 15. Instead, IFRS 15 was introduced according to the modified retrospective application method. With this method, IFRS 15 is applied to new and existing contracts not yet fulfilled at the time of the standard's initial application. To determine the effect of the first-time application of IFRS 15, the revenue recognised under IAS 18 for each contract not yet fulfilled from contract inception to 31 December 2017 is compared with the revenue that would have been recognised if IFRS 15 had been applied since contract inception. The difference between these two amounts is to be recognised in the opening statement of financial position as a cumulative adjustment of retained earnings as at 1 January 2018. The first-time application of IFRS 15 did not result in any cumulative adjustments to retained earnings.

The clarifications to IFRS 15 published in April 2016 relate to three issues (identifying performance obligations, principal versus agent relationships and licensing for intellectual property) and also include transition relief for contracts that were completed at the beginning of the earliest period presented or modified before this period. The UMH Group will apply the relief granted for the first-time application of IFRS 15 to all contract modifications made before 1 January 2018 and will not reassess or restate these contracts retroactively.

At the end of the previous year, the effects of IFRS 15 were assessed. The group companies analysed their contracts according to the five steps defined in IFRS 15. Revenue within

the scope of IFRS 15 were mainly recognised under the Group's commission income. The effects identified relate to principal versus agent relationships in the form of a change in modified gross or net presentation of commission income and expenses. As a result, the reassessment of principal versus agent relationships resulted in an increase in net commission income and expenses which are described in more detail in note [27].

In individual cases, contract assets and contract liabilities can be recognised under other assets or other liabilities. The simplified approach to determining impairment according to IFRS 9 is applied uniformly to contract assets and receivables that come under IFRS 15.

The amendments to IFRS 2 Classification and Measurement of Share-based Payment Transactions address issues relating to the accounting for cash-settled share-based payments. The key amendment/clarification is that IFRS 2 now includes provisions regarding calculation of the fair value of liabilities for share-based payments. These amendments are of no significance for the UMH consolidated financial statements.

Changes to IAS 40 Transfers of investment property relate to the accounting for investment property under construction or development. In principle, IAS 40 stipulates that classification as investment property begins or ends when there is a change in use. IAS 40.57 lists cases when a change in use occurs. As this list was formulated as exhaustive, it was unclear whether this principle also applies to properties under construction or development. The amendments to IAS 40 clarify that this principle also applies to properties not yet completed. The list in IAS 40.57 is now explicitly non-exhaustive. There was no impact on the UMH consolidated financial statements.

Interpretation IFRIC 22 Foreign Currency Transactions and Advance Consideration clarifies which exchange rate should be used for prepayments of foreign currency transactions. The significant factor for determining the foreign exchange rate is therefore the date on which the non-monetary asset or non-monetary liability resulting from the advance payment is

first recognised. If several amounts of advance consideration are paid or received, the time of the transaction and thus also the exchange rate are determined for each individual payment. These amendments have no material impact on the UMH consolidated financial statements.

The amendments to IAS 28 Investments in Associates and Joint Ventures in the Annual Improvements to IFRSs 2014–2016 Cycle clarify that the option of venture capital organisations, investment funds and similar entities to measure their investments in associates and joint ventures at fair value through profit or loss may be exercised on an investment-by-investment basis. These amendments are of no significance for the UMH consolidated financial statements.

- **Endorsed IFRS changes not applied**

The following new accounting standards, changes to IFRSs and IFRIC interpretations were not applied early voluntarily:

- IFRS 16 Leases
- Amendments to IFRS 9 Prepayment features with negative compensation
- IFRIC 23 Uncertainty over income tax treatments

In the future, the regulations of IFRS 16 Leases will replace the content of IAS 17 Leases. The key changes pursuant to IFRS 16 relate to accounting by lessees. Lessees must henceforth recognise right-of-use assets for all leases and thus corresponding lease liabilities for the payment obligations entered into. Application exemptions are granted in the case of low-value assets and short-term leases. The note disclosure requirements for lessees and lessors are considerably more extensive with IFRS 16 in comparison to IAS 17. The new regulations of IFRS 16 affect all group companies that have rented or leased properties. As lessors, the Group companies are only affected to a small extent. Corresponding right-of-use assets and lease liabilities are recognised in the UMH Group, unless in individual cases the exceptions for short-term leases or low-value assets apply.

We currently expect rights-of-use assets and lease liabilities of approximately EUR 120 million to be recognised when applying IFRS 16 for the first time.

The amendments to IFRS 16 are effective and mandatory for annual periods beginning on or after 1 January 2019. Either the complete retrospective application method or the modified retrospective application method is stipulated. IFRS 16 will be applied within the UMH Group on the basis of the modified retrospective application method, which recognises cumulative adjustment amounts from the first-time application as at 1 January 2019 in retained earnings. With this method, IFRS 16 is applied to new and existing contracts not yet fulfilled at the time of the standard's initial application.

The amendment to IFRS 9 regarding prepayment features with negative compensation clarified ambiguity concerning the categorisation and measurement of financial instruments with symmetric termination rights. Accordingly, the cash flow criterion of IFRS 9 is not explicitly breached even in the case of an appropriate negative repayment penalty. The amendments are effective and mandatory for the first time from 1 January 2019. The implementation of the amendments is not expected to have any impact on the UMH consolidated financial statements.

Interpretation IFRIC 23 Uncertainty over income tax treatments includes regulations on the recognition and measurement of tax risk items and thus closes existing regulatory loopholes in IAS 12 Income Taxes. In particular, IFRIC 23 addresses whether an entity should consider each tax treatment independently or whether some tax treatments should be considered together, with assumptions that an entity makes regarding the review of tax treatment by the taxation authorities, with the determination of taxable profit (tax loss), the tax bases, unused tax losses, unused tax credits and tax rates, or taking into account changes in facts and circumstances. Tax risks shall be measured at the most probable value or expected value. In accordance with the Interpretation, the measurement method that best reflects the existing risk should be used.

The adoption of IFRIC 23 is not expected to result in any significant accounting changes as in the past tax risk items have been recognised at their best possible value. The Interpretation is effective and mandatory for the first time from 1 January 2019.

- **IFRS changes not yet endorsed**

The following new accounting standards issued by the IASB, amendments to existing accounting standards, interpretations and improvements to IFRSs have not yet been endorsed by the EU:

- IFRS 17 Insurance Contracts
- Amendments to IAS 28 – Long-term Interests in Associates and Joint Ventures
- Amendments to IAS 19 – Plan Amendment, Curtailment or Settlement
- Amendments to References to the Conceptual Framework in IFRS Standards
- Amendments to IFRS 3 Business Combinations
- Amendments to IAS 1 and IAS 8 – Definition of Material
- Annual Improvements to IFRSs 2015-2017 Cycle

IFRS 17 Insurance Contracts replaces IFRS 4 Insurance Contracts and pursues the aim of a consistent, principle-based accounting for all insurance contracts. It sets out principles for the recognition, measurement, presentation and disclosure of insurance contracts and requires the measurement of insurance liabilities at the current settlement value. The measurement generally takes place using a general model according to a 3-component approach. Insurance contracts with a term of less than one year can be shown using the simplified allocation method (Premium Allocation Approach). The effects on the UMH consolidated financial statements are currently being tested by the Group companies. IFRS 17 is effective and mandatory for annual periods beginning on or after 1 January 2021. Early adoption of IFRS 17 is permitted.

The amendment to IAS 28 regarding long-term interests in associates and joint ventures clarifies that an entity is to

apply IFRS 9 to long-term interests in an associate or joint venture that form part of the net investment in the associate or joint venture but to which the equity method is not applied. The date of first-time application of the amendments is 1 January 2019. Early adoption is permitted subject to endorsement in EU law.

Owing to the amendments to IAS 19 Plan Amendment, Curtailment or Settlement, in the future it will be required that in the event of a change, reduction or settlement of a defined benefit plan, the current service cost and the net interest for the remainder of the financial year should be remeasured using the current actuarial assumptions which have been used for the required remeasurement of net debt (asset). Additions were also made to clarify how a change, reduction or settlement affects the requirements of the asset ceiling. The amendments are effective and mandatory for the first time from 1 January 2019. Early adoption is permitted subject to endorsement in EU law.

The intention of the amendments to IFRS 3 Business Combinations is to make it easier to distinguish acquisitions of business activities from acquisitions of a group of assets. To be considered as a business activity, an acquisition as defined by the new definition of business activities must include resources (inputs) and a substantive process that together create the opportunity to generate output. The amended definition shall be applied to acquisitions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after 1 January 2020. Early adoption is permitted subject to the pending endorsement in EU law.

The amendments to IAS 1 and IAS 8 Definition of Material aim to improve the definition of materiality without fundamentally altering the application of the materiality principle. In particular, the amendments led to the new characteristic of concealing information, which resulted in the omission or misrepresentation of information. Subject to their adoption into EU law, the amendments shall be applied prospectively for financial years beginning on or after 1 January 2020.

The effects on the UMH consolidated financial statements of the amendments or improvements to IFRSs listed above are currently being examined.

The dates of first-time adoption for the approved IFRS amendments are subject to their being endorsed in EU law.

- **Voluntary changes in accounting policies**

There were no voluntary changes in accounting and measurement policies in the financial year.

[3] Consolidated group

In addition to UMH AG as the parent company, the UMH consolidated financial statements include 16 subsidiaries (previous year: 16) in which UMH AG directly or indirectly holds more than 50 % of the shares or voting rights. Ten of these subsidiaries (previous year: ten) have their registered office in Germany, while six (previous year: six) are headquartered in other countries. Ten subsidiaries (previous year: ten) that are not material to an understanding of the net assets, financial position and results of operations of the UMH Group have not been consolidated and are reported as investments in subsidiaries under investment securities.

The consolidated financial statements of UMH AG do not include any subgroups that prepare their own subgroup financial statements.

In the financial year, one investment fund (previous year: one) was included in the consolidated financial statements as a consolidated structured entity in accordance with IFRS 10.

One joint venture (previous year: one) – one of which is outside Germany (previous year: one) – is accounted for using the equity method.

Four associates (previous year: four) – four of which are in Germany (previous year: four) – are accounted for using the equity method.

In the financial year, there is no investment fund (previous year: one) that is not included in the consolidated group but is recognised as a subsidiary in financial assets under which UMH AG is in a position to exercise control and which is of minor importance for an understanding of the net assets, financial position and results of operations of the UMH Group.

Seven investment funds (previous year: seven) that UMH AG controls were held for sale as at the end of the reporting period.

A complete list of the subsidiaries, joint ventures, associates and investment funds included in the consolidated financial statements can be found in the list of shareholdings (note [66]).

[4] Principles of consolidation

Subsidiaries and investment funds are consolidated using the acquisition method. This method requires all of a subsidiary's assets and liabilities to be recognised at fair value at the acquisition date or at the date on which control is acquired (note [65]).

Any difference between the cost and the fair value of the assets and liabilities is recognised as goodwill under intangible assets. The carrying amount of goodwill is tested for impairment at least once a year or more frequently if there are any indications of possible impairment. An impairment loss is recognised if goodwill is found to be impaired.

Any negative goodwill is recognised immediately in profit or loss.

Intragroup assets, liabilities, income and expenses are eliminated in full. Profits or losses resulting from transactions within the group are eliminated unless the amounts concerned are immaterial.

Joint ventures and associates are accounted for using the equity method and are reported as shares in companies accounted for using the equity method. The cost of these

equity investments and any goodwill are determined at the time the investments are included in the consolidated financial statements for the first time. The same rules are applied as for subsidiaries.

The carrying amount of equity is adjusted over time based on the associates' and joint ventures' financial statements, which have been prepared in accordance with local accounting standards and reconciled to IFRS.

Occasionally, the UMH Group has holdings of funding provided for a number of investment funds, as a result of which the group is in a position to exercise control over the fund concerned. These holdings are consolidated unless they satisfy the criteria specified in IFRS 5 and are therefore to be reported as assets held for sale.

Investments in subsidiaries, joint ventures and associates that are of no material significance and are therefore not consolidated and equities and other shareholdings are recognised under investment securities and measured at fair value or, if their fair value cannot be reliably determined, at cost.

[5] Estimates

Assumptions and estimates must be made in accordance with the relevant financial reporting standards in order to determine the carrying amounts of assets, liabilities, income and expenses recognised in these consolidated financial statements. These assumptions and estimates are based on past experience, planning and expectations or forecasts of future events.

Assumptions and estimates are mainly used in determining the fair value of financial assets and financial liabilities and in identifying any impairment on financial assets. In addition, estimates have a significant influence on determining the carrying amounts of goodwill and intangible assets acquired in the course of business combinations. Assumptions and

estimates also have an impact on the measurement of provisions for employee benefits and other provisions in addition to the recognition and measurement of income tax assets and income tax liabilities.

Fair values of financial assets and financial liabilities

If there are no prices available for certain financial instruments on active markets, the fair values of such financial assets and financial liabilities have to be determined on the basis of estimates, resulting in some uncertainty. Estimation uncertainty mainly arises if fair values are calculated using measurement methods involving significant measurement parameters that are not observable on the market. This affects both financial instruments measured at fair value and financial instruments measured at amortised cost whose fair values are disclosed in the notes. The assumptions underlying the determination of fair values for the measurement parameters and measurement methods used are presented in the notes on financial instruments in note [59].

Impairment of financial assets

When testing financial assets in the 'financial assets measured at amortised cost' category and the 'financial assets measured at fair value through other comprehensive income' and financing lease receivables for impairment, the estimated future cash flows from interest payments, the repayment of principal and the recovery of collateral must be determined. This requires estimates and assumptions regarding the amount and timing of future cash flows, which in turn give rise to some uncertainty. Factors influencing evidence of impairment, which are determined by discretionary decisions, include, for example, economic conditions, the financial performance of the counterparty and the amount of collateral held. In addition, as part of determining evidence of impairment for portfolios, parameters such as probability of default, which are calculated using statistical models, are included in the estimates and assumptions.

Goodwill and intangible assets

Recognition of goodwill is essentially based on anticipated income and synergy effects and on intangible assets that cannot be recognised resulting from or acquired in the course of business combinations. Its carrying amount is reviewed using forecast figures based primarily on estimates. Identifiable intangible assets acquired in the course of business combinations are recognised on the basis of their future economic benefit. This is assessed by the management by means of appropriate and justified assumptions.

Provisions for employee benefits and other provisions

Uncertainty associated with estimates in connection with provisions for employee benefits primarily arises from the measurement of defined benefit pension obligations, on which actuarial assumptions have a material effect. Actuarial assumptions are based on a large number of long-term, forward-looking factors, such as salary increases, annuity trends and average life expectancy.

Actual future cash outflows due to items for which other provisions have been recognised may differ from the forecast utilisation of the provisions. The measurement bases and the assumptions and estimates used to determine the amount to be recognised for provisions are shown in note [50].

Income tax assets and liabilities

Deferred income tax assets and liabilities are calculated on the basis of estimates of the future taxable income of taxable entities. In particular, these estimates affect any assessment of the extent to which it will be possible to utilise deferred income tax assets in future. The calculation of current income tax assets and liabilities for the purposes of preparing HGB financial statements still requires estimates of details relevant to income tax.

Estimate whether variable considerations within the meaning of IFRS 15 are limited

The fee for the asset management service, which consists of current remuneration (and parts of the lump-sum remuneration and the performance-related management fee), should be recognised over the term in equal amounts for the term intervals of the range of services. Since the ongoing remuneration and the flat-rate fee are variable fees depending on the assets under management, this uncertainty is related to the total amount of the remuneration due over the term of the investment fund or an asset management agreement. The development of assets under management depends on the development of the fair value of the assets under management, on payments made or paid out to shareholders or deposits or disbursements on asset management mandates. Owing to the regulations of IFRS 15 for the limitation of the recognition of variable consideration, the variable remuneration in this case should not be fully included in the transaction price from the beginning. It is included only at the time in which the uncertainty is overcome, which is the case at each respective settlement date (usually monthly).

If performance-based remuneration components have been agreed, they are influenced, among other things, by market developments and thus by factors beyond the company's control. Since this income is subject to a large number and a wide range of possible outcomes due to significant risks of a downturn on the capital markets which cannot be excluded, it can only then be included in the amount of the transaction price subject to the provisions of IFRS 15 on the limitation of the recognition of variable consideration if the outperformance criteria agreed for a defined benchmark and the agreed assessment period have been met as there is no significant risk of cancellation up until this date.

If investment compensation has been agreed for property funds or other AIF property funds, it can only then be included in the amount of the transaction price due to the provisions of IFRS 15 on the limitation of the recognition of variable consideration if benefits and encumbrances have been

transferred or in the case of portfolio developments as soon as payments in the investment funds are settled according to the construction progress.

[6] Financial instruments

All financial assets and financial liabilities, including all derivatives, are recognised in the statement of financial position in accordance with IFRS 9. All financial instruments are measured at fair value on first-time recognition. The amounts initially recognised for financial assets and financial liabilities not measured at fair value through profit or loss include transaction costs directly attributable to the acquisition of the assets or liabilities concerned. The subsequent measurement of financial assets and financial liabilities depends on the IFRS 9 category to which they are assigned on addition.

Categories of financial instruments

- Financial assets or liabilities at fair value through profit or loss (fair value PL)

Financial assets that are not measured at amortised cost or at fair value through other comprehensive income should be categorised as 'financial assets at fair value through profit or loss'. This category comprises the subcategories below:

Financial assets mandatorily measured at fair value through profit or loss

The subcategory 'financial assets mandatorily measured at fair value through profit or loss' includes financial assets that do not meet the cash flow condition under IFRS 9 or that are acquired with the intention to subsequent disposal in the near future. For this purpose, these financial assets must be part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking or they must be derivative financial instruments that are not designated as hedges in effective hedging relationships.

The UMH group assigns units in investment funds and part of the loans and advances to banks to this category. This category also includes debt instruments that also come under the 'hold to collect and sell' business model. Derivative financial instruments also come under this category.

Financial assets from contingent consideration through business combinations

This subcategory includes contingent considerations that the acquirer has classified as financial assets in a business combination or analogous application of IFRS 3 for transactions based on IAS 28.

There are currently no cases of this being applied at the UM Group.

Financial assets designated at fair value through profit or loss (fair value option).

Financial assets classified at fair value through profit or loss may be assigned to the sub-category 'financial assets at fair value through profit or loss' if they are used to eliminate or substantially reduce recognition or measurement inconsistencies (accounting mismatches). The fair value option is used to eliminate or substantially reduce accounting mismatches resulting from the different measurement of non-derivative financial instruments and derivative financial instruments used to hedge them. Derivative financial instruments are measured at fair value through profit or loss, while non-derivative financial instruments are measured at amortised cost or changes in the fair value can be recognised through other comprehensive income. Failure to use hedge accounting will result in accounting mismatches that are significantly reduced by exercising the fair value option. In connection with avoiding accounting mismatches, the fair value option is exercised on financial assets for loans and advances to banks and customers as well as bearer shares and bonds. Financial instruments measured at fair value through profit or loss are categorised to eliminate or significantly reduce recognition or measurement mismatches (accounting mismatches).

The fair value option was not used within the UMH Group.

- **Financial assets measured at fair value through other comprehensive income (fair value OCI)**

The category comprises the subcategories below:

- **Financial assets mandatorily measured at fair value through other comprehensive income**

A category is classified if the financial asset is held within the framework of a business model whose objective is both the recognition of contractual cash flows and the sale of financial assets. In addition, the contractual terms of the financial asset on specified dates must result in cash flows that are solely payments of principal and interest on the principal amount outstanding.

Due to the cash flow conditions, these financial assets consist exclusively of debt instruments. They are measured at fair value. Interest income, impairment losses and effects from the currency translation reserve should be recognised in profit or loss. Differences between amortised cost and fair value are recognised in other comprehensive income. The amounts recognised in other comprehensive income must be reclassified to profit and loss (recycling).

In the UMH Group, no debt instruments are measured at fair value through other comprehensive income as at the end of the reporting period.

- **Financial assets designated at fair value through other comprehensive income (fair value OCI option).**

For equity instruments, the irrevocable option of designation is recognised as 'financial assets at fair value through profit or loss' (fair value OCI option). Except for dividends not transferred to capital, changes in fair value are recognised in consolidated other comprehensive income. Cumulative consolidated other comprehensive income is not subsequently reclassified to the income statement (recycling), for example due to the disposal of the instrument. After disposal of these equity instruments, the accumulated other comprehensive income is reclassified to retained earnings. The general option to exercise the fair value OCI only applies to equity

instruments that are not held for trading or are contingent consideration recognised by an acquirer in a business combination under IFRS 3.

For each new addition of an equity instrument, the UMH Group checks whether the option should be exercised. The option is currently being exercised for all equity instruments.

- **Financial assets measured at amortised cost**

It is classified in this category if the financial assets is held within a business model whose objective is to hold financial assets for the recognition of contractual cash flows. The contractual terms of the financial asset results in contractual cash flows that are solely payments of principal and interest on the principal amount outstanding (so-called cash flow condition). Financial assets in this category consist exclusively of debt instruments due to the cash flow condition. They are measured at amortised cost using the effective interest rate method. Interest income, impairment losses and effects from the currency translation reserve should be recognised in profit or loss.

The UMH Group assigns the majority of its loans and advances to banks and customers and trade receivables recognised under other assets.

- **Financial liabilities measured at fair value through profit or loss (fair value PL)**

Financial liabilities that are not measured at amortised cost should be categorised as 'financial assets measured at fair value through other profit or loss'. The category comprises the subcategories below:

- **Financial liabilities mandatorily measured at fair value through profit or loss**

The subcategory 'financial liabilities mandatorily measured at fair value through profit or loss' includes financial liabilities that do not meet the cash flow condition under IFRS 9 or that are acquired with the intention to repayment in the near

future. For this purpose, these financial liabilities must be part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking or they must be derivative financial instruments that are not designated as hedges in effective hedging relationships.

In the UMH Group, only derivative financial instruments are required to be measured at fair value through profit or loss on a regular basis.

- **Financial assets from contingent consideration through business combinations**

This subcategory includes contingent considerations that the acquirer has classified as financial liabilities in a business combination or analogous application of IFRS 3 for transactions based on IAS 28.

- **Financial liabilities measured at fair value through profit or loss (fair value option)**

Financial liabilities measured at fair value through profit or loss may be assigned to the sub-category 'financial liabilities at fair value through profit or loss' if they eliminate or significantly reduce recognition or measurement inconsistencies (accounting mismatches), which are managed as a portfolio based on the fair value or one or more embedded derivatives subject to separation.

For financial liabilities measured at fair value through profit or loss, the result from changes in the fair value of the financial liability attributable to changes in the credit risk of that liability must be recognised in other comprehensive income. The remainder of the change in fair value of the liability is recognised in profit or loss. The amounts recognised in other comprehensive income are not reclassified to profit or loss if the relevant financial liabilities are disposed of.

No financial liabilities are measured at fair value through profit or loss in the UMH Group.

- **Financial liabilities measured at amortised cost (AC)**

Financial liabilities are to be categorised as 'financial liabilities measured at amortised cost' for subsequent measurement. This excludes: 'financial liabilities measured at fair value through profit or loss', financial liabilities that arise when a transfer of a financial asset does not meet the derecognition requirement or the accounting is based on its continuing involvement, financial guarantees, credit commitments with a below-market rate of interest and contingent consideration that is recognised by a purchaser in a business combination in accordance with IFRS 3.

The UMH Group allocates all its liabilities to banks and customers and recognises trade payables under other liabilities in the statement of financial position.

Initial recognition and derecognition of financial assets and liabilities

Derivatives are initially recognised on the trade date. Regular way purchases and sales of non-derivative financial assets are accounted for at the settlement date. Changes in fair value between the trade date and settlement date are recognised in accordance with the category of the financial instrument.

In principle, financial instruments are measured at fair value on first-time recognition. In the case of financial assets or financial liabilities that are not measured at fair value through profit or loss, they are recognised plus or minus transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability.

Differences between transaction prices and fair values are recognised in profit or loss on initial recognition if the fair value equals the quoted market price for an identical asset or liability in an active market or is based on a measurement method that uses data only from observable markets. If the fair value at the time of acquisition is derived from transaction prices and this is also used as a measure in the subsequent measurement, changes in the fair value are only

recognised in profit or loss if they can be attributed to the change in observable market data. Differences not recognised upon initial recognition are distributed over the term of the relevant financial instruments and recognised accordingly.

Financial assets are derecognised if the contractual rights to cash flows from them expire or are transferred to third parties and there are no significant opportunities and risks associated with the financial assets. If the derecognition criteria for financial assets are not met, the transfer to third parties is accounted for as secured borrowing. Financial liabilities are derecognised if the contractual obligations have been settled, cancelled or expired.

Impairment losses and reversals of impairment losses on financial assets

Impairment losses in accordance with IFRS 9 apply only to financial assets that are debt instruments. However, equity instruments are not within the scope of IFRS 9. Impairment losses must be recognised for the financial assets below:

- Financial assets pursuant to the IFRS 9 category 'financial assets measured at amortised cost',
- Financial assets (only debt instruments) assigned to the IFRS 9 category 'financial assets measured at fair value through other comprehensive income',
- Open credit commitments for a currently existing legal obligation to lend (irrevocable credit commitments) if these are not measured at fair value through profit and loss,
- Financial guarantees if they are not measured at fair value through profit or loss.
- Lease receivables
- Trade receivables and contract assets that come under the scope of IFRS 15.

All financial assets are initially assigned to level 1. Purchased or originated credit-impaired assets (POCI) are an exception. 12-month expected credit losses are the minimum risk assessment measurement for level 1 assets.

At the end of each reporting period, the credit risk for each instrument is determined and checked to see whether it has significantly increased since the end of the previous reporting period. For debt instruments, important objective evidence includes financial difficulties on the part of the issuer or debtor, delay or default on interest payments or repayments of principal, failure to comply with ancillary contractually agreed arrangements or the contractually agreed provision of collateral, a significant downgrading in credit rating or issue of a default rating. Macroeconomic factors are not taken into account here as the volume of receivables that are not due daily is of minor importance.

Assets for which the credit risk has increased significantly since initial recognition but there is not any objective evidence that the assets are impaired are assigned to level 2. The impairment for these assets should be measured at the amount of the lifetime expected credit losses.

It can simply be assumed that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have low credit risk at the reporting date (low credit risk exemption). For loans and thus also for promissory note loans, the application of low credit risk exemption in the UMH Group is excluded. However, securities with a low default risk are not subject to an examination for a significant increase in default risk. Investment grade securities are assigned to level 1.

Financial assets that are classified as impaired on the basis of objective evidence must be assigned to level 3. The impairment for these assets should be measured at the amount of the lifetime expected credit losses.

Purchased or originated credit-impaired financial assets (POCI) must initially be recognised at their carrying amount less the expected credit losses over the full term and amortised accordingly at a risk-adjusted effective interest rate. As at the end of the reporting period, only the cumulative changes in lifetime expected credit losses since initial

recognition shall be recognised as a loss allowance. These assets are not expected to transfer levels.

The UMH Group uses a standardised default definition to assess the credit-impaired status of a financial asset. The definition of default is based on Article 178 CRR. Pursuant to this definition, there is a rebuttable presumption that a default event has occurred after 90 days of default.

If a financial asset is more than 30 days past due, the presumption under IFRS 9.5.5.11 may be refuted, according to which the past due risk leads to a significant increase in default risk. Unrated receivables are based on expert assessments. Otherwise, the rating of the counter party available is included.

The expected credit losses of receivables to customers and receivables to investments funds are determined on a collective basis.

In calculating the expected credit losses, the derivation of the expected probability of default to be stated is based on publicly available ratings. If it is determined at the end of the reporting period that there is no longer a significant increase in the default risk compared with previous reporting dates, the affected financial assets will be transferred back to level 1 and risk provisions reduced to the level of the expected 12-month credit loss. For a return back from level 3, the default status is reversed in accordance with the regulatory definition only after a corresponding period of good conduct.

The simplified approach in accordance with IFRS 9.5.5.15 is used at the UMH Group, whereby for receivables within the scope of application of IFRS 15 and other trade receivables, the expected credit loss over the entire term is initially determined.

For receivables in the scope of the simplified approach, the provision rates to be applied are based on the past experience of the UMH Group. Commission receivables are predominantly current receivables in accordance with IFRS 15, the carrying

amount of which, in the experience of the UMH Group, is not influenced by macroeconomic factors.

Direct impairment losses directly reduce the carrying amount of assets. Direct write-downs are recognised if we expect that the receivable has become uncollectible. These are generally insignificant minimum amounts.

If significant contractual adjustments are made to financial assets, these are derecognised and initially recognised as a new asset. To assess whether there is a substantial modification, a quantitative criterion is used in addition to various qualitative criteria. The threshold here is a change in the present value of the renegotiated contractual cash flows compared to the present value of the original contractual cash flows, which is significant at more than 10%. We consider a significant modification to be appropriate if it involves one of the following types of contractual adjustments: Currency conversion, inclusion or adjustment of equity conversion rights, change of debtor, inclusion of collateral agreements with which the cash flow criterion of IFRS 9 is no longer met. We also consider a significant modification to be appropriate if other contractual adjustments, taking into account the overall circumstances, have changed the nature of a financial asset to such an extent that a new financial instrument exists within the meaning of IFRS 9. For impaired assets (level 3), the regulations for POCI apply. If contractual adjustments of financial assets have no material impact, they are reviewed for a significant increase in default risk compared to the original date of acquisition.

In the current reporting period, no changes have been made to the assumptions for the calculation or the input factors of expected credit losses.

Compared to the expected loss approach in accordance with IFRS 9, impairment losses were previously recognised in accordance with the incurred loss model pursuant to IAS 39. Financial assets not measured at fair value through profit or loss were tested at the end of each reporting period to determine whether there was any objective evidence that

these assets were impaired. For impairment losses on debt instruments, objective evidence includes financial difficulties on the part of the issuer or debtor, delay or default on interest payments or repayments of principal. For equity instruments, objective evidence includes a significant or prolonged decrease in fair value.

Embedded derivatives

An embedded derivative is a component of a hybrid contract that also includes a non-derivative financial instrument (host) – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. A derivative that is attached to a financial instrument but is contractually transferable independently of that instrument, or has a different counterparty, is not an embedded derivative, but a separate financial instrument.

If a hybrid contract contains a host contract that is a financial asset, the requirements governing the categorisation of financial assets apply to the entire hybrid contract. In accordance with IAS 39, embedded derivatives were derived from the host contract and measured and recognised separately.

If a hybrid contract contains a host contract that is a financial liability, a derivative should be separated from the host contract and accounted for separately if:

- the economic characteristics and risks of the derivative are not closely related to the economic characteristics and risks of the host contract;
- a separate instrument with the same terms as the derivative would meet the definition of a derivative; and
- the host contract is not measured at fair value through profit or loss.

If these requirements are not met cumulatively, the embedded derivative may not be separated from the host contract.

If an embedded derivative is separated, the host contract shall be accounted for in accordance with the appropriate Standards.

If a contract contains one or more embedded derivatives and the host contract is not a financial asset, the entire hybrid contract can be designated at fair value through profit or loss. This does not apply to cases in which embedded derivatives only insignificantly change the contractual cash flows, or if when initially assessing comparable hybrid instruments with little or no analysis it is apparent that embedded derivatives should be separated.

Classes of financial instruments

The classes of financial instruments correspond to line items in the statement of financial position (note [55]).

[7] Fair value measurement of financial instruments

Fair value is the price at which an orderly transaction to sell an asset or to transfer a liability would take place between market participants at the measurement date. The fair value of financial instruments is determined on the basis of market prices or observable market data at the end of the reporting period or by using recognised measurement models. Investment fund units are measured at the redemption price less a redemption charge, if such a charge is stipulated in the contractual terms. If securities and derivatives can be traded with sufficient liquidity on active markets, i.e. market prices are available, or tradable prices can be established by active market participants, then these prices are used as the basis for determining fair value. If no prices are available from liquid markets, fair value is determined using techniques whose parameters are based on observable market data. Financial instruments with short remaining terms or repayable on demand are measured at their nominal amount. These instruments include cash in hand, current account credit balances and trade receivables.

[8] Currency translation

All monetary assets and liabilities are translated at the closing rate at the end of the reporting period into the relevant functional currency of the entities in the UMH Group. The

translation of non-monetary assets and liabilities depends on the way in which these assets and liabilities are measured. If non-monetary assets are measured at amortised cost, they are translated using the historical exchange rate. Non-monetary assets measured at fair value are translated at the closing rate. Income, expenses, gains and losses are translated at the prevailing closing rate when they are recognised either in profit or loss or in other comprehensive income.

If the functional currency of subsidiaries included in the financial statements of the UMH Group is different from the group's reporting currency (euro), all assets and liabilities are translated at the closing rate. Equity is translated at the historical rate. The resulting difference is reported in the currency translation reserve. Income and expenses are translated at the average rate. In most cases, the functional currency of the entities included in the consolidated financial statements is the euro, i.e. the group's reporting currency.

[9] Cash reserve

Cash and cash equivalents are cash in hand and balances with central banks and other government institutions. Cash and cash equivalents are measured at their nominal amount.

[10] Loans and advances to banks

Loans and advances to banks and customers include all receivables that are categorised either as 'financial assets measured at amortised cost', 'financial assets at fair value through profit or loss', 'financial assets measured at fair value through other comprehensive income'.

Loans and advances to banks and customers are measured at amortised cost using the effective interest method if they meet the cash flow criterion of IFRS 9 and are managed within the 'hold' business model. Apart from a few exceptions, this is the case in the receivables portfolio of the UMH Group. The fair value option was not used by the UMH Group for receivables.

Interest income from loans and advances to banks and customers is recognised under interest income from lending and money market operations.

Premiums, discounts and transaction costs are recognised in the income statement under net interest income. Deferred interest on receivables and premiums and discounts are reported with the respective loans and receivables under the corresponding statement of financial position items. Premium and discount amounts are allocated over the term of the loan or receivable using the effective interest method.

[11] Allowances for losses on loans and receivables

Allowances for losses on loans and receivables for cash reserve, loans and advances to banks and customers, financial assets and other assets, which are categorised at amortised cost or classified as finance leases, are deducted from assets as a separate item in the statement of financial position. Additions to and reversals of risk provisions for these financial position items are recognised in profit or loss as allowances for losses.

Impairment losses on loans and advances to banks and customers are determined in accordance with the regulations of IFRS 9 applicable to the respective category of financial assets and, depending on this, are disclosed as a separate item in the statement of financial position or recognised in the reserve from other comprehensive income.

Uncollectible loans and receivables are written off immediately; any subsequent receipts from loans and receivables already written off are recognised in the income statement.

Loan loss provisions also include changes to provisions for financial guarantees. Additions to and reversals of provisions for financial guarantees are also recognised through profit or loss in allowances for losses on loans and receivables.

In the past financial year, no allowances for losses on loans and receivables were recognised in accordance with IFRS 9.5.5.

In accordance with IAS 39, an allowance is recognised for losses on loans and receivables if there is objective evidence that it will not be possible to collect the full amount when due. The amount of the allowance was measured as the difference between the carrying amount and the present value of estimated future cash flows from this loan or receivable. Uncollectible loans and receivables were written off immediately; any subsequent receipts from loans and receivables already written off were recognised in the income statement. The total amount of the allowances for losses on loans and receivables was shown as a deduction from loans and advances to banks and customers on the face of the statement of financial position.

[12] Investment securities

Investment securities comprise bearer bonds and other fixed income securities, equities and other variable-yield securities and other shareholdings and investments in companies that are not materially significant, except where such securities or shares are not classified as held for trading. Investment securities also include shares in subsidiaries and investments in joint ventures and associates.

This item mainly consists of investment fund units. These investments comprise short-term investments for the purposes of liquidity management (liquidity), initial funding for newly launched funds (funding), investments in pension plans or employee retention programmes (employee investments) or longer-term capital investments (strategic investments). In addition, temporary investments in funds used to protect the liquidity of these funds are allocated to the 'funding' category.

The initial recognition of investment securities is generally based on fair value. The subsequent measurement of these financial assets depends on the IFRS 9 category to which they are assigned on acquisition. Gains and losses on the remeasurement of investment securities are reported under other net remeasurement income on financial instruments.

If these portfolios are equity instruments, they must be measured at fair value through profit and loss. In the UMH Group, the fair value OCI option was used for investments and unconsolidated subsidiaries held as at 1 January 2018. In the event of acquisitions of new equity instruments after 1 January 2018, the decision on whether to use the fair value OCI option is made on a case-by-case basis. If this item is a debt instrument, as is regularly the case with our own investments in investment fund units, it must be measured at fair value through profit or loss because the cash flow criterion of IFRS 9 is not met for these assets.

[13] Shares in companies accounted for using the equity method

Investments in associates and joint ventures are recognised at cost in the consolidated statement of financial position when significant influence is acquired or the entity is established. In subsequent years, the carrying amount of the equity is adjusted to take into account the group's share of the changes in equity. The equity carrying amount is reduced by dividend payments received. The group's share of the profit or loss from the associate or joint venture is recognised in the consolidated income statement as net income from companies accounted for using the equity method; the group's share of other comprehensive income is recognised in other comprehensive income. Gains, losses, impairment losses and reversals of impairment losses on investments in associates and investments in joint ventures accounted for using the equity method are recognised in net income from investment securities.

[14] Property, plant and equipment

Property, plant and equipment comprise the following assets used by the group for its own purposes: land and buildings that are expected to be used over more than one period and operating and office equipment.

Property, plant and equipment are measured at cost less depreciation, which is reduced by cumulative depreciation

and cumulative impairment losses in subsequent financial years. Depreciation is calculated on a straight-line basis over the useful life. Land is not depreciated.

The normal useful lives of property, plant and equipment are determined by taking into account expected physical wear and tear, technical obsolescence and legal and contractual restrictions.

If there are indications due to facts or circumstances that the assets may be impaired, the recoverable amount is determined. An impairment loss is recognised if the recoverable amount is less than the carrying amount at which the asset is recognised. The recoverable amount is the higher of the fair value less costs to sell and value in use.

The depreciation expense on property is recognised as an administrative expense. Impairment losses and gains are recognised in other operating income.

[15] Intangible assets

In addition to purchased software, intangible assets also include distribution and exclusive rights, customers and any goodwill.

Intangible assets are recognised at cost less depreciation. For the purpose of subsequent measurement, software, purchased customer relationships and other intangible assets with a finite useful life are reduced by cumulative depreciation and cumulative impairment losses.

If there are indications at the end of the reporting period that an intangible asset with a finite useful life may be impaired, the asset is tested for impairment. Intangible assets with indefinite useful lives, intangible assets not yet ready for use and goodwill are not amortised but are instead tested for impairment once a year. The Union Investment Group does not develop any of its own software as part of its software projects.

However, standard software products are customised, resulting in expenses that are regularly capitalised as ancillary costs for purchased software licenses.

The amortisation expense on intangible assets is included in administrative expenses (note [31]). Impairment losses, reversals of impairment losses and gains and losses on disposals of intangible assets are recognised under other operating result (note [32]).

[16] Assets and liabilities held for sale

The carrying amount of non-current assets or disposal groups for which a sale is planned is recovered principally through a sale transaction rather than through their continuing use. These assets and disposal groups therefore need to be classified as held for sale if the criteria set out below are satisfied.

To be classified as held for sale, the assets or disposal groups must be available for immediate sale in their present condition, subject only to terms that are usual and customary for sales of such assets or disposal groups, and it must be highly probable that a sale will take place. A sale is deemed to be highly probable if there is a commitment to a plan to sell the asset or disposal group, an active programme to locate a buyer and complete the plan has been initiated, the asset or disposal group is being actively marketed for sale at a price that is reasonable in relation to the current fair value, and a sale is expected to be completed within one year of the date on which the asset or disposal group is classified as held for sale.

Assets classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell. The assets are no longer depreciated or amortised from the date on which they are classified as held for sale.

Assets and disposal groups classified as held for sale are shown separately in the statement of financial position under non-current assets and disposal groups classified as held for

sale and liabilities included in disposal groups classified as held for sale. Gains and losses arising on remeasurement at the lower of carrying amount and fair value less costs to sell and gains and losses on the sale of these assets or disposal groups that represent a component of an entity are recognised in the consolidated income statement under net income from discontinued operations. Gains and losses arising on remeasurement and on the sale of assets or disposal groups that do not represent a component of an entity are recognised in the consolidated income statement under other operating result (note [32]).

Occasionally, the UMH Group has holdings of funding provided for a number of investment funds, as a result of which the group is in a position to exercise control over the fund concerned. These holdings are consolidated unless they satisfy the criteria to be classified as 'held for sale' as a disposal group and are reported according to IFRS 5. This is the case if the UMH Group actively endeavours to sell off the holdings immediately in order to ensure that the funding is repaid and if it is highly probable that the investment funds concerned will no longer be under the control of the UMH Group within one year of the initial acquisition of the holdings. They are measured at fair value in line with IFRS 9 in accordance with IFRS 5.5(c).

[17] Liabilities to banks and customers

Liabilities to banks and customers include all registered liabilities which are not classified as 'held for trading'. Liabilities to banks and customers are generally recognised at cost using the effective interest method. The fair value option was not used by the UMH Group for financial liabilities.

Interest expenses for liabilities to banks and customers are recognised separately in net interest income.

[18] Asset and liability derivatives

Derivative financial instruments with positive and negative fair values are assigned to the statement of financial position

items 'Asset derivatives' and 'Liability derivatives' if, despite the intention to hedge, the requirements for hedge accounting have not been met. Gains and losses on the remeasurement of these items are reported under other net remeasurement income on financial instruments.

Figures reported in the item 'Liability derivatives' represent funding gaps in capital preservation commitments in accordance with Section 1 (1) no. 3 of German Personal Pension Plan Certification Act (AltZertG) in connection with the UniProfiRente product issued by Union Investment Privatfonds GmbH to the extent that such funding gaps arise on the measurement of each individual contract as specified in Section II no. 1 in conjunction with Section V of circular 2/2007 (BA) issued by Germany's Federal Financial Supervisory Authority (BaFin) on 18 January 2007. The amounts recognised as liabilities in each case represent the difference between the present value of the pension plan contributions guaranteed in accordance with Section 1 (1) no. 3 AltZertG and the market value of the customer portfolio, provided that this difference is positive.

In addition, the 'Liability derivatives' statement of financial position item includes funding gap risks arising from guarantee funds that were issued by asset management companies belonging to the group. The carrying amount is recognised as the difference between the present value of the guarantee commitments at the next guarantee date of a fund and the net asset value of the fund, provided that this difference is positive.

Under the 'Asset derivatives' statement of financial position item, a call option is capitalised that entitles UMH AG to acquire additional shares in ZBI Partnerschafts-Holding GmbH and can be exercised on 14 May 2022 at the earliest. In addition, UMH AG has recognised put options, as the writer, that entitle the option holder to offer UMH AG shares in ZBI Partnerschafts-Holding GmbH on 30 April 2022 at the earliest. These are reported under the 'Liability derivatives' item.

The exercise price of the call and put options is the normalised EBT (earnings before taxes) attributable to the optioned shares multiplied by a contractually agreed factor. The normalised EBT equals the company's average annual consolidated earnings before taxes for the last three full financial years before the exercise of the respective option. On this basis, the Black-Scholes model is used to measure these options, the key parameters of which include the expected normalised EBT for the last three full financial years before the expected exercise date and the current enterprise value of the ZBI Group (strike price).

When determining the carrying amounts of market values from derivative financial instruments, valuation haircuts for credit risk or own credit risk are taken into account, if necessary.

[19] Provisions for employee benefits

Provisions for employee benefits are recognised in accordance with IAS 19.

A distinction is made in occupational pension schemes between defined contribution plans and defined benefit plans. In defined contribution plans, the entity concerned has no obligation other than to pay contributions to an external pension provider. The providers covering the pension entitlements of employees in the Union Investment Group's German companies are as follows: BVV Versicherungsverein des Bankgewerbes a.G., Berlin (BVVaG), BVV Versorgungskasse des Bankgewerbes e.V., Berlin (BVVeV), R+V Pensionsversicherung a.G., Wiesbaden (RVPaG), R+V Pensionsfonds Aktiengesellschaft, Wiesbaden (RVP) and Versorgungskasse genossenschaftlich orientierter Unternehmen VGU e.V., Wiesbaden (VGUeV). All these plans are defined benefit plans, but they are treated as defined contribution plans in accordance with the rules for multi-employer plans specified in IAS 19.34.

Under defined benefit plans, the entity concerned has an obligation to pay the benefits promised to current and former employees, although there is a distinction between plans

funded by provisions and those funded by third-party arrangements.

In accordance with IAS 19, the Union Investment Group recognises provisions for obligations arising in connection with pension entitlements and current benefits payable to eligible current and former employees of the group and their surviving dependants (the plans being funded by both employer and employees). There are various different pension systems in operation at the individual Union Investment Group sites depending on local legal, financial and tax circumstances. However, all the systems are generally based on the length of service and the individual employee's level of remuneration.

Since 1 November 2007, the remaining pension obligations under employer-funded pension commitments to retirees and former employee beneficiaries with vested pension entitlements and to a significant proportion of the beneficiaries who are still employed have been funded via VGUeV or RVP. As these remaining obligations are funded via external pension providers, the UMH Group does not have any direct payment obligations in respect of these people.

The defined benefit obligation of UMH Group companies is measured in accordance with IAS 19 using the projected unit credit method and is based on actuarial reports. The calculation of the obligation takes into account current projections of mortality, invalidity and employee turnover, expected increases in salaries, entitlements and pensions, and uses a realistic discount rate. The discount rate is based on interest rates currently available for long-term corporate bonds from investment-grade issuers, and was set at 1.75 % (previous year: 1.75 %). Mortality and invalidity assumptions are derived from the Heubeck 2018 G mortality tables. Irrespective of the investment structure of the existing plan assets and pension insurance policies, the expected return for the financial year on the plan assets and pension insurance policies was determined using a discount factor of 1.75 %.

The employer-funded pension obligations are covered by VGUeV and RVP assets, which may be used solely for the

purposes of meeting the pension commitments and are protected from the claims of any creditors. The VGUeV and RVP assets are plan assets as defined by IAS 19 and are netted against the pension obligations. If the assets exceed the pension obligations, an asset item is reported in accordance with IAS 19. If the assets do not cover the obligation, the net obligation is recognised under provisions for pensions.

In some cases in the past, pension insurance policies were taken out to cover the risks arising from pension obligations. Some of these policies are pledged to employees. The premiums are paid by the Union Investment Group.

The obligations arising from the deferred compensation scheme (employee-funded) are covered by investments in Union Investment Group investment fund units. Since September 2013, these investment fund units have been held in a contractual trust arrangement (CTA) by R+V Treuhand GmbH, Wiesbaden. They are plan assets as defined by IAS 19 and are netted against the corresponding pension obligations.

Actuarial gains or losses can arise from increases or decreases in the present value of the defined benefit obligation, the fair value of plan assets or reimbursement rights. The reasons for these actuarial gains or losses can include changes in the calculation parameters, changes in the estimates of risk from pension obligations, differences between the actual and expected return on plan assets and differences between the actual and expected return on reimbursement rights.

Actuarial gains and losses on defined benefit obligations, plan assets and reimbursement rights are recognised in their comprehensive income in accordance with IAS 19.120(c).

Provisions are recognised to cover obligations arising from partial retirement schemes. Since 2015, the investment fund units to secure partial retirement claims have been held in a contractual trust arrangement (CTA) by R+V Treuhand GmbH, Wiesbaden. The provisions for partial retirement arrangements are netted against the fair value of the investment units.

[20] Other provisions

Other provisions are recognised in accordance with IAS 37.

When determining the amount to be recognised for provisions, the UMH Group must make assumptions regarding the probability of an outflow of resources. Although these assumptions are a best estimate based on the prevailing circumstances in each case, the need to make assumptions means that a degree of uncertainty is involved. When measuring provisions, assumptions also have to be made regarding the likely amount of the outflow of resources. A change in the assumptions used can alter the amount recognised for the provisions.

Provisions for financial guarantees that fall within the scope of IFRS 9 are measured at fair value on initial recognition. They are subsequently measured at the higher of any provision recognised in accordance with IAS 37 and the amount initially recognised.

[21] Income

Interest and dividends

Interest is recognised using the effective interest method and recognised on an accrual basis.

The cash flows used to calculate the effective interest rate used take account of contractual arrangements in connection with the respective financial assets and financial liabilities.

Dividend income from unconsolidated subsidiaries, equity investments and distributions from investment fund units are recognised at the date that the legal entitlement to the payment arises.

Revenue from contracts with customers

In the UMH Group, contracts are concluded that may include the provision of multiple services. The resulting revenue is

posted separately if a service is to be classified as a separately definable performance obligation.

Revenue from contracts with customers is recognised when the underlying services have been performed, it is probable that the economic benefits will flow to the group and the amount of the income can be reliably determined. Thus, income is either recognised over the period in which the underlying services are performed or recognised directly in profit or loss after the service has been performed.

In the UMH Group, revenue from contracts with customers is primarily commission income.

Commissions earned over the period of the performance obligations include, in particular, fees for the management of investment funds or for asset management in other formats, as well as for the holding of securities ('union depots').

The UMH Group receives performance-based management fees from some contracts. These are contingent upon exceeding agreed absolute or relative outperformance criteria that vary from product to product and may include monthly, quarterly, annual or longer measurement periods. In the case of performance-based management fees, revenue is received when the amount of that provision can be reliably estimated and it is highly likely that there will be no significant reversal in the recognised revenue as soon as uncertainty ceases to exist. Due to the risks of a downturn on the capital markets which cannot be excluded, these commissions are therefore regularly collected if the agreed outperformance criteria have been met in relation to the defined benchmark and the measurement period, as there is no significant risk of cancellation up until this date.

For some contracts with customers, the capital management companies of the UMH Group have the option of involving third parties in the provision of services to customers. In these cases, with few exceptions, the UMH Group is generally regarded as the originator ('principal') of these agreements because it has the power to dispose of the services promised to the customers.

The practical expedient waiver to adjust consideration to impact from a financing component (IFRS 15.63), recognition of costs of obtaining a contract as an expense (IFRS 15.94) and waiver of performance obligations (IFRS 15.121) are applied.

[22] Income taxes

Current and deferred tax assets are reported under income tax assets; current and deferred tax liabilities are reported under income tax liabilities.

Current income tax assets and liabilities are calculated using current tax rates. A corporation tax rate of 15.0% (previous year: 15.0%) and a solidarity surcharge of 5.5% (previous year: 5.5%) of corporation tax is used for the German companies. The trade tax rate for the subsidiaries was 16.1% (previous year: 16.1%). Deferred tax assets and liabilities arose in connection with differences between the carrying amounts of assets and liabilities in accordance with IFRS and those in the tax base. These differences are expected to affect income tax liabilities or refunds in the future (temporary differences). Deferred taxes were measured using the tax rates expected to apply in the country of the company concerned in the period in which the taxes will actually be paid or recovered. Deferred tax assets for as yet unused tax loss carry-forwards are only recognised if it is probable that there will be sufficient future taxable profits in the same tax entity against which the losses can be utilised. Current tax receivables and payables are reported separately and are not netted, nor are they discounted.

Deferred tax assets and liabilities are recognised either in profit or loss (under income taxes) or in equity, depending on the treatment of the items to which they relate. Deferred tax assets and deferred tax liabilities are netted in the statement of financial position if they relate to the same tax authorities.

Other, non-income-related taxes are reported under other operating result (note [32]).

There were no changes to tax rates or tax legislation after the end of the reporting period that could have a significant impact on the UMH Group's income tax assets or liabilities.

The income tax expense represents the total of the current tax expense and the deferred taxes. The current tax expense is calculated on the basis of the taxable income for the year. Taxable income is different from the net income for the year reported in the income statement because taxable income disregards income and expense that is not taxable / deductible for tax purposes or that is only taxable / deductible for tax purposes in subsequent years. The UMH Group's current tax liabilities were calculated using the tax rates in force at the end of the reporting period or enacted prior to the end of the reporting period.

The UMH Group is required to pay income taxes in various countries, and the basis for measuring this liability varies from country to country. Provisions for taxes worldwide were recognised on the basis of profits determined in accordance with local stipulations and locally applicable tax rates. However, there are some transactions whose final taxation cannot be definitively determined during the normal course of business. The amount of the provisions set aside for these matters is based on estimates as to the probability of additional tax becoming due in the future and the amount of such liabilities. An appropriate provision is recognised for any risks arising from different tax treatment. If the final taxation of these transactions differs from the tax originally assumed, this will affect the current and deferred taxes recognised in the period in which the taxation is definitively determined.

The UMH Group also needs to make estimates to determine whether any impairment losses need to be recognised on deferred tax assets. There are two key elements in deciding whether deferred tax assets are impaired: an assessment of the probability that temporary measurement differences will reverse and an assessment as to whether the loss carry-forwards that have given rise to the recognition of deferred tax assets can be utilised. These factors depend on the availability of future taxable profits during the periods in which the temporary measurement differences reverse and the tax loss carry-forwards can be utilised. The interpretation of complex tax legislation and the amount and timing of future taxable income are subject to a degree of uncertainty. There may be changes to the taxes payable in future periods as a consequence of differences between actual outcomes and assumptions or future changes in these assumptions, especially in view of the increasing interdependence of international markets.

[23] Contingent liabilities

Contingent liabilities are possible obligations arising from past events. The existence of these obligations will only be confirmed by future events outside the control of the UMH Group. Present obligations arising out of past events but not recognised because of the improbability of an outflow of resources embodying economic benefits also constitute contingent liabilities.

The amount of contingent liabilities is disclosed in the notes, unless the possibility of an outflow of resources embodying economic benefits is extremely low.

Contingent liabilities are measured at the best estimate of possible future outflows of resources embodying economic benefits.

Contingent liabilities for litigation risks are recognised when it is more likely than not to believe that there is no present obligation, but the possibility that the litigation will result in a liability for a UMH Group entity is not unlikely. Risks from legal disputes are measured according to the probability of them occurring.

[24] Leases

Under IAS 17, a lease is classified as an operating lease if substantially all the risks and rewards incidental to ownership are not transferred to the lessee. In operating leases, the lessor accounts for the assets. By contrast, a finance lease is a lease that transfers substantially all the risks and rewards incidental to ownership of the asset concerned to the lessee.

There is also a very small number of cases in which rental income is earned from leasing office space to third parties. All such leases are operating leases. Lease payments under an operating lease are recognised on a straight-line basis over the term of the lease and reported as administrative expenses.

There were no contractual arrangements classified as finance leases in the reporting year.

Consolidated income statement disclosures

[25] Net interest income

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Interest income and current income	8,880	14,070	-5,190
from lending and money market operations	283	356	-73
from negative interest on financial assets	-952	-477	-475
from investment fund units	8,342	12,614	-4,272
from equity investments	6	7	-1
from investments in subsidiaries	1,201	1,570	-369
Interest expenses	-958	-981	23
for liabilities to banks and customers	-1,090	-977	-113
for other liabilities	132	-4	136
Total	7,922	13,089	-5,167

Interest income collected using the effective interest method amounts to EUR 283 thousand.

[26] Allowances for losses on loans and receivables

	2018 EUR thousand
Allowances for losses on loans and receivables to banks	-
Addition	-
Reversal	-
Net income from modification	-
Directly recognised impairment losses	-
Receipts from directly recognised loans and receivables	-
Allowances for losses on loans and receivables to customers	-27
Addition	-
Reversal	-
Net income from modification	-
Directly recognised impairment losses	-29
Receipts from directly recognised loans and receivables	2
Allowances for other receivables	-
Addition	-
Reversal	-
Net income from modification	-
Directly recognised impairment losses	-
Receipts from directly recognised loans and receivables	-
Total	-27

Contracts with customers within the meaning of IFRS 15 account for an impairment loss of EUR -29 thousand.

Comparative information in accordance with IAS 39

	2017 EUR thousand
Directly recognised write-downs	-15
Receipts from loans and receivables written off	-
Total	-15

[27] Net fee and commission income

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Fee and commission income	2,448,308	2,312,823	135,485
from sales commission	310,042	30,934	279,108
from management fees	1,979,838	2,021,414	-41,576
from securities custody accounts	52,349	51,347	1,002
Other	106,079	209,128	-103,049
Fee and commission expenses	-1,032,439	-898,197	-134,242
for volume-based commission	-680,074	-689,774	9,700
for revenue-based commission	-282,455	-7,970	-274,485
for securities custody accounts	-4,169	-16,123	11,954
Other	-65,741	-184,330	118,589
Total	1,415,869	1,414,626	1,243

Commission income is attributable to revenue from contracts with customers including funds.

The volume-based sales commission generated from the sale of fund units with a front-end fee, which is dependent on the transaction volume is used, among other things, to cover sales and marketing expenses. The amount of front-end fees is calculated in each case according to a percentage surcharge on the net asset value of the fund unit issued under investment conditions. Front-end fees are recognised at the date of the sale. While up to 2017, the amount recognised was reduced by the portion of the sales commission passed on to sales partners, with any such reduction reported as a deduction from revenue, since the first-time adoption of IFRS 15, the gross income received is shown here and the amounts paid to the distribution partners (2018: EUR 278.0 million, see Reconciliation (1)) under revenue-related commission expenses as we provide the sales performance to our clients as the principal.

The management fees represent the payment of consideration for the management of mutual funds, special funds, individual portfolios and portfolios forming part of advisory agreements with institutional clients. Management fees vary depending on the asset classes

being managed and sometimes include performance-based components. In the case of performance-based management fees, revenue is received if the agreed outperformance criteria have been met in relation to a defined benchmark and the agreed measurement period, as there is no significant risk of cancellation up until this date. Flat-rate payments are partly levied to cover costs defined in the contract. The ongoing management fees and lump-sum payments, which are contractually agreed as a percentage of the assets under management, are recognised over a period of time and generally settled on a monthly basis.

Management fees also include investment compensation agreed for the management of the property funds or other alternative investment vehicles. These are collected at the time of the transfer of benefits and encumbrances or, in the case of project developments, at the time the payments are settled in the investment funds in accordance with construction progress. As a result of the first-time application of IFRS 15, as at 2018, income from administration or lump-sum payments, if they relate to performance obligations rendered as agents, are reduced by the fees paid to external service providers EUR 97.1 million, of which EUR 94.3 million for services performed by the custodian, see Reconciliation (2), and EUR 2.8 million for the audit services provided to the investment funds, see Reconciliation (3)).

The management fees shown in the table above include commission income from securities lending transactions which the management companies of the UMH Group recognised for the account of the customers. Any income is received over the period in which the service was performed. The commission income from securities lending transactions is distributed between the Group's management companies and investment funds or the assets managed for clients in other formats, from which the securities are lent.

Income from securities custody accounts are primarily attributable to recognising custody account fees over a period for the union depots held by Union Investment Service Bank AG, Frankfurt am Main. These custody account fees are accrued monthly as receivables and are usually collected in December. This also includes fees for other services provided as part of the custody account management, which are collected at the time the service is provided. Other fee and commission income includes income from the brokerage of investment funds of external capital management companies. As the UMH Group acts as an agent here, in 2018 this income is recognised for the first time after deduction of the amounts paid to the distribution partners (EUR 127.3 million, see Reconciliation (4)) only in the amount of the margin achieved (EUR 48.8 million).

Reconciliation in accordance with IFRS 15.C8(a) of the presentation of the 2018 financial year compared to the presentation if IAS 18 continued to apply:

	2018 (IFRS 15) EUR thousand	Reconciliation EUR thousand	2018 (IAS 18) EUR thousand
Fee and commission income	2,448,308		2,394,676
from sales commission	310,042	-278,034 (1) +94,255 (2)	32,008
from management fees	1,979,838	+2,811 (3)* +127,336 (4)	2,204,240
from securities custody accounts	52,349		52,349
Other	106,079		106,079
Fee and commission expenses	-1,032,439		975,926
for volume-based commission	-680,074	-94,255 (2)	-774,329
for revenue-based commission	-282,455	+278,034 (1)	-4,421
for securities custody accounts	-4,169		-4,169
Other	-65,741	-127,336 (4)	-193,007
Total	1,415,869	+2,811	1,418,680

* In accordance with IAS 18, this expense is recognised under administrative expenses, see table in note [31], report row "Other administrative expenses – miscellaneous".

[28] Net income from investment securities

	2018 EUR thousand
Gains and losses from the disposal of shares and other variable-yield securities (including other shareholdings)	-23,027
Gains and losses from the disposal of shares and other variable-yield securities	–
Gains and losses from the disposal of investment fund units	-23,027
Total	-23,027

Comparative information in accordance with IAS 39

	2017 EUR thousand
Gains and losses on the sale or change in fair value of available-for-sale equities and other variable-yield securities (including other shareholdings)	0
Gains and losses on the sale of other shareholdings or on the recognition of impairment losses for other shareholdings	0
Gains and losses realised on the sale of other shareholdings measured at cost	0
Gains and losses on the sale or change in fair value of investments in joint ventures	8,204
Impairment on investments in joint ventures accounted for using the equity method	–
Reversal of impairment on investments in joint ventures accounted for using the equity method	8,204
Total	8,204

[29] Other net remeasurement income on financial instruments

	2018 EUR thousand
Gains and losses on derivatives used for purposes other than trading	-22,728
Fair value gains and losses on derivatives used for purposes other than trading	-20,472
Realised gains and losses on derivatives used for purposes other than trading	-2,256
Gains and losses from contingent consideration through business combinations	-11,000
Remeasurement income on financial liabilities from contingent consideration	-5,000
Realised gains and losses on liabilities from contingent consideration	-6,000
Income from financial assets mandatorily measured at fair value through profit or loss	-17,111
Income from financial assets mandatorily measured at fair value through profit or loss	-17,111
Net remeasurement income from investment units mandatorily measured at fair value through profit or loss	-17,111
Total	-50,839

Gains and losses from contingent consideration through business combinations relate to a transaction pursuant to IAS 28 and depends on the sales targets achieved.

Comparative information in accordance with IAS 39

	2017 EUR thousand
Gains and losses on derivatives used for purposes other than trading	11,600
Fair value gains and losses on derivatives used for purposes other than trading	11,701
Realised gains and losses on derivatives used for purposes other than trading	-101
Net income from financial instruments measured at fair value through profit or loss	1,716
Gains and losses on shares and other variable-yield securities (including other shareholdings)	4,856
Fair value gains and losses on shares and other variable-yield securities (including other shareholdings)	6,420
Realised gains and losses on shares and other variable-yield securities (including other shareholdings)	-1,564
Net income from investments in subsidiaries	20
Net remeasurement income from investments in subsidiaries	19
Realised net income from investments in subsidiaries	1
Net income from derivative financial instruments in relation to non-derivative financial instruments	-3,160
Realised net income from derivative financial instruments in relation to non-derivative financial instruments	-3,160
Total	13,316

[30] Net income from companies accounted for using the equity method

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Joint ventures	6,221	4,626	1,595
Associate	10,890	11,312	-422
Total	17,111	15,938	1,173

[31] Administrative expenses

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Staff costs	-405,649	-395,182	-10,467
Wages and salaries	-354,805	-346,871	-7,934
Social security contributions	-36,330	-34,022	-2,308
Pensions and other post-employment benefit expenses	-14,514	-14,289	-225
Other administrative expenses	-450,488	-427,240	-23,248
IT expenses	-104,880	-106,276	1,396
Public relations/marketing	-78,119	-75,143	-2,976
Consulting	-66,037	-65,422	-615
Office expenses	-51,171	-52,983	1,812
Property and occupancy costs	-41,985	-41,158	-827
Miscellaneous	-108,296	-86,258	-22,038
Depreciation and amortisation expense	-38,547	-35,962	-2,585
Property, plant and equipment	-5,463	-4,633	-830
Intangible assets	-33,084	-31,329	-1,755
Total	-894,684	-858,384	-36,300

[32] Other operating result

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Other operating income	37,827	33,726	4,101
Income from the reversal of deferred liabilities	13,328	9,520	3,808
Income from the refund of other taxes	6,890	7,788	-898
Income from the reversal of provisions	3,293	2,850	443
Income from exchange differences on currency translation	241	165	76
Miscellaneous other operating income	14,075	13,403	672
Other operating expenses	-8,408	-30,345	21,937
Impairment losses on intangible assets	-3,502	-4,685	1,183
Expenses for other taxes	-2,041	-2,406	365
Write-downs on purchased customer relationships	-474	-474	-
Expenses for exchange differences on currency translation	-357	-405	48
Impairment losses on property, plant and equipment	-85	-	-85
Expenses for restructuring measures	-26	-500	474
Impairment losses on other assets	-	0	0
Miscellaneous other operating expenses	-1,923	-21,875	19,952
Total	29,419	3,381	26,038

[33] Income taxes

The breakdown of income taxes is as follows:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Current tax expense	-175,562	-187,634	12,072
Deferred taxes	20,745	-1,179	21,924
Total	-154,817	-188,813	33,996

The following reconciliation shows the relationship between consolidated earnings before taxes and income taxes in the financial year:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Consolidated earnings before taxes	501,744	610,155	-108,411
× income tax rate	31.190 %	31.155 %	0.035 %
= expected income tax expense in financial year	156,494	190,094	-33,600
Deduction from tax owing to tax-exempt income	-9,708	-15,551	5,843
Addition to tax owing to non-deductible expenses	6,497	8,299	-1,802
Trade tax variance	4,097	4,754	-657
Tax rate differences on income subject to taxation in other countries	-3,723	-4,543	820
Current tax expense / income relating to prior periods	-631	2,643	-3,274
Deferred tax expense / income relating to prior periods	-72	0	-72
Change in impairment of deferred tax assets	-184	-245	61
Other	2,047	3,362	-1,315
Tax expense in accordance with IFRS	154,817	188,813	-33,996

The deferred tax income (expense) attributable to temporary differences or the reversal thereof that did not result from either loss carry-forwards or tax rate differences amounted to EUR 20,674 thousand (previous year: EUR -1,179 thousand).

The deferred tax expense/income attributable to tax rate changes or the introduction of new types of tax is shown separately in the reconciliation.

Statement of comprehensive income disclosures

[34] Amounts reclassified to profit or loss

As in the previous year, no amounts were reclassified from other comprehensive income to the consolidated income statement in the financial year.

[35] Income taxes relating to components of other comprehensive income

Income taxes relating to components of other comprehensive income:

	2018 EUR thousand
The table below shows the income taxes relating to the various components of other comprehensive income:	1,265
Income taxes relating to components of other comprehensive income	-31
The table below shows the income taxes relating to the various components of other comprehensive income (after taxes)	1,234
Exchange differences on currency translation of foreign subsidiaries (before taxes)	-1,657
Income taxes relating to components of other comprehensive income	-31
Exchange differences on currency translation of foreign subsidiaries (after taxes)	-1,688
Share of other comprehensive income of joint ventures and associates accounted for using the equity method (before taxes)	2,922
Income taxes relating to components of other comprehensive income	–
Share of other comprehensive income of joint ventures and associates accounted for using the equity method (after taxes)	2,922
Amounts not reclassified to profit or loss (before taxes)	-11,490
Income taxes relating to components of other comprehensive income	7,028
Amounts not reclassified to profit or loss (after taxes)	-4,462

	2018 EUR thousand
Gains and losses from equity instruments for which the fair value OCI option was exercised (before taxes)	-2,136
Income taxes relating to components of other comprehensive income	22
Gains and losses from equity instruments for which the fair value OCI option was exercised (after taxes)	-2,114
Actuarial gains and losses on defined benefit plans (before taxes)	-9,202
Income taxes relating to components of other comprehensive income	7,004
Actuarial gains and losses on defined benefit plans (after taxes)	-2,198
Share of other comprehensive income of joint ventures and associates accounted for using the equity method (before taxes)	-152
Income taxes relating to components of other comprehensive income	–
Share of other comprehensive income of joint ventures and associates accounted for using the equity method (after taxes)	-152
Other comprehensive income (before taxes)	-10,225
Income taxes relating to components of other comprehensive income	6,997
Other comprehensive income (after taxes)	-3,228

Comparative information in accordance with IAS 39

	2017 EUR thousand
The table below shows the income taxes relating to the various components of other comprehensive income:	11,532
Income taxes relating to components of other comprehensive income	-147
Income taxes relating to components of other comprehensive income Amounts reclassified to profit or loss (after taxes)	11,385
Gains and losses on available-for-sale financial assets (before taxes)	16,172
Income taxes relating to components of other comprehensive income	-195
Gains and losses on available-for-sale financial assets (after taxes)	15,977
Exchange differences on currency translation of foreign subsidiaries (before taxes)	1,773
Income taxes relating to components of other comprehensive income	48
Exchange differences on currency translation of foreign subsidiaries (after taxes)	1,821
Share of other comprehensive income of joint ventures and associates accounted for using the equity method (before taxes)	-6,413
Income taxes relating to components of other comprehensive income	–
Share of other comprehensive income of joint ventures and associates accounted for using the equity method (after taxes)	-6,413

	2017 EUR thousand
Amounts not reclassified to profit or loss (before taxes)	4,964
Income taxes relating to components of other comprehensive income	-1,580
Amounts not reclassified to profit or loss (after taxes)	3,385
Actuarial gains and losses on defined benefit plans (before taxes)	4,965
Income taxes relating to components of other comprehensive income	-1,580
Actuarial gains and losses on defined benefit plans (after taxes)	3,385
Other comprehensive income (before taxes)	16,497
Income taxes relating to components of other comprehensive income	-1,727
Other comprehensive income (after taxes)	14,770

Consolidated statement of financial position disclosures

[36] Cash reserve

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Cash in hand	30	18	12
Total	30	18	12

[37] Loans and advances to banks

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Loans and advances to banks in Germany	475,724	320,754	154,970
of which repayable on demand	473,778	319,071	154,707
Loans and advances to banks outside Germany	296,919	52,227	244,692
of which repayable on demand	293,791	49,002	244,789
Total	772,643	372,981	399,662

The maximum risk for receivables is the carrying amount.

[38] Loans and advances to customers

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Loans and advances to customers in Germany	50,395	43,268	7,127
Loans and advances to customers outside Germany	33,166	32,053	1,113
Total	83,561	75,321	8,240

Loans and advances to customers included loans of EUR 16 thousand secured by mortgage (previous year: EUR 17 thousand). The carrying amount is the maximum credit risk for the remaining receivables.

Loans and advances to customers also included employer loans to salaried staff amounting to EUR 16 thousand (previous year: EUR 17 thousand).

In addition, they include receivables from customers of EUR 7,115 thousand (previous year: EUR 8,659 thousand) in respect of deferred custody account fees for investment accounts under Germany's Capital Accumulation Act (VermBG).

[39] Asset derivatives

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
From other transactions	48,924	37,040	11,884
Total	48,924	37,040	11,884

[40] Investment securities

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Equities and other variable-yield securities	975,205	1,338,642	-363,437
Equities	32	32	–
Investment fund units	969,640	1,336,962	-367,322
Other shareholdings	5,533	1,648	3,885
Investments in subsidiaries	22,847	29,203	-6,356
Total	998,052	1,367,845	-369,793

Changes in investment securities

	Equities and other variable-yield securities EUR thousand	Investments in subsidiaries EUR thousand	Total EUR thousand
Carrying amount as at 1 Jan. 2017	1,169,212	13,401	1,182,613
Cost as at 1 Jan. 2017	1,165,495	21,820	1,187,315
Additions	964,062	273	964,335
Reclassifications	-7,024	-918	-7,942
Disposals	-791,793	-13	-791,806
Currency translation	328	40	368
Cost as at 31 Dec. 2017	1,331,068	21,202	1,352,270
Cumulative changes resulting from measurement at fair value as at 1 Jan. 2017	3,717	6,587	10,304
Changes recognised in other comprehensive income resulting from measurement at fair value in reporting period	-217	16,388	16,171
Changes resulting from measurement at fair value through profit or loss in reporting period	4,315	49	4,364
Reclassifications (measurement at fair value)	253	-17	236
Disposals (measurement at fair value)	-472	0	-472
Changes resulting from currency translation (measurement at fair value)	-22	0	-22
Cumulative changes resulting from measurement at fair value as at 31 Dec. 2017	7,574	23,007	30,581
Impairment losses as at 1 Jan. 2017	–	-15,006	-15,006
Impairment losses as at 31 Dec. 2017	–	-15,006	-15,006
Carrying amount as at 31 Dec. 2017	1,338,642	29,203	1,367,845
Cost as at 1 Jan. 2018	1,331,068	21,202	1,352,270
Additions	763,319	968	764,287
Reclassifications	3,336	-1,149	2,187
Disposals	-1,106,877	-14,338	-1,121,215
Currency translation	-163	-33	-196
Cost as at 31 Dec. 2018	990,683	6,650	997,333

	Equities and other variable-yield securities EUR thousand	Investments in subsidiaries EUR thousand	Total EUR thousand
Cumulative changes resulting from measurement at fair value as at 1 Jan. 2018	7,574	8,001	15,575
Changes recognised in other comprehensive income resulting from measurement at fair value in reporting period	3,858	-5,993	-2,135
Changes resulting from measurement at fair value through profit or loss in reporting period	-17,360	-19	-17,379
Reclassifications (measurement at fair value)	560	-1	559
Disposals (measurement at fair value)	-10,091	14,209	4,118
Changes resulting from currency translation (measurement at fair value)	-19	0	-19
Cumulative changes resulting from measurement at fair value as at 31 Dec. 2018	-15,478	16,197	719
Carrying amount as at 31 Dec. 2018	975,205	22,847	998,052

[41] Shares in companies accounted for using the equity method

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Investments in joint ventures	56,712	52,981	3,731
Investments in associates	54,590	51,435	3,155
Total	111,302	104,416	6,886

There are no active markets for the investments accounted for using the equity method, nor can their fair value be reliably determined by using a measurement method based on assumptions that do not rely on available observable market data. There are no other suitable markets elsewhere. The investments in joint ventures and associates are intended to support the operating activities of the UMH Group over the long term.

Changes in shares in companies accounted for using the equity method

	Investments in joint ventures EUR thousand	Investments in associates EUR thousand	Total EUR thousand
Carrying amount as at 1 Jan. 2017	50,175	6,831	57,006
Additions	–	33,431	33,431
Changes resulting from measurement under the equity method	-5,398	11,173	5,775
of which changes recognised in other comprehensive income	-10,024	-139	-10,163
of which changes recognised in profit or loss	4,626	11,312	15,938
Reversals of impairment losses	8,204	–	8,204
Carrying amount as at 31 Dec. 2017	52,981	51,435	104,416
Changes resulting from measurement under the equity method	3,731	3,155	6,886
of which changes recognised in other comprehensive income	-2,490	-7,735	-10,225
of which changes recognised in profit or loss	6,221	10,890	17,111
Carrying amount as at 31 Dec. 2018	56,712	54,590	111,302

The changes recognised in equity relating to investments in joint ventures accounted for using the equity method include EUR 2,602 thousand (previous year: EUR -6,717 thousand) attributable to currency translation, EUR -28 thousand (previous year: EUR 304 thousand) attributable to the remeasurement of financial assets at fair value through profit or loss and EUR -5,064 thousand (previous year: EUR -3,611 thousand) attributable to distributions.

The changes recognised in equity relating to investments in associates accounted for using the equity method comprised EUR -7,735 thousand (previous year: EUR -139 thousand) attributable to distributions.

The reversal of impairment losses of EUR 8,204 thousand recognised in the previous year relates to the joint venture BEA Union Investment Management Limited, Hong Kong. The fair value of the joint venture calculated on the basis of an income capitalisation approach was higher than the equity carrying amount before impairment losses and reversals of impairment losses on account of increased expected income.

[42] Property, plant and equipment

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Land and buildings	14,331	12,611	1,720
Operating and office equipment	7,956	9,795	-1,839
Total	22,287	22,406	-119

Changes in property, plant and equipment

	Land and buildings EUR thousand	Operating and office equipment EUR thousand	Total EUR thousand
Carrying amount as at 1 Jan. 2017	12,646	10,910	23,556
Cost as at 1 Jan. 2017	23,146	37,864	61,010
Additions	1,306	2,145	3,451
Reclassifications	–	1	–
Disposals	–	-271	-271
Currency translation	–	179	179
Cost as at 31 Dec. 2017	24,452	39,918	64,370
Amortisation and impairment losses as at 1 Jan. 2017	-10,500	-26,954	-37,454
Additions – amortisation	-1,341	-3,291	-4,632
Reclassifications	–	-1	-1
Disposals – depreciation	–	245	245
Currency translation	–	-122	-122
Amortisation and impairment losses as at 31 Dec. 2017	-11,841	-30,123	-41,964
Carrying amount as at 31 Dec. 2017	12,611	9,795	22,406

	Land and buildings EUR thousand	Operating and office equipment EUR thousand	Total EUR thousand
Cost as at 1 Jan. 2018	24,452	39,918	64,370
Additions	3,388	3,310	6,698
Reclassifications	–	-3,509	-3,509
Disposals	-2,190	-16,575	-18,765
Currency translation	–	-161	-161
Cost as at 31 Dec. 2018	25,650	22,983	48,633
Amortisation and impairment losses as at 1 Jan. 2018	-11,841	-30,123	-41,964
Additions – amortisation	-1,413	-4,050	-5,463
Additions – impairment losses	-60	-25	-85
Reclassifications	–	2,485	2,485
Disposals – depreciation	1,901	16,547	18,448
Disposals – impairment losses	94	25	119
Currency translation	–	114	114
Amortisation and impairment losses as at 31 Dec. 2018	-11,319	-15,027	-26,346
Carrying amount as at 31 Dec. 2018	14,331	7,956	22,287

The normal useful life for operating and office equipment is between three and 13 years.

The 'Land and buildings' item includes leasehold improvements, the normal useful life of which is based on the respective lease term.

[43] Intangible assets

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Software	106,769	94,990	11,779
Purchased customer relationships	4,267	4,742	-475
Miscellaneous intangible assets	30,827	37,189	-6,362
Total	141,863	136,921	4,942

No goodwill has been recognised by the UMH Group. All intangible assets have a finite useful life.

Changes in intangible assets

	Software EUR thousand	Purchased customer relationships EUR thousand	Miscellaneous intangible assets EUR thousand	Total EUR thousand
Carrying amount as at 1 Jan. 2017	91,206	5,690	42,909	139,805
Cost as at 1 Jan. 2017	262,990	5,690	42,909	311,589
Additions	36,921	–	–	36,921
Currency translation	108	–	–	108
Cost as at 31 Dec. 2017	300,019	5,690	42,909	348,618
Amortisation and impairment losses as at 1 Jan. 2017	-171,784	-474	-2,860	-175,118
Additions (amortisation)	-28,470	-474	-2,860	-31,804
Additions (impairment losses)	-4,685	–	–	-4,685
Currency translation	-90	–	–	-90
Amortisation and impairment losses as at 31 Dec. 2017	-205,029	-948	-5,720	-211,697
Carrying amount as at 31 Dec. 2017	94,990	4,742	37,189	136,921

	Software EUR thousand	Purchased customer relationships EUR thousand	Miscellaneous intangible assets EUR thousand	Total EUR thousand
Cost as at 1 Jan. 2018	300,019	5,690	42,909	348,618
Additions	42,145	–	–	42,145
Reclassifications	-2,066	–	–	-2,066
Disposals	-9,915	–	–	-9,915
Currency translation	-96	–	–	-96
Cost as at 31 Dec. 2018	330,087	5,690	42,909	378,686
Amortisation and impairment losses as at 1 Jan. 2018	-205,029	-948	-5,720	-211,697
Additions (amortisation)	-30,224	-475	-2,860	-33,559
Additions (impairment losses)	–	–	-3,502	-3,502
Reclassifications	1,954	–	–	1,954
Disposals	9,892	–	–	9,892
Currency translation	89	–	–	89
Amortisation and impairment losses as at 31 Dec. 2018	-223,318	-1,423	-12,082	-236,823
Carrying amount as at 31 Dec. 2018	106,769	4,267	30,827	141,863

The normal useful life of most software is four or five years, for purchased customer relationships twelve years and for miscellaneous intangible assets 15 years. Amortisation is recognised on a straight-line basis.

The impairment losses in the previous year resulted entirely from the early end of the iVVI (MEINVermögen) project.

[44] Income tax assets

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Current income tax assets	4,686	10,893	-6,207
Germany	3,826	10,893	-7,067
Rest of world	860	–	860
Deferred income tax assets	57,247	33,325	23,922
Deferred tax assets (recognised in profit or loss)	67,193	49,662	17,531
Deferred tax assets (recognised in equity)	31,148	30,782	366
Netting	-41,094	-47,119	6,025
Total	61,933	44,218	17,715

Deferred tax assets that were only expected to be realised after twelve months amounted to EUR 53,602 thousand (based on their net value; previous year: EUR 25,841 thousand).

Deferred tax assets represent the potential income tax relief from temporary differences between the carrying amounts of assets and liabilities in the IFRS consolidated statement of financial position and the tax accounts in accordance with local tax regulations for the companies in the UMH Group.

No deferred taxes were recognised in respect of loss carry-forwards of EUR 1,133 thousand (previous year: EUR 1,870 thousand) as it is not currently considered certain that they can be utilised.

Deferred tax assets were recognised in connection with the following statement of financial position items:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Assets			
Loans and advances to banks	10	–	10
Investment fund units	3,271	69	3,202
Investments in subsidiaries and equity investments	104	–	104
Property, plant and equipment	119	119	–
Intangible assets	10	10	–
Other assets	308	374	-66
Equity and liabilities			
Liability derivatives	16,496	6,677	9,819
Provisions for employee benefits	70,411	66,310	4,101
Other provisions	631	737	-106
Other liabilities	6,981	6,148	833
Total	98,341	80,444	17,897

[45] Other assets

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Other financial liabilities	141,666	142,657	-991
Trade receivables	140,142	141,228	-1,086
of which from investment funds	137,579	137,966	-387
Miscellaneous other receivables	1,524	1,429	95
Other tax assets	31,759	17,704	14,055
Miscellaneous other assets	11,153	9,733	1,420
of which funding surplus for defined benefit plans	153	114	39
of which reimbursement rights recognised as assets in accordance with IAS 19.116	9,515	8,430	1,085
Deferred income	12,961	7,769	5,192
Total	197,539	177,863	19,676

The maximum risk for other financial receivables is the carrying amount.

[46] Assets held for sale

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Loans and advances to banks	13,903	–	13,903
Intangible assets	144	–	144
Investment securities	23,246	27,029	-3,783
Property, plant and equipment	1,247	–	1,247
Income tax assets	1,453	–	1,453
Other assets	3,143	–	3,143
Total	43,136	27,029	16,107

[47] Liabilities to banks

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Liabilities to banks in Germany	19,635	14,626	5,009
Liabilities to banks outside Germany	–	16	-16
Total	19,635	14,642	4,993

[48] Liabilities to customers

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Liabilities to customers in Germany	1,221	1,218	3
Total	1,221	1,218	3

[49] Liability derivatives

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
In connection with guarantee commitments	56,507	26,970	29,537
From other transactions	7,838	5,019	2,819
Total	64,345	31,989	32,356

[50] Provisions

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Provisions for employee benefits	191,934	175,193	16,741
Provisions for defined benefit pension obligations	121,685	109,247	12,438
Provisions for other long-term employee benefits	69,574	64,344	5,230
of which provisions for partial retirement schemes	21,284	17,169	4,115
of which miscellaneous provisions for other long-term employee benefits	48,290	47,175	1,115
Provisions for termination benefits	675	1,602	-927
of which provisions for termination benefits linked with restructuring	675	1,455	-780
of which miscellaneous provisions for termination benefits	–	147	-147
Other provisions	16,892	18,536	-1,644
Provisions for restructuring	100	258	-158
Miscellaneous provisions	16,792	18,278	-1,486
Total	208,826	193,729	15,097

Provisions for defined benefit pension obligations

The provisions for defined benefit plans comprise both closed pension schemes that are no longer accepting new participants and open schemes for, among others, board members and managing directors. New employees in Germany are almost always only offered defined contribution pension plans, for which no provisions have to be recognised. The picture outside Germany is more varied because there are both defined contribution and defined benefit plans that are open to a small proportion of new employees. Overall, the proportion of the group's total obligations accounted for by obligations outside Germany is not material.

The cost of defined contribution plans was EUR -5,226 thousand in the financial year (previous year: EUR -4,828 thousand) and is recognised in administrative expenses under pensions and other post-employment benefit expenses.

The present value of defined benefit obligations is broken down by risk class as follows:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Germany	309,903	297,549	12,354
Final salary-dependent plans	139,503	135,752	3,751
Defined benefit contribution plan	170,400	161,797	8,603
Rest of world	5,828	5,660	168
Final salary-dependent plans	–	–	–
Defined benefit contribution plan	5,828	5,660	168
Total	315,731	303,209	12,522

The final salary-dependent pension obligations are the employer's pension obligations to employees, the amount of which depends on the employee's final salary before the insured event occurred. For the most part, they can be assumed to constitute a life-long payment obligation. In Germany, Section 16 (1) of the Occupational Pensions Act (BetrAVG) requires the pension amount to be adjusted every three years to reflect the change in consumer prices or net wages. The main risk factors for final salary-dependent pension plans are therefore longevity, changes in salary, inflation risk and the discount rate.

A significant risk factor – over which the company has no influence – is the level of market interest rates for investment-grade fixed-income corporate bonds because the resulting interest affects both the amount of the obligations and the measurement of the plan assets. This risk can be limited by means of appropriate plan structuring or asset investment in order to match the obligations and the plan assets.

The majority of defined benefit contribution plans comprise obligations to pay fixed capital amounts or amounts at fixed interest rates, part of which are paid by the employee and part by the employer. The most prevalent pension scheme is funded by employees paying part of their salary into the scheme. Under the other significant scheme, the contributions are linked to remuneration and must be paid by the employer. However, this pension scheme is closed to new employees.

The pension plans in Germany are not subject to minimum funding requirements. Some pension plans outside Germany are governed by local regulations, but these do not include minimum funding requirements.

The changes in the present value of the defined benefit obligations were as follows:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Opening balance as at 1 Jan.	303,209	289,741	13,468
Current service cost	7,197	7,328	-131
Interest cost	5,314	5,081	233
Current pension payments	-5,427	-5,464	37
Employee contributions	5,470	4,724	746
Actuarial gains (-)/losses (+)	-32	1,799	-1,831
of which due to experience adjustments	-1,611	1,799	-3,410
of which due to changes in demographic assumptions	1,579	–	1,579
of which due to changes in financial assumptions	–	–	–
Closing balance as at 31 Dec.	315,731	303,209	12,522

The following actuarial assumptions were used in the measurement of defined benefit pension obligations:

	31 Dec. 2018 %	31 Dec. 2017 %	Change Percentage points
Discount rate	1.75	1.75	–
Salary increases	0.00 – 2.50	0.00 – 2.50	–
Pension increases	0.00 – 3.00	0.00 – 3.00	–
Staff turnover	0.00 – 6.00	0.00 – 6.00	–

Based on the present value of the defined benefit pension obligations, the weighted absolute percentages for the salary increase parameter and pension increase parameter are 1.47 % (previous year: 1.48 %) and 1.46 % (previous year: 1.48 %) respectively. The weighted absolute percentage for staff turnover is 0.87 % (previous year: 0.86 %).

Sensitivity analysis

The following table shows the sensitivity of the defined benefit pension obligations to the main actuarial assumptions. The effects shown are based on an isolated change to one assumption, with the other assumptions remaining the same. Correlation effects between individual parameters are not considered.

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Change in the present value of defined benefit pension obligations as at the end of the reporting period if	315,731	303,209	12,522
the discount rate was 100 basis points higher	-36,717	-34,046	-2,671
the discount rate was 100 basis points lower	48,191	44,154	4,037
the future salary increases were 50 basis points higher	3,764	3,902	-138
the future salary increases were 50 basis points lower	-3,565	-3,691	126
the future pension increases were 25 basis points higher	4,676	4,539	137
the future pension increases were 25 basis points lower	-4,461	-4,333	-128
the future life expectancy was one year longer	5,201	5,179	22
the future life expectancy was one year shorter	-5,376	-5,421	45

The duration of the defined benefit obligations as at the end of the financial year was 14 years for Germany (previous year: 15 years) and 12 years for the rest of the world (previous year: 12 years).

Plan assets

The funding status of the defined benefit pension obligations is shown in the following table:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Present value of defined benefit pension obligations	315,731	303,209	12,522
of which not funded by plan assets	70,568	66,602	3,966
of which funded by plan assets	245,163	236,607	8,556
Less fair value of plan assets	-194,199	-194,076	-123
Defined benefit pension obligations (net)	121,532	109,133	12,399
Funding surplus	153	114	39
Provisions recognised for defined benefit pension obligations	121,685	109,247	12,438
Fair value of reimbursement rights	9,515	8,430	1,085

The following table shows the changes in plan assets:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Opening balance as at 1 Jan.	194,076	178,886	15,190
Interest income	3,452	3,188	264
Income from/expenses for plan assets (not including interest income)	-9,034	6,342	-15,376
Funding of plan assets	9,718	9,296	422
of which contributions by employers	4,259	4,582	-323
of which contributions by employees	5,459	4,714	745
Pension benefits paid	-4,013	-3,636	-377
Closing balance as at 31 Dec.	194,199	194,076	123

The actual income from plan assets amounted to EUR -5,582 thousand in the year under review (previous year: EUR 9,530 thousand).

Additional contributions to plan assets of EUR 9,691 thousand are expected in the subsequent financial year (previous year: EUR 8,745 thousand).

The plan assets mainly comprise entitlements arising from insurance contracts and investment fund units with broadly diversified portfolios. The risks attached to plan assets in connection with entitlements arising from insurance contracts are reviewed regularly by the pension providers VGUEV and RVP in order to determine the funding ratio for the obligation.

The pension obligations and the plan assets are in the eurozone.

The fair value of the plan assets is broken down by asset class as follows:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Investment fund units (securities funds) – no market price quoted on an active market	104,377	106,320	-1,943
Investment fund units (real estate funds) – no market price quoted on an active market	368	305	63
Entitlements arising from insurance contracts	89,454	87,451	2,003
Total	194,199	194,076	123

Reimbursement rights

The following table shows the changes in reimbursement rights:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Opening balance as at 1 Jan.	8,430	6,752	1,678
Interest income	147	118	29
Income from / expenses for reimbursement rights (not including interest income)	-200	422	-622
Funding of reimbursement rights	1,159	1,161	-2
of which contributions by employers	1,147	1,151	-4
of which contributions by employees	12	10	2
Pension benefits paid	-21	-23	2
Closing balance as at 31 Dec.	9,515	8,430	1,085

The actual income from reimbursement rights amounted to EUR -53 thousand in the year under review (previous year: EUR 540 thousand).

Changes in other provisions

	Provisions for restructuring EUR thousand	Miscellaneous provisions EUR thousand	Total EUR thousand
Opening balance as at 1 Jan. 2018	258	18,278	18,536
Additions	–	894	894
Utilisation	-100	-382	-482
Reversals	-58	-1,866	-1,924
Effect from the increase in the discounted amount over time and change in the discount rate	–	-132	-132
Closing balance as at 31 Dec. 2018	100	16,792	16,892

The remaining terms of other provisions are shown in the table below:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Provisions for restructuring	100	258	-158
Up to three months	–	–	–
Three months to one year	100	258	-158
One year to five years	–	–	–
More than five years	–	–	–
Indefinite	–	–	–
Miscellaneous provisions	16,792	18,278	-1,486
Up to three months	–	629	-629
Three months to one year	1,009	1,655	-646
One year to five years	7,042	7,340	-298
More than five years	8,347	8,479	-132
Indefinite	394	175	219

[51] Income tax liabilities

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Current income tax liabilities	75,366	76,130	-764
Provisions for income taxes	75,208	74,880	328
Income tax liabilities	158	1,250	-1,092
Deferred tax liabilities	1,608	3,998	-2,390
Deferred tax liabilities (recognised in profit or loss)	40,476	42,231	-1,755
Deferred tax liabilities (recognised in equity)	2,226	8,886	-6,660
Netting	-41,094	-47,119	6,025
Total	76,974	80,128	-3,154

Provisions for income taxes are tax liabilities for which a final and binding tax assessment notice has not yet been issued. Income tax liabilities include payment obligations for current income taxes owed to tax authorities both in Germany and in other countries.

Deferred tax liabilities represent the potential income tax expense from temporary differences between the carrying amounts of assets and liabilities in the IFRS consolidated statement of financial position and the tax accounts in accordance with local tax regulations for the companies in the UMH Group. Deferred tax liabilities that were only expected to be incurred after twelve months amounted to EUR 575 thousand (based on their net value; previous year: EUR 2,889 thousand).

Deferred tax liabilities were recognised in connection with the following statement of financial position items:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Assets			
Loans and advances to banks	–	–	–
Asset derivatives	5,243	1,449	3,794
Investment fund units	749	5,889	-5,140
Investments in subsidiaries and equity investments	297	362	-65
Property, plant and equipment	18	25	-7
Intangible assets	1,067	1,185	-118
Other assets	100	163	-63
Assets held for sale	–	13	-13
Equity and liabilities			
Liability derivatives	–	595	-595
Provisions for employee benefits	35,225	41,405	-6,180
Other provisions	–	29	-29
Other liabilities	3	2	1
Total	42,702	51,117	-8,415

[52] Other liabilities

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Other financial liabilities	6,204	9,178	-2,974
Trade payables	2,824	6,344	-3,520
Miscellaneous other liabilities	3,380	2,834	546
Financial liabilities from contingent consideration through business combinations	5,000	–	5,000
Other tax liabilities	47,716	43,941	3,775
Deferred liabilities	702,227	669,584	32,643
of which for sales commission	530,205	486,910	43,295
Miscellaneous other liabilities	25	43	-18
Deferred income	449	686	-237
Total	761,621	723,432	38,189

Financial liabilities from contingent consideration through business combinations relate to a transaction pursuant to IAS 28.

[53] Liabilities held for sale

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Income tax liabilities	295	–	295
Other liabilities	10,104	–	10,104
Total	10,399	–	10,399

[54] Equity

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Issued capital	87,130	87,130	–
Capital reserves	18,617	18,617	–
Retained earnings	843,017	751,331	91,686
Fair value OCI reserve	18,701	20,371	-1,670
Currency translation reserve	11,148	6,413	4,735
Reserve from assets held for sale	-3,500	–	-3,500
Consolidated net profit	339,059	413,889	-74,830
Non-controlling interests	24,077	23,169	908
Total	1,338,249	1,320,920	17,329

Issued capital

The issued capital corresponds to the share capital of UMH AG. It amounts to EUR 87,130 thousand (previous year: EUR 87,130 thousand) and is divided into 29,043,466 (previous year: 29,043,466) fully paid, registered no-par-value shares. The UMH Group did not hold any treasury shares at the end of the reporting period. There were no preferential rights or restrictions in relation to the distribution of dividends.

A dividend of EUR 11.02 per share (previous year: EUR 6.89 per share) was distributed to shareholders in the reporting year in accordance with the resolution adopted by the Annual General Meeting on 4 May 2018. This equates to a total dividend payment of EUR 320,059 thousand (previous year: EUR 200,109 thousand).

The payment of a dividend of EUR 8.47 per share will be proposed at the Annual General Meeting on 10 May 2019. This equates to a total dividend payment of EUR 245,998 thousand. The Supervisory Board of UMH AG approved the proposed appropriation of profit at its meeting held on 1 March 2019.

Capital reserves

The capital reserves comprise the premiums arising on the issue of shares in the company.

Retained earnings

Retained earnings comprise the undistributed earnings from prior years, actuarial gains and losses on defined benefit plans and plan assets in accordance with IAS 19.120(c), and on reimbursement rights in accordance with IAS 19.116, together with the effects of the first-time application of IFRS.

Breakdown of changes in retained earnings by component of other comprehensive income:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Actuarial gains and losses on defined benefit plans	-2,138	3,291	-5,429
Total	-2,138	3,291	-5,429

Fair value OCI reserve

The fair value OCI reserve comprises the effects from the remeasurement of the fair value of financial instruments 'at fair value through profit or loss' (net of the associated deferred taxes) before these effects can be recognised in profit or loss. These instruments are not recognised through profit or loss.

The revaluation reserve in accordance with IAS 39 (in 2017) comprises the effects from the remeasurement of the fair value of available-for-sale financial instruments (net of the associated deferred taxes) before these effects can be recognised in profit or loss.

Breakdown of changes in fair value OCI reserve by component of other comprehensive income:

	2018 EUR thousand
Gains and losses from equity instruments for which the fair value OCI option was exercised	-1,524
Share of other comprehensive income of joint ventures and associates accounted for using the equity method	-152
Total	-1,676

Comparative information in accordance with IAS 39

	2017 EUR thousand
Gains and losses on available-for-sale financial assets	14,365
Share of other comprehensive income of joint ventures and associates accounted for using the equity method	304
Total	14,669

Currency translation reserve

The effects of exchange rates arising when the financial statements of group companies denominated in foreign currency are translated into the group reporting currency (euro) are reported in the currency translation reserve.

Breakdown of changes in the currency translation reserve by component of other comprehensive income:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Exchange differences on currency translation of foreign subsidiaries	-1,688	1,821	-3,509
Share of other comprehensive income of joint ventures and associates accounted for using the equity method	2,923	-6,717	9,640
Total	1,235	-4,896	6,131

Reserve from assets held for sale

These items include components of equity of a subsidiary held for sale that do not represent a component of equity.

Non-controlling interests

Non-controlling interests comprise the share of subsidiaries' equity not attributable to UMH AG.

Breakdown of changes in non-controlling interests by component of other comprehensive income:

	2018 EUR thousand
Gains and losses from equity instruments for which the fair value OCI option was exercised	-591
Actuarial gains and losses on defined benefit plans	-58
Total	-649

Comparative information in accordance with IAS 39

	2017 EUR thousand
Gains and losses on available-for-sale financial assets	1,613
Actuarial gains and losses on defined benefit plans	93
Total	1,706

Financial instruments disclosures

[55] Categories of financial instruments

	31 Dec. 2018 EUR thousand
Financial assets measured at amortised cost	754,421
Loans and advances to banks	512,296
Loans and advances to customers	83,561
Other financial liabilities	141,666
Assets held for sale	16,898
Financial liabilities measured at amortised cost	27,687
Liabilities to banks	19,635
Liabilities to customers	1,221
Other financial obligations	6,204
Liabilities held for sale	627
Financial assets mandatorily measured at fair value through profit or loss	1,302,206
Loans and advances to banks	260,347
Investment securities	969,688
Asset derivatives	48,924
Assets held for sale	23,247
Financial assets measured at fair value through other comprehensive income	28,364
Investment securities	
Equities and other variable-yield securities (including other shareholdings)	5,517
Investments in subsidiaries	22,847
Financial liabilities at fair value through profit or loss	69,345
Liability derivatives	64,345
Financial liabilities from contingent consideration through business combinations	5,000

Comparative information in accordance with IAS 39

	31 Dec. 2017 EUR thousand
Loans and receivables	590,959
Loans and advances to banks	372,981
Loans and advances to customers	75,321
Other financial liabilities	142,657
Other financial liabilities	25,038
Liabilities to banks	14,642
Liabilities to customers	1,218
Other financial liabilities	9,178
Available for sale	30,624
Investment securities	30,624
Equities and other variable-yield securities (including other shareholdings)	1,680
– measured at fair value	66
– measured at cost	1,614
Investments in subsidiaries	28,944
– measured at fair value	28,688
– measured at cost	256
Designated at fair value through profit or loss	1,364,250
Investment securities	1,337,221
Equities and other variable-yield securities (including other shareholdings)	1,336,962
Investments in subsidiaries	259
Assets held for sale	27,029
Held for trading	69,029
Asset derivatives	37,040
Liability derivatives	31,989

In the UMH Group, the fair value OCI option is currently exercised for all equity investments and non-consolidated subsidiaries. The UMH Group considers this classification of strategic financial investments as more meaningful. For each new investment, it is decided on a case-by-case basis how this investment should be classified. Dividends of EUR 1,206 thousand were recognised from these financial instruments in the financial year. As at 31 December 2018, all instruments from which dividends were received are still held. Due to the liquidation of a non-consolidated subsidiary, the accrued fair value OCI reserve of EUR 6 thousand was reclassified to retained earnings.

The fair value OCI option is exercised for all investments in equity instruments.

Assets recognised at fair value through profit or loss (recognised initially in other comprehensive income)	2018 EUR thousand
Equities	32
Other shareholdings	5,485
Interests in unconsolidated subsidiaries	22,847
Total	28,364

In the current period, there were no reclassifications of financial assets between the measurement categories.

[56] Exposure to credit risk

	Investment grade		Non-investment grade		NR – not rated or no rating required		31 Dec. 2018 EUR thousand
	Level 1 EUR thousand	Level 2 EUR thousand	Level 1 EUR thousand	Level 2 EUR thousand	Level 1 EUR thousand	Level 2 EUR thousand	
Loans and advances to banks	507,222	–	–	–	–	5,074	512,296
of which current account	507,222	–	–	–	–	–	507,222
of which in Germany	473,778	–	–	–	–	–	473,778
of which in other EU countries	32,890	–	–	–	–	–	32,890
of which other	554	–	–	–	–	–	554
of which trade receivables	–	–	–	–	–	5,074	5,074
of which in Germany	–	–	–	–	–	1,423	1,423
of which in other EU countries	–	–	–	–	–	2,912	2,912
of which other	–	–	–	–	–	738	738

	Investment grade		Non-investment grade		NR – not rated or no rating required		31 Dec. 2018 EUR thousand
	Level 1 EUR thousand	Level 2 EUR thousand	Level 1 EUR thousand	Level 2 EUR thousand	Level 1 EUR thousand	Level 2 EUR thousand	
Loans and advances to customers	–	–	–	–	16	83,545	83,561
of which retail clients	–	–	–	–	16	8,721	8,737
of which in Germany	–	–	–	–	16	8,603	8,619
of which in other EU countries	–	–	–	–	–	118	118
of which other	–	–	–	–	–	–	–
of which to other financial institutions	–	–	–	–	–	72,415	72,415
of which in Germany	–	–	–	–	–	38,278	38,278
of which in other EU countries	–	–	–	–	–	30,116	30,116
of which other	–	–	–	–	–	4,021	4,021
of which others	–	–	–	–	–	2,410	2,410
of which in Germany	–	–	–	–	–	807	807
of which in other EU countries	–	–	–	–	–	1,228	1,228
of which other	–	–	–	–	–	374	374
Other receivables	–	–	–	–	–	141,666	141,666
of which to investment funds	–	–	–	–	–	137,579	137,579
of which in Germany	–	–	–	–	–	103,011	103,011
of which in other EU countries	–	–	–	–	–	34,568	34,568
of which other	–	–	–	–	–	–	–
of which others	–	–	–	–	–	4,087	4,087
of which in Germany	–	–	–	–	–	2,929	2,929
of which in other EU countries	–	–	–	–	–	590	590
of which other	–	–	–	–	–	568	568
Total	507,222	–	–	–	16	230,285	737,523

The carrying amount is the maximum credit risk for the financial instruments measured at fair value. Please see note [70] for the maximum credit risk of the financial guarantees issued.

[57] Gross carrying amounts and allowances for losses

Financial assets measured at amortised cost:

Loans and advances to banks	Level 1 EUR thousand	Level 2 EUR thousand	Level 3 EUR thousand	Total EUR thousand
Opening balance as at 1 Jan. 2018	358,680	4,907	–	363,587
Addition of new financial assets	13,294,492	42,759	–	13,337,251
Transfer in accordance with assets held for sale	-8,089	–	–	-8,089
Transfer from level 1	–	–	–	–
Transfer from level 2	–	–	–	–
Transfer from level 3	–	–	–	–
Transfer to level 1	–	–	–	–
Transfer to level 2	–	–	–	–
Transfer to level 3	–	–	–	–
Directly recognised impairment losses	–	–	–	–
Disposals and repayment of financial assets	-13,137,225	-42,599	–	-13,179,824
Increase in carrying amount due to modification	–	–	–	–
Decrease in carrying amount due to modification	–	–	–	–
Net of amortisation, market value changes and other measurement changes	–	–	–	–
Differences on currency translation	-635	7	–	-628
Closing balance as at 31 Dec. 2018	507,222	5,074	–	512,296

Loans and advances to customers	Level 1 EUR thousand	Level 2 EUR thousand	Level 3 EUR thousand	Total EUR thousand
Opening balance as at 1 Jan. 2018	17	75,304	–	75,321
Addition of new financial assets	–	434,450	–	434,450
Transfer in accordance with assets held for sale	–	–	–	–
Transfer from level 1	–	–	–	–
Transfer from level 2	–	–	–	–
Transfer from level 3	–	–	–	–
Transfer to level 1	–	–	–	–
Transfer to level 2	–	–	–	–
Transfer to level 3	–	–	–	–

Loans and advances to customers	Level 1 EUR thousand	Level 2 EUR thousand	Level 3 EUR thousand	Total EUR thousand
Directly recognised impairment losses	–	-29	–	-29
Disposals and repayment of financial assets	-1	-426,272	–	-426,273
Increase in carrying amount due to modification	–	–	–	–
Decrease in carrying amount due to modification	–	–	–	–
Net of amortisation, market value changes and other measurement changes	–	–	–	–
Differences on currency translation	–	91	–	91
Closing balance as at 31 Dec. 2018	16	83,545	–	83,561

Other receivables	Level 1 EUR thousand	Level 2 EUR thousand	Level 3 EUR thousand	Total EUR thousand
Opening balance as at 1 Jan. 2018	–	142,657	–	142,657
Addition of new financial assets	–	2,098,735	–	2,098,735
Transfer in accordance with assets held for sale	–	-3,470	–	-3,470
Transfer from level 1	–	–	–	–
Transfer from level 2	–	–	–	–
Transfer from level 3	–	–	–	–
Transfer to level 1	–	–	–	–
Transfer to level 2	–	–	–	–
Transfer to level 3	–	–	–	–
Directly recognised impairment losses	–	–	–	–
Disposals and repayment of financial assets	–	-2,096,078	–	-2,096,078
Increase in carrying amount due to modification	–	–	–	–
Decrease in carrying amount due to modification	–	–	–	–
Net of amortisation, market value changes and other measurement changes	–	–	–	–
Differences on currency translation	–	-178	–	-178
Closing balance as at 31 Dec. 2018	–	141,666	–	141,666

In the past financial year, no allowances for losses on loans and receivables were recognised in accordance with IFRS 9.5.5. There are no credit losses on purchased or originated credit-impaired assets (POCI).

[58] Items of income, expense, gains and losses

Net gains and losses

The breakdown of net gains and losses on financial instruments by IFRS 9 category for financial assets and financial liabilities is as follows:

	2018 EUR thousand
Financial instruments at fair value through profit or loss	-65,717
Financial assets mandatorily measured at fair value through profit or loss	-65,717
Financial instruments at fair value through other comprehensive income	1,206
Financial assets measured at fair value through other comprehensive income	1,206
Measured at amortised cost	-1,592
Assets measured at amortised cost	-502
Liabilities measured at amortised cost	-1,090

Comparative information in accordance with IAS 39

	2017 EUR thousand
Financial instruments at fair value through profit or loss	25,930
Held-for-trading financial instruments	11,600
Financial instruments designated at fair value through profit or loss	14,330
Available-for-sale financial assets	1,578
Loans and receivables	-137
Other financial liabilities	-974

Net gains or net losses comprise gains and losses on fair value measurement through profit or loss, impairment losses and reversals of impairment losses and gains and losses on the sale or early repayment of the financial instruments concerned. These items also include interest income/expenses and current income.

Interest income and expenses

The following total interest income and expenses arose in connection with financial assets and financial liabilities that are not measured at fair value through profit or loss:

	2018 EUR thousand
Interest income	283
Interest expenses and negative interest on financial assets	-1,849

Comparative information in accordance with IAS 39

	2017 TEUR
Interest income	356
Interest expenses and negative interest on financial assets	-1,451

[59] Fair values

If there is an active market for financial assets and financial liabilities, the fair value is based on the relevant market price as at the end of the reporting period. The fair values of investment fund units are the redemption prices (net asset value) published by the relevant asset management companies in accordance with requirements under national investment law. If the contractual conditions of a fund stipulate a redemption charge, the fair value is reduced by this charge.

The fair value of investment securities classified as equity instruments that are not quoted on an active market is determined using an income capitalisation approach based on parameters such as forecasts, calculated free cash flows, beta factors or risk-adjusted and interpolated interest rates based on the basic discount curve.

Owing to the short remaining term, the carrying amount is used as a realistic estimate of the fair value of financial resources, current trade receivables and other receivables, checking account and instant-access deposits with banks, current trade payables and other payables, checking account liabilities to banks and borrowing with or without an interest rate that is fixed in the short term.

The carrying amounts of the financial assets in the table reflect the amount that best represents the company's maximum exposure to credit risk as at the end of the reporting period. Collateral and other credit enhancements held were not taken into account. The negative market value from derivative financial instruments included EUR 50,715 thousand (previous year: EUR 20,913 thousand) in respect of capital preservation commitments for the UniProfiRente retirement pension product and EUR 5,792 thousand (previous year: EUR 6,057 thousand) in respect of minimum payment commitments in connection with guarantee funds launched by asset management companies belonging to the group.

The measurement methods described above are used to determine the fair values of all classes of financial instrument.

Assets	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Loans and advances to banks (fair value)	772,643	372,981	399,662
Loans and advances to banks (carrying amount)	772,643	372,981	399,662
Loans and advances to customers (fair value)	83,561	75,321	8,240
Loans and advances to customers (carrying amount)	83,561	75,321	8,240
Asset derivatives (fair value)	48,924	37,040	11,884
Asset derivatives (carrying amount)	48,924	37,040	11,884
Investment securities (fair value)	998,052	1,367,845	-369,793
Investment securities (carrying amount)	998,052	1,367,845	-369,793
Other financial receivables (fair value)	141,666	142,657	-991
Other financial receivables (carrying amount)	141,666	142,657	-991
Assets held for sale (fair value)	40,145	27,029	13,116
Assets held for sale (carrying amount)	40,145	27,029	13,116

Equity and liabilities	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Liabilities to banks (fair value)	19,635	14,642	4,993
Liabilities to banks (carrying amount)	19,635	14,642	4,993
Liabilities to customers (fair value)	1,221	1,218	3
Liabilities to customers (carrying amount)	1,221	1,218	3
Liability derivatives (fair value)	64,345	31,989	32,356
Liability derivatives (carrying amount)	64,345	31,989	32,356
Other financial liabilities (fair value)	6,204	9,178	-2,974
Other financial liabilities (carrying amount)	6,204	9,178	-2,974
Financial liabilities from contingent consideration through business combinations (fair value)	5,000	–	5,000
Financial liabilities from contingent consideration through business combinations (carrying amount)	5,000	–	5,000
Liabilities held for sale (fair value)	627	–	627
Liabilities held for sale (carrying amount)	627	–	627

[60] Fair value hierarchy**Assets and liabilities measured at fair value in the statement of financial position**

The recurring fair value measurements are assigned to the levels of the fair value hierarchy as follows:

Assets	31 Dec. 2018 EUR thousand
Loans and advances to banks	260,347
of which level 1	–
of which level 2	260,347
of which level 3	–
Asset derivatives	48,924
of which level 1	–
of which level 2	–
of which level 3	48,924
Investment securities	998,052
of which level 1	–
of which level 2	962,686
of which level 3	35,366
Assets held for sale	23,246
of which level 1	–
of which level 2	23,246
of which level 3	–
Total	1,330,569

Comparative information in accordance with IAS 39

Assets	31 Dec. 2017 EUR thousand
Asset derivatives	37,040
of which level 1	–
of which level 2	–
of which level 3	37,040
Investment securities	1,365,976
of which level 1	–
of which level 2	1,328,935
of which level 3	37,041
Assets held for sale	27,029
of which level 1	–
of which level 2	27,029
of which level 3	–
Total	1,430,045

Equity and liabilities	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Liability derivatives	64,345	31,989	32,356
of which level 1	–	–	–
of which level 2	56,507	26,970	29,537
of which level 3	7,838	5,019	2,819
Financial liabilities from contingent consideration through business combinations	5,000	–	5,000
of which level 1	–	–	–
of which level 2	–	–	–
of which level 3	5,000	–	5,000
Total	69,345	31,989	37,356

Level 1 fair value measurements are derived from quoted prices in active markets for identical financial assets or liabilities.

Level 2 fair value measurements are based on inputs other than quoted prices included in level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices). Investment fund units held for own-account investing activities are assigned to this level of the fair value hierarchy.

Level 3 fair value measurements use models with inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Reclassifications

Assets held at the end of the reporting period and measured at fair value on a recurring basis were not reclassified between levels 1, 2 and 3 in the financial year.

Transfers between levels 1 and 2 take place when there is a change in the inputs that is relevant to categorisation in the fair value hierarchy.

Fair value measurements at level 3

The table below shows the changes in the recurring fair value measurements of level 3 liabilities in the financial year:

Asset derivatives	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Opening balance as at 1 Jan. 2018	37,040	–	37,040
Additions (purchases)	–	32,501	-32,501
Changes resulting from measurement at fair value	11,884	4,539	7,345
of which through profit or loss	11,884	4,539	7,345
Closing balance as at 31 Dec. 2018	48,924	37,040	11,884

Investment securities	2018 EUR thousand
Opening balance as at 1 Jan. 2018	38,910
Additions (purchases)	313
Reclassifications	–
Changes resulting from measurement at fair value	-3,728
of which through profit or loss	-1,592
of which in equity	-2,136
Disposals (sales)	-131
Closing balance as at 31 Dec. 2018	35,366

Comparative information in accordance with IAS 39

Investment securities	2017 EUR thousand
Opening balance as at 1 Jan. 2017	21,409
Additions (purchases)	696
Reclassifications	284
Changes resulting from measurement at fair value	15,999
of which through profit or loss	-173
of which in equity	16,172
Disposals (sales)	-1,347
Closing balance as at 31 Dec. 2017	37,041

The table below shows the changes in the recurring fair value measurements of level 3 liabilities in the financial year:

Liability derivatives	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Opening balance as at 1 Jan. 2018	5,019	–	5,019
Additions (purchases)	–	6,882	-6,882
Changes resulting from measurement at fair value	2,819	-1,863	4,682
of which through profit or loss	2,819	-1,863	4,682
Closing balance as at 31 Dec. 2018	7,838	5,019	2,819

Financial liabilities from contingent consideration through business combinations	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Opening balance as at 1 Jan. 2018	–	–	–
Additions (purchases)	5,000	–	5,000
Closing balance as at 31 Dec. 2018	5,000	–	5,000

As part of the processes for fair value measurement, the UMH Group reviews whether the measurement methods used are typical and whether the measurement parameters used in the measurement methods are observable in the market. This review takes place at the end of each reporting period. On the basis of this review, the fair values are assigned to the levels of the fair value hierarchy. In the UMH Group, transfers between the levels take place as soon as there is a change in the inputs that is relevant to categorisation in the fair value hierarchy. In each step of this process, both the distinctive features of the particular product type and the distinctive features of the business models of the group entities are taken into consideration.

The measurement of call and put options to shares of ZBI Partnerschafts-Holding GmbH is described in more detail in note [18]. The calculation of enterprise value was based on a risk-adjusted interest rate of 10.77 %; a 360-day volatility of 23.1 % and risk-free interest rates of zero and 0.77 % were used in the Black-Scholes model (previous year: 360-day volatility of 24.1 % and risk-free interest rates of zero and 0.92 %). The gain of EUR 9,065 thousand (previous year: EUR 6,402 thousand) in the reporting year is reported in profit or loss under other net remeasurement income on financial instruments.

The loss of EUR -1,592 thousand (previous year: EUR -173 thousand) in the reporting year is reported in profit or loss under other net remeasurement income on financial instruments. The loss recognised in equity of EUR -2,136 thousand (previous year: EUR 16,172 thousand) is reported in the statement of comprehensive income under gains and losses on equity instruments.

The most probable value has been recognised from contingent consideration in the course of business combinations for which the achievement of a specified sales target has been agreed. The loss of EUR -5,000 thousand (previous year: EUR – thousand) in the reporting year is reported in profit or loss under other net remeasurement income on financial instruments.

The fair value of level 3 investments in subsidiaries is determined on the basis of the income capitalisation approach using unobservable inputs, such as future income. The risk-adjusted interest rates ranged between 6.25 % and 9.35 % (previous year: between 6.25 % and 9.35 %). For an investment in a start-up, a pre-money valuation was implemented on the basis of the measurement for the last round of financing. The 'Investment securities' item contains units in investment funds (units in private equity funds). The fair value is the redemption price published by the asset management companies in line with national investment law provisions (net asset value). The calculation of the redemption price is essentially based on the discounted cash flow values sent by third-party managers of the funds in question.

No sensitivity analysis is performed for investment securities and asset and liability derivatives whose fair value is determined on the basis of measurement models as the resulting effects are immaterial.

Assets and liabilities not measured at fair value

Recurring fair value measurements of assets and liabilities that are not recognised at fair value in the statement of financial position, but whose fair value must be disclosed, are assigned to the levels of the fair value hierarchy as follows:

Assets	31 Dec. 2018 EUR thousand
Loans and advances to banks	512,296
of which level 1	–
of which level 2	512,296
of which level 3	–
Loans and advances to customers	83,561
of which level 1	–
of which level 2	83,561
of which level 3	–
Other financial liabilities	141,666
of which level 1	–
of which level 2	141,666
of which level 3	–
Assets held for sale	16,898
of which level 1	–
of which level 2	16,898
of which level 3	–
Total	754,420

Comparative information in accordance with IAS 39

Assets	31 Dec. 2017 EUR thousand
Loans and advances to banks	372,981
of which level 1	–
of which level 2	372,981
of which level 3	–
Loans and advances to customers	75,321
of which level 1	–
of which level 2	75,321
of which level 3	–
Investment securities	1,870
of which level 1	–
of which level 2	–
of which level 3	1,870
Other financial liabilities	142,657
of which level 1	–
of which level 2	142,657
of which level 3	–
Total	592,829

In accordance with IAS 39, level 3 investment securities comprise equities and other variable-yield securities including other shareholdings and investments in subsidiaries measured at cost.

[61] Contractual maturity analysis

The maturity analysis shows the contractually agreed cash inflows and outflows:

Equity and liabilities	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Liabilities to banks	19,635	14,642	4,993
of which level 1	–	–	–
of which level 2	19,635	14,642	4,993
of which level 3	–	–	–
Liabilities to customers	1,221	1,218	3
of which level 1	–	–	–
of which level 2	1,221	1,218	3
of which level 3	–	–	–
Other financial liabilities	6,204	9,178	-2,974
of which level 1	–	–	–
of which level 2	6,204	9,178	-2,974
of which level 3	–	–	–
Liabilities held for sale	627	–	627
of which level 1	–	–	–
of which level 2	627	–	627
of which level 3	–	–	–
Total	27,687	25,037	2,650

Assets	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Loans and advances to banks	772,643	372,981	399,662
Up to one month	772,634	372,962	399,672
One month to three months	9	8	1
Three months to one year	–	–	–
One year to five years	–	–	–
More than five years	–	–	–
Indefinite	–	11	-11
Loans and advances to customers	84,104	75,890	8,214
Up to one month	74,654	68,034	6,620
One month to three months	4,311	1,608	2,703
Three months to one year	2	2	–
One year to five years	4,790	5,832	-1,042
More than five years	274	324	-50
Indefinite	73	90	-17
Asset derivatives	48,924	37,040	11,884
Up to one month	–	–	–
One month to three months	–	–	–
Three months to one year	–	–	–
One year to five years	48,924	37,040	11,884
More than five years	–	–	–
Indefinite	–	–	–
Investment securities	998,052	1,367,585	-369,533
Up to one month	–	–	–
One month to three months	–	–	–
Three months to one year	–	–	–
One year to five years	–	–	–
More than five years	–	–	–
Indefinite	998,052	1,367,585	-369,533

Assets	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Other financial liabilities	141,666	142,657	-991
Up to one month	140,690	139,546	1,144
One month to three months	276	882	-606
Three months to one year	208	1,783	-1,575
One year to five years	189	146	43
More than five years	292	290	2
Indefinite	11	10	1
Assets held for sale	40,145	27,029	13,116
Up to one month	16,899	–	16,899
One month to three months	–	–	–
Three months to one year	–	–	–
One year to five years	–	–	–
More than five years	–	–	–
Indefinite	23,246	27,029	-3,783
Equity and liabilities	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Liabilities to banks	19,635	14,642	4,993
Up to one month	19,635	14,642	4,993
One month to three months	–	–	–
Three months to one year	–	–	–
One year to five years	–	–	–
More than five years	–	–	–
Indefinite	–	–	–
Liabilities to customers	1,221	1,218	3
Up to one month	1,221	1,218	3
One month to three months	–	–	–
Three months to one year	–	–	–
One year to five years	–	–	–
More than five years	–	–	–
Indefinite	–	–	–

Equity and liabilities	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Liability derivatives	70,644	79,296	-8,652
Up to one month	1,808	570	1,238
One month to three months	3,465	68	3,397
Three months to one year	994	315	679
One year to five years	16,892	54,329	-37,437
More than five years	47,485	24,014	23,471
Indefinite	–	–	–
Other financial liabilities	6,204	9,178	-2,974
Up to one month	5,534	7,773	-2,239
One month to three months	439	14	425
Three months to one year	6	7	-1
One year to five years	201	319	-118
More than five years	23	6	17
Indefinite	1	1,059	-1,058
Financial liabilities from contingent consideration through business combinations	5,000	–	–
Up to one month	–	–	–
One month to three months	–	–	–
Three months to one year	–	–	–
One year to five years	5,000	–	–
More than five years	–	–	–
Indefinite	–	–	–
Liabilities held for sale	627	–	627
Up to one month	627	–	627
One month to three months	–	–	–
Three months to one year	–	–	–
One year to five years	–	–	–
More than five years	–	–	–
Indefinite	–	–	–

In the above table, the undiscounted contractual payment obligations from the capital preservation and guarantee commitments of all UniProfiRente contracts and guarantee funds less the assets allocated to these contracts as at the end of the reporting period were reported under liability derivatives, provided the capital preservation or guarantee commitments of these contracts had a negative fair value as at the end of the reporting period.

From 2017, the liability derivatives also include the exercise prices of the put options for shares in ZBI Partnerschafts-Holding GmbH, Erlangen, written by UMH. Their earliest possible exercise date cannot be determined by the calendar alone but rather depends on a range of other conditions. They were therefore allocated to the 'One year to five years' maturity band on the basis of the expected exercise dates. In contrast, the call option for additional shares in ZBI Partnerschafts-Holding GmbH acquired in the previous year was recognised at fair value under asset derivatives in the maturity band of the earliest possible exercise date.

Other disclosures	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Financial guarantees	54,474	52,056	2,418
Up to one month	–	–	–
One month to three months	–	–	–
Three months to one year	–	–	–
One year to five years	–	–	–
More than five years	–	–	–
Indefinite	54,474	52,056	2,418

The table above shows the potential cash outflows for financial guarantees rather than their expected outflows.

[62] Foreign currency volumes

Assets	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Loans and advances to banks	1,413	27,148	-25,735
US dollar (USD)	985	861	124
Swiss franc (CHF)	–	–	–
Japanese yen (JPY)	–	–	–
Pound sterling (GBP)	294	137	157
Polish zloty (PLN)	–	26,128	-26,128
Hong Kong dollar (HKD)	–	–	–
Other foreign currencies	134	22	112
Loans and advances to customers	2,942	2,971	-29
US dollar (USD)	2,523	2,502	21
Swiss franc (CHF)	205	183	22
Japanese yen (JPY)	–	–	–
Pound sterling (GBP)	171	244	-73
Polish zloty (PLN)	–	–	–
Hong Kong dollar (HKD)	–	–	–
Other foreign currencies	43	42	1
Investment securities	152	5,186	-5,034
US dollar (USD)	20	18	2
Swiss franc (CHF)	17	17	–
Japanese yen (JPY)	–	–	–
Pound sterling (GBP)	12	13	-1
Polish zloty (PLN)	–	5,026	-5,026
Hong Kong dollar (HKD)	–	–	–
Other foreign currencies	103	112	-9

Assets	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Other financial liabilities	1,804	4,736	-2,932
US dollar (USD)	1,682	234	1,448
Swiss franc (CHF)	44	48	-4
Japanese yen (JPY)	–	–	–
Pound sterling (GBP)	78	77	1
Polish zloty (PLN)	–	4,377	-4,377
Hong Kong dollar (HKD)	–	–	–
Other foreign currencies	–	–	–
Assets held for sale	20,404	1,968	18,436
US dollar (USD)	28	–	28
Swiss franc (CHF)	–	–	–
Japanese yen (JPY)	–	–	–
Pound sterling (GBP)	–	–	–
Polish zloty (PLN)	20,376	1,968	18,408
Hong Kong dollar (HKD)	–	–	–
Other foreign currencies	–	–	–
Total	26,715	42,009	-15,294

Equity and liabilities	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Other financial liabilities	131	580	-449
US dollar (USD)	–	63	-63
Swiss franc (CHF)	2	51	-49
Japanese yen (JPY)	–	–	–
Pound sterling (GBP)	33	–	33
Polish zloty (PLN)	–	466	-466
Hong Kong dollar (HKD)	–	–	–
Other foreign currencies	96	–	96
Liabilities held for sale	627	–	627
US dollar (USD)	–	–	–
Swiss franc (CHF)	–	–	–
Japanese yen (JPY)	–	–	–
Pound sterling (GBP)	–	–	–
Polish zloty (PLN)	627	–	627
Hong Kong dollar (HKD)	–	–	–
Other foreign currencies	–	–	–
Total	758	580	178

Other disclosures	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Financial guarantees	54,474	52,056	2,418
US dollar (USD)	54,474	52,056	2,418
Swiss franc (CHF)	–	–	–
Japanese yen (JPY)	–	–	–
Pound sterling (GBP)	–	–	–
Polish zloty (PLN)	–	–	–
Hong Kong dollar (HKD)	–	–	–
Other foreign currencies	–	–	–
Total	54,474	52,056	2,418

The nominal amount is reported for financial guarantees.

Other disclosures

[63] Equity management

As a subsidiary of DZ BANK, UMH AG is not subject to separate consolidated supervision as a banking group under the German Banking Act (KWG) and, consequently, nor is it subject to any regulatory capital requirements at the UMH Group level. However, some of the companies in the Union Investment Group are – at the individual bank level – subject to regulatory capital requirements under national legislation, which was complied with at all times in the reporting year. Regulatory capital requirements in the Federal Republic of Germany are specified for capital management companies by Section 25 of Germany's Investment Code (KAGB) and for Union Investment Service Bank AG, Quoniam Asset Management GmbH and VisualVest GmbH by European Regulation No. 575/2013 (CRR) in conjunction with Section 10 KWG. The Board of Managing Directors of UMH AG also uses the corporate guidelines on integrated risk and capital management as the basis for ensuring appropriate capital adequacy in the Union Investment Group. The aggregate risk is compared against the available aggregate risk cover for a given analysis period in order to make sure that, with a specified confidence level, the potential losses do not exceed the aggregate risk cover. Aggregate risk cover comprises the equity reported in the statement of financial position and quasi-equity components, and also takes into account hidden reserves and liabilities that would arise in the event of a loss. Please refer to the statement of changes in equity for further information on the composition of and changes in equity. Additional details on risk management can also be found in the risk report in the group management report.

[64] Disclosures of revenue from contracts with customers

Allocation of the revenue from contracts with customers

	2018
	EUR thousand
Revenue elements	
Fee and commission income	2,448,308
from sales commission	310,042
from management fees	1,979,838
from securities custody accounts	52,349
Other	106,079
Other operating income	3,738
Total revenue elements	2,452,046
Geographical key markets	
Germany	1,843,184
Other EU countries	608,862
Rest of the world	–
Total geographical key markets	2,452,046
Type of sales recognised	
At a point in time	344,598
Over a period of time	2,107,448
Total amount of sales recognised	2,452,046

The asset management services provided typically do not give rise to any contractual assets due to the periodic settlements. As no advance considerations are paid by customers, no contract liabilities arise.

Contracts with customers for which the proceeds contain significant financing components have not been identified. We have applied the practical expedient granted in IFRS 15.63 that transaction prices may not be adjusted in relation to the effects of a significant financing component if the customer expects to pay at the latest within one year after the transfer of the assets or services promised.

The contracts with customers concluded by the UMH Group always grant a claim to a consideration to be paid by the customer in an amount that corresponds directly to the value of the services already provided by the company for these customers. Thus, the practical expedient granted in IFRS 15.121(b) is used and sales are recognised in the amount that the entity may charge. This eliminates the obligation to disclose the total amount of transaction prices that are allocated to the performance obligations for the contract portfolio that have not yet been fulfilled as at the balance sheet date. Quantitative disclosures on the performance obligations that have not yet been fulfilled are not possible with the contract arrangements typical for asset management due to the requirements of IFRS 15 to limit the recognition of variable consideration.

Disclosures of contracts with customers

Part of the receivables recognised in the statement of financial position is accounted for using the regulations of IFRS 15.

	Loans and advances to banks EUR thousand	Loans and advances to customers EUR thousand	Other receivables EUR thousand	Total EUR thousand
As at 1 Jan. 2018	4,898	75,232	138,093	218,223
Additions	40,761	407,190	2,074,371	2,522,322
Disposals	-40,603	-398,999	-2,071,300	-2,510,902
Impairment/ reversal of impairment	–	-29	–	-29
Other	7	91	-3,585	-3,487
As at 31 Dec. 2018	5,063	83,485	137,579	226,127

[65] Disclosure of interests in other entities

Significant judgements and assumptions

- Control of other companies

The group controls an entity when it is exposed to variable returns from the entity and has the ability to affect those returns through its power over the entity.

In order to determine whether an entity must be consolidated, the UMH Group checks a series of factors, such as

- the purpose and form of the entity,
- the relevant activities and how these are determined,
- whether the group's rights result in the ability to direct the relevant activities,
- whether the group has exposure or rights to variable returns and whether the group has the ability to use its power to affect the amount of its returns.

If voting rights are relevant, the group is deemed to have control insofar as it holds, directly or indirectly, more than half of the voting rights over an entity unless there is evidence that another investor has the practical ability to unilaterally direct the relevant activities. Potential voting rights that are deemed to be substantive are also considered when assessing control. Likewise, the UMH Group also assesses existence of control where it does not control the majority of the voting rights but has the practical ability to unilaterally direct the relevant activities. This can arise in circumstances where the size and distribution of shareholders' voting rights give the group the power to direct the relevant activities.

The group reassesses the consolidation status at least at the end of each quarter. Therefore, any changes in the structure leading to a change in one or more of the control factors require reassessment when they occur. This includes changes in decision-making rights, changes in contractual arrangements, changes in the financing, ownership or capital structure and changes following a trigger event which was anticipated in the original documentation.

In the 2017 financial year, the UMH Group increased its interest in VR Consultingpartner GmbH, Frankfurt am Main, from 49 % to 51 %. The UMH Group does not control the company due to the rules on board composition and the design of the voting rules. There is also no joint control with other parties. VR Consultingpartner GmbH is therefore still included in the consolidated financial statements as an associate using the equity method.

In relation to the funds managed by the asset management companies of the group, after assessing their role in line with the national provisions of investment law, the UMH Group assumes that

- it has power of control within the meaning of IFRS 10.7(a),
- it has exposure, and rights, to variable returns from its involvement in these entities (IFRS 10.7(b)) and
- it has the ability to use its power over these entities to influence the amount of its returns (IFRS 10.7(c)).

Against this backdrop, it reviews for which of these funds the UMH Group has the role of the principal, which would necessitate consolidation, and for which it only acts as an agent for third-party investors.

As such, the UMH Group always plays the role of an agent for these funds if

- the contractually agreed remuneration is commensurate with the services provided and includes only terms customarily present in arrangements negotiated on an arm's length basis (IFRS 10.B69) and
- the scope of the UMH Group's participation in such a fund and the associated variability, taking into account its direct participation in this fund, and the material remuneration components of the UMH Group for the management of the fund do not exceed an internally determined threshold. If this threshold is exceeded, the overall circumstances are analysed on a case-by-case basis.

Due to the precedence taken by investor protection regulations, the UMH Group assumes that, as long as the control threshold in accordance with IFRS 10 is not exceeded, it does not have significant influence within the meaning of IAS 28 over investment funds managed by the group's asset management companies. Own-account investments in investment funds not fully consolidated are therefore not recognised according to the equity method but at fair value.

• Associates, joint control and significant influence

Associates are entities over which the UMH Group directly or indirectly has significant influence. Significant influence is generally presumed when the group holds between 20 % and 50 % of the voting rights.

The UMH Group holds 49 % of the voting rights of BEA Union Investment Management Limited, Hong Kong (BU). As this equity investment is controlled jointly with other partners, decisions on the relevant activities require the unanimous approval of all parties and the UMH Group has rights to the equity investment's net assets, it has been classified as a joint venture. The equity investment has been included in the consolidated financial statements using the equity method since its acquisition.

Investments in subsidiaries

• Deviating reporting periods

In the financial year, as in the previous year, there were no companies in the UMH Group with a reporting period deviating from that of the UMH Group.

• Non-controlling interests in the activities of the UMH Group and its cash flows

There are significant non-controlling interests in the UMH Group for the subsidiaries Union Investment Real Estate GmbH, Hamburg (UIR), Quoniam Asset Management GmbH, Frankfurt am Main (QAM), Union Investment Institutional Property GmbH, Hamburg (UII) and Union Investment Real Estate Austria AG, Vienna (URA):

Non-controlling interests (incl. profit share)	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Union Investment Real Estate GmbH	16,744	17,452	-708
Quoniam Asset Management GmbH	4,504	3,444	1,060
Union Investment Institutional Property GmbH	2,268	1,724	544
Union Investment Real Estate Austria AG	553	542	11
Miscellaneous	7	7	0
Total	24,076	23,169	907

Non-controlling interests	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Union Investment Real Estate GmbH	4,317	4,907	-590
Quoniam Asset Management GmbH	2,885	2,369	516
Union Investment Institutional Property GmbH	651	193	458
Union Investment Real Estate Austria AG	15	-16	31
Miscellaneous	0	0	0
Total	7,868	7,453	415

– Union Investment Real Estate GmbH, Hamburg

UIR is a leading property manager in Europe. It has more than 50 years' expertise in asset management for properties and provides bespoke real estate solutions for private and institutional asset allocation. With its internationally diversified property portfolio, now distributed across 20 national markets, it leverages the opportunities of global market cycles for investors. Extensive market knowledge and an investment strategy based on the presence of its own teams and strong cooperation partners in target markets contribute to a high return on investment. UIR operates on commercial property markets as an investor and seller, builder and developer, lessor and service provider for all aspects of real estate. UIR currently manages property funds with net assets of EUR 32.6 billion (previous year: EUR 31.7 billion). UMH AG directly holds 90.0 % of shares in UIR. Its share in the voting rights is equal to its shareholding. There are non-controlling interests of 5.5 % (UIR Beteiligungs Holding GmbH & Co KG) and of 4.5 % (DZ BANK).

UMH AG concluded an indefinite control agreement with UIR in January 2014, which can be cancelled with notice of six months to the end of a financial year. For the duration of the agreement, this guarantees the non-controlling interest UIR Beteiligungs GmbH & Co KG a share of profits (cash dividend) for each full financial year of EUR 1,961 thousand for 5.5 % of shares in the company and, for DZ BANK, EUR 1,605 thousand for 4.5 % of shares. The non-controlling interests did not claim the guaranteed dividend, which does not affect the entitlement to the distributed dividend according to UIR's resolution on the appropriation of profit. In the financial year, the non-controlling interests in UIR received dividend distributions (cash dividends) of EUR 4,444 thousand (previous year: EUR 3,511 thousand).

Summarised financial information on UIR:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change TEUR
Assets	301,578	298,126	3,452
Liabilities	134,133	123,600	10,533

	2018 EUR thousand	2017 EUR thousand	Change TEUR
Interest and commission income	337,773	304,613	33,160
Net income through profit or loss	43,163	49,077	-5,914
Other comprehensive income	-5,800	16,178	-21,978
Total comprehensive income	37,363	65,255	-27,892
Cash flow	4	1	3

– Quoniam Asset Management GmbH, Frankfurt am Main

QAM is a limited liability asset management company based in Frankfurt and with a branch in London. Using its engineering-based approach, QAM focuses exclusively on the development and implementation of quantitative portfolio management strategies for global institutional investors.

UMH AG directly holds 88.0 % of the capital and all voting rights in QAM. Non-controlling interests account for 12.0 % of capital shares. These non-voting shares are held by the management of QAM.

In the financial year, (cash) dividends of EUR 1,763 thousand (previous year: EUR 1,867 thousand) were paid to the non-controlling interests of QAM.

Summarised financial information on QAM:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Assets	77,553	65,095	12,458
Liabilities	40,016	36,397	3,619

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Interest and commission income	76,154	71,035	5,119
Net income through profit or loss	24,047	19,741	4,306
Other comprehensive income	-518	476	-994
Total comprehensive income	23,529	14,425	9,104
Cash flow	3	-2	5

– Union Investment Institutional Property GmbH, Hamburg

UII, a property asset management company based in Hamburg and with a branch in London, systematically and successfully focuses on the investment requirements of institutional investors. 30 years ago, UII already focused on the needs of institutional investors. Vehicle expertise, best-in-class processes and a precise knowledge of the different requirements of institutional investors allow it to deliver tailored real estate solutions for institutional asset allocation. In addition to institutional mutual funds and multi-client special funds, UII offers institutional investors individual solutions. The fund vehicles can be of either German or Luxembourg provenance. UII currently manages a volume of EUR 6.1 billion in its institutional business (previous year: EUR 4.7 billion).

UMH AG directly holds 90.0 % of shares in UII. Its share in the voting rights is equal to its shareholding. At 10.0 %, the sole non-controlling interest is BAG Bankaktiengesellschaft, Hamm.

UMH AG concluded an indefinite control agreement with UII in October 2013, which can be cancelled with notice of six months to the end of a financial year. For the duration of the agreement, this guarantees the non-controlling interest a share of profits (cash dividend) for each full financial year of 12 % of the notional value of the company of EUR 620,000, i.e. EUR 74,400. In the financial year, the non-controlling interest in UII received dividend distributions (cash dividends) of EUR 100 thousand (previous year: EUR 400 thousand).

Summarised financial information on UII:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Assets	33,649	29,114	4,535
Liabilities	10,974	11,869	-895

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Interest and commission income	42,819	26,394	16,425
Net income through profit or loss	6,506	1,930	4,576
Other comprehensive income	-75	316	-391
Total comprehensive income	6,431	2,246	4,185
Cash flow	-	-	-

– Union Investment Real Estate Austria AG, Vienna

URA, which is based in Vienna, is an asset management company for real estate in accordance with the Austrian Real Estate Investment Fund Act. The company was founded in 2003 and manages real estate in Austria and Germany. URA currently manages property funds with a volume of EUR 0.9 billion (previous year: EUR 0.8 billion).

UMH AG indirectly holds 94.5 % of shares in URA. Its share in the voting rights is equal to its shareholding. At 5.5 %, the sole non-controlling interest is BAG Bankaktiengesellschaft, Hamm.

In the financial year, (cash) dividends of EUR 4 thousand (previous year: EUR 58 thousand) were paid to the non-controlling interests of URA.

Summarised financial information on URA:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Assets	15,811	14,947	864
Liabilities	5,756	5,094	662

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Interest and commission income	15,059	8,654	6,405
Net income through profit or loss	265	-290	555
Other comprehensive income	3	2	1
Total comprehensive income	268	-288	556
Cash flow	–	–	–

- Nature and extent of material restrictions

National regulatory requirements and provisions of company law restrict the UMH Group's ability to transfer assets to or from other companies within the group. However, these restrictions cannot be specifically assigned to individual assets or items of the statement of financial position.

In addition, owing to regulatory provisions, Union Investment Service Bank AG, the asset management companies and the securities companies of the Union Investment Group are subject to restrictions on lending to other group companies.

By contract dated 22 October 2018, UMH transferred all its shares in Union Investment Towarzystwo Funduszy Inwestycyjnych S.A. (TFI), Warsaw, in a so-called locked box method. Under the terms of this agreement, as at 31 December 2017 and until the pending closing, dispositions of the company's assets were limited to contractually-defined exceptions. Based on the consolidated financial statements of the UMH Group as at 31 December 2018, these restrictions amount to EUR 23,411 thousand for assets held for sale, EUR 10,399 thousand for liabilities held for sale, EUR 1,827 thousand for equity and EUR 4,488 thousand on consolidated profit. It has also been contractually agreed that the buyer's approval must be obtained in advance for all transactions beyond normal business operations until the closing has been completed.

- Nature of risks entailed by interests in consolidated structured entities

The fund UI Vario: 2 is consolidated in the UMH consolidated financial statements at a net asset value of EUR 842.5 million as at the end of the reporting period (previous year: EUR 784.6 million). This is a fund of funds that was issued as a vehicle to bundle the strategic own-account investment positions of the UMH Group and its investment universe, and concentrates on funds managed by the Union Investment Group. All unit certificates of this fund managed by Union Investment Luxembourg S.A. are owned by companies of the UMH Group. Only the companies of the UMH Group can acquire these unit certificates. The maximum downside risk is limited to the consolidated net assets of this structured entity.

Interests in joint arrangements and associates

- Deviating reporting periods

In the reporting year, there were no companies in the UMH Group with a reporting period deviating from that of the UMH Group.

The last available annual financial statements, with any adjustments, are used. Any known material effects in the year under review are covered in a reconciliation statement.

- Type, extent and financial impact of interests in joint arrangements

- BEA Union Investment Management Limited, Hong Kong

BEA Union Investment Management Limited (BU) is a joint venture of UMH AG and The Bank of East Asia Limited, Hong Kong (BEA). The asset management company provides portfolio management services for mutual funds and mandatory provident fund (MPF) schemes – regulated pension products – and asset management and advisory services for institutional clients. Sales activities run through BEA and, increasingly, third parties, and mainly focus on Hong Kong and China. At the end of 2018, the company had HKD 56.3 billion in assets under management (previous year: HKD 56.9 billion) in 87 products (previous year: 89 products).

UMH AG's shareholding at the end of the reporting period was 49 % (previous year: 49 %). The remaining 51 % of shares (previous year: 51 %) are held by BEA. The shares in BU are accounted for in the UMH Group using the equity method. In the financial year, BU distributed a dividend of HKD 44.9 million or EUR 4,774 thousand to UMH AG (previous year: HKD 30.9 million or EUR 3,727 thousand).

Summarised financial information on BU:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Assets	68,204	62,404	5,800
of which cash reserve	–	–	–
Liabilities	-7,890	-7,347	-543
of which: financial liabilities	-7,819	-7,344	-475

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Interest income	1,173	637	536
Interest expenses	–	–	–
Fee and commission income	32,828	29,064	3,764
Fee and commission expenses	-6,120	-4,557	-1,563
Administrative expenses, depreciation and amortisation	-12,860	-14,713	1,853
Income taxes	-2,277	-1,631	-646
Net income from continuing operations	12,696	12,912	-216
Other comprehensive income	-56	621	-677
Total comprehensive income	12,640	13,533	-893

Statement of reconciliation from summarised financial information to the carrying amount of the shares in BU:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Recognised net assets	60,314	55,057	5,257
Multiplication by shareholding	29,554	26,978	2,576
Goodwill before reversal of impairment	27,158	17,800	9,358
Reversal of impairment of goodwill	–	8,204	-8,204
Carrying amount from remeasurement in line with the equity method	56,712	52,982	3,730

– Other joint ventures

There were no significant joint ventures accounted for using the equity method at the end of the reporting period.

- Type, extent and financial impact of interests in associates

– ZBI Partnerschafts-Holding GmbH, Erlangen

The ZBI Group's operating business is bundled in ZBI Partnerschafts-Holding GmbH, Erlangen, and its subsidiaries (ZBI). The ZBI Group is a leading company on the German residential property market. The group covers the entire value chain for a residential property. The ZBI Group issues open- and closed-ended mutual funds for private investors. Open-ended special funds and individual funds are issued for institutional investors. All funds invest exclusively in German residential properties.

ZBI Partnerschafts-Holding GmbH was founded in 2017. UMH AG directly holds a 49.9 % stake in the company; the rest of the shares are held by ZBI Zentral Boden Immobilien AG, Erlangen (ZBI AG). ZBI Partnerschafts-Holding GmbH and its subsidiaries are included in the consolidated financial statements as an associate using the equity method. In the financial year, ZBI distributed a dividend of EUR 7,460 thousand to UMH AG (previous year: EUR – thousand).

Summarised financial information on ZBI:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Assets	87,639	70,782	16,857
of which cash reserve	–	–	–
Liabilities	-44,436	-33,662	-10,774
of which financial liabilities	-40,043	-28,756	-11,287

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Interest income	341	11,401	-11,060
Fee and commission income	90,048	51,463	38,585
Administrative expenses, depreciation and amortisation	-66,408	-31,440	-34,968
Income taxes	-7,750	-8,948	1,198
Net income from continuing operations	16,230	22,475	-6,245
Total comprehensive income	16,230	22,475	-6,245

Statement of reconciliation from summarised financial information to the carrying amount of the shares in ZBI:

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Recognised net assets	43,203	37,120	6,083
Multiplication by shareholding	21,558	18,523	3,035
Goodwill before reversal of impairment	25,697	25,697	0
Reversal of impairment of goodwill	–	–	–
Carrying amount from remeasurement in line with the equity method	47,255	44,220	3,035

– Other associates

The carrying amount of associates individually insignificant to the UMH Group accounted for using the equity method was EUR 7.3 million as at the end of the reporting period (previous year: EUR 7.2 million).

Summarised financial information on individually insignificant associates accounted for using the equity method:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Pro rata net income from continuing operations	1,533	1,887	-354
Pro rata net income from discontinued operations	–	–	–
Pro rata other comprehensive income	–	–	–
Pro rata total comprehensive income	1,533	1,887	-354

- **Nature and extent of material restrictions**

In its domestic country of Hong Kong, the joint venture BU is subject to regulatory minimum capital requirements and therefore restrictions on its dividend and capital distributions.

The associate R+V Pensionsfonds Aktiengesellschaft, Wiesbaden, is subject to standard industry restrictions on dividend and capital distributions owing to insurance supervisory law regulations.

- **Risks associated with interests in joint ventures and associates**

– Obligations in relation to joint ventures

The two shareholders of BU are not permitted to end the joint venture without stating grounds. A special mechanism would take effect in this event. The terminating partner has to offer the non-terminating partner its shares at a price per share determined by the terminating partner itself. If the non-terminating partner refuses this offer, the terminating partner must, in return, assume the shares of the non-terminating partner at the previously determined price per share. This arrangement is not reflected in the carrying amounts of the UMH Group.

The UMH Group had recognised provisions for commission for BU of EUR 569 thousand as at the end of the reporting period (previous year: EUR 727 thousand).

- **Unrecognised losses**

There are no unrecognised losses for the joint ventures and associates accounted for using the equity method in the UMH consolidated financial statements.

Interests in unconsolidated structured entities

- **Nature of interests**

In its business activities, in its capacity as an asset manager and an investor, the UMH Group has relationships with various entities set up to generate commission or investment income. Some of these entities have one or more of the following characteristics:

- The structures have been set up so that any voting rights or similar rights are not the dominant factor in deciding who controls the entity,
- they have restricted activities or
- they have a narrow and well-defined objective.

Such entities are referred to as structured entities. They are consolidated when the substance of the relationship between the UMH Group and the structured entities indicates that the structured entities are controlled by the UMH Group. The entities covered by this note are not consolidated as the UMG Group has no control over voting rights, contracts, financing agreements or other funds.

The group has interests in structured entities as defined by IFRS 12 when the UMH Group is contractually or non-contractually exposed to variable returns on the performance of these entities. Examples include debt or equity investments, investment management agreements, liquidity facilities, guarantees and derivative instruments in which the UMH Group absorbs the financial risks from the structured entities. By contrast, instruments that transfer risks to these entities do not give rise to interests in structured entities on the part of the UMH Group.

The business activities of the UMH Group with unconsolidated structured entities can be broken down into the following two types:

- Business activity 1: Management of and own-account investment in funds set up by companies of the Union Investment Group.
 - Business activity 2: Management of portfolios of funds set up by third-party companies.
- **Business activity 1: Management of funds and own-account investment in funds set up by companies of the Union Investment Group**

The unconsolidated structured entities to be taken into account in reporting in accordance with IFRS 12 are essentially funds set up by companies of the Union Investment Group in line with the contractual form model without voting rights and, to a smaller extent, in company structures with their own legal identity. The asset management companies of the group form such structured entities in order to satisfy different customer requirements in relation to investments in specific asset classes or investment styles.

The UMH Group generates income from ongoing management fees for its fund-based investment management services, supplemented in part by performance fees. In addition, the UMH Group's expenses are reimbursed from funds, partly in the form of flat-rate remuneration.

There are no derivative transactions between companies of the UMH Group and the funds managed by the Union Investment Group. Funds are not refinanced by loans from Union Investment Group companies.

Own-account investments in funds are classified at fair value through profit or loss, hence the recognised and unrecognised gains and losses on the remeasurement of these items are included in other net remeasurement income on financial instruments.

The funds are financed by issuing unit certificates to investors. Further financing – in the form of borrowing – is only used for open-ended mutual real estate funds, special property funds and other individual funds. A key feature of all the funds managed by the Union Investment Group is risk diversification according to national investment law provisions.

A further component of business activity 1 is the guarantee funds set up by companies of the Union Investment Group. These have market value guarantees. This means that a certain amount or a certain performance is guaranteed for these investments up to a certain level. The amount of the market value guarantees and the maturity dates vary on the basis of the

agreements made for the individual investment funds. A market value guarantee is triggered when the market value of the unit certificates in question do not meet the guaranteed specifications at certain dates. As at the end of the reporting period, the UMH Group managed guarantee funds with a volume of EUR 2,808,845 thousand (net asset value) (previous year: EUR 4,130,635 thousand) and a minimum payment commitment (nominal amount) of EUR 2,634,926 thousand (previous year: EUR 3,814,043 thousand). The put options embedded in the guarantee funds were measured at EUR 5,792 thousand as at the end of the reporting period (previous year: EUR 6,057 thousand) and reported as liability derivatives on the equity and liabilities side of the statement of financial position.

Number of unit certificates and volume of funds managed by the UMH Group as business activity 1:

	Volume		Number (unit certificates)	
	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand
Mutual funds	165,031,764	171,793,713	387	391
of which guarantee funds	2,808,845	4,130,635	36	48
Special funds	99,899,124	94,926,645	392	384
of which guarantee funds	–	–	–	–
Total	264,930,888	266,720,358	779	775
of which guarantee funds	2,808,845	4,130,635	36	48

The following assets and liabilities are recognised in the statement of financial position of the UMH Group in connection with the interests in business activity 1. There is also possible exposure from contingent liabilities and financial guarantees, credit commitments and other commitments.

2018 financial year	Mutual funds		Special funds		Total
	EUR thousand	of which guarantee funds EUR thousand	EUR thousand	of which guarantee funds EUR thousand	
Assets	1,110,323	63	23,357	–	1,133,680
Loans and advances to customers	3,270	–	899	–	4,169
Investment fund units	964,331	–	5,310	–	969,641
Investments in subsidiaries	–	–	–	–	–
Other receivables	120,381	63	17,149	–	137,530
Assets held for sale	22,340	–	1	–	22,341
Liabilities	6,369	5,792	18	–	6,387
Liability derivatives	5,792	5,792	–	–	5,792
Other liabilities	577	–	18	–	595
Net reported exposure (assets less liabilities)	1,103,954	-5,729	23,339	–	1,127,293
Contingent liabilities	–	–	–	–	–
Financial guarantees, credit commitments and other commitments	2,629,134	2,629,134	–	–	2,629,134
Financial guarantees	–	–	–	–	–
Credit commitments	–	–	–	–	–
Other commitments	2,629,134	2,629,134	–	–	2,629,134
Reported exposure (net reported exposure + contingent liabilities + financial guarantees, credit commitments and other commitments)	3,733,088	2,623,405	23,339	–	3,756,427
Actual maximum exposure	3,733,088	2,623,405	23,339	–	3,756,427

2017 financial year	Mutual funds		Special funds		Total
	EUR thousand	of which guarantee funds EUR thousand	EUR thousand	of which guarantee funds EUR thousand	
Assets	1,486,861	119	19,356	–	1,506,217
Loans and advances to customers	3,127	–	913	–	4,040
Investment fund units	1,331,721	–	5,241	–	1,336,962
Investments in subsidiaries	259	–	–	–	259
Other receivables	124,725	119	13,202	–	137,927
Assets held for sale	27,029	–	–	–	27,029
Liabilities	6,935	6,072	46	–	6,981
Liability derivatives	6,057	6,057	–	–	6,057
Other liabilities	878	15	46	–	924
Net reported exposure (assets less liabilities)	1,479,926	-5,953	19,310	–	1,499,236
Contingent liabilities	–	–	–	–	–
Financial guarantees, credit commitments and other commitments	3,807,986	3,807,986	0	–	3,807,986
Financial guarantees	–	–	–	–	–
Credit commitments	–	–	–	–	–
Other commitments	3,807,986	3,807,986	0	–	3,807,986
Reported exposure (net reported exposure + contingent liabilities + financial guarantees, credit commitments and other commitments)	5,287,912	3,802,033	19,310	–	5,307,222
Actual maximum exposure	5,287,912	3,802,033	19,310	–	5,307,222

Financial guarantees, credit commitments and other commitments are stated at their nominal amounts. This takes into account only financial guarantees, credit commitments and other commitments for which no liabilities or contingent liabilities have been recognised.

The actual maximum exposure is calculated in the UMH Group as a gross value without offsetting any collateral and is equal to the exposure reported in the table above for business activity 1.

Regarding the disclosure of the maximum downside risk, it should be noted that the above table includes market price guarantees in the amount of the nominal values of the guarantee commitments for guarantee funds (EUR 2,634,926 thousand; previous year: EUR 3,814,043 thousand), less the liability amounts recognised for the put options embedded in these products (EUR 5,792 thousand; previous year: EUR 6,057 thousand). However, the maximum loss exposure for the market price guarantees on guarantee funds is not the economic risk of this product class as this also takes into account the net assets of these guarantee funds (EUR 2,808,845 thousand; previous year: EUR 4,130,635 thousand) as at the end of the reporting period and the management model for securing minimum payment commitments for these products.

In the reporting year, the UMH Group generated the following income from the structured entities for business activity 1:

2018 financial year	Loading charges, management fees and other fee and commission income EUR thousand	Income from distributions EUR thousand	Realised and unrealised gains and losses on remeasurement through profit or loss EUR thousand	Total income recognised in profit or loss EUR thousand	Unrealised gains and losses on remeasurement in other comprehensive income EUR thousand
Mutual funds	2,025,509	8,155	-39,946	1,993,718	-
of which guarantee funds	28,883	-	-	-	-
Special funds	166,467	188	-192	166,463	-
of which guarantee funds	-	-	-	-	-
Total	2,191,976	8,343	-40,138	2,160,181	-
of which guarantee funds	28,883	-	-	-	-

2017 financial year	Management fees and other fee and commission income EUR thousand	Income from distributions EUR thousand	Realised and unrealised gains and losses on remeasurement through profit or loss EUR thousand	Total income recognised in profit or loss EUR thousand	Unrealised gains and losses on remeasurement in other comprehensive income EUR thousand
Mutual funds	1,793,390	12,392	8,897	1,814,679	-
of which guarantee funds	41,021	-	3,942	44,963	-
Special funds	134,815	222	-115	134,922	-
of which guarantee funds	-	-	-	-	-
Total	1,928,205	12,614	8,782	1,949,601	-
of which guarantee funds	41,021	-	3,942	44,963	-

Due to the introduction of IFRS 15, the composition of the income has changed. Please see the information in note [2].

The UMH Group incurred losses of EUR -63,088 thousand from business activity 1 in the financial year (previous year: EUR -6,486 thousand). These were included solely in net income in profit or loss. The distributions by the funds in the financial year were deducted in calculating the losses incurred for each fund.

- **Business activity 2: Management of portfolios of funds set up by third-party companies**

In addition to managing funds set up by asset management companies of the Union Investment Group, the companies of the UMH Group manage portfolios of funds set up by third-party companies. The UMH Group generates management fees and, in some cases, additional performance fees from these contractual relationships. There are no derivative transactions between companies of the UMH Group and these third-party funds. Third-party funds are not refinanced by loans from Union Investment Group companies.

The volumes and number of mandates for business activity 2 were as follows year-on-year:

	Volume		Number	
	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	31 Dec. 2018	31 Dec. 2017
Outsourcing mandates	37,404,548	37,852,234	223	214

As at the end of the reporting period, business activity 2 was reflected only in the statement of financial position item loans and advances to customers with fee and commission receivables of EUR 20,636 thousand (previous year: EUR 17,330 thousand). There was no other exposure from contingent liabilities, financial guarantees, credit commitments or other commitments for this business activity as at the end of the reporting period.

The maximum downside risk from assets from unconsolidated structured entities for business activity 2 is equal to the current carrying amounts of these items and is EUR 20,636 thousand (previous year: EUR 17,330 thousand).

In the financial year, the UMH Group generated only fee and commission income of EUR 80,267 thousand from business activity 2 (previous year: EUR 72,483 thousand). No losses were incurred on this business activity in the financial year.

Support arrangements for unconsolidated structured entities

• Nature of support

The UMH Group is considered a fund's sponsor if market participants associate this structured entity with the UMH Group. The UMH Group assumes this to be the case if the terms 'Union Investment' or 'Union' are used in a fund's name.

As the asset management services performed by the UMH Group for the funds set up by the companies of the Union Investment Group and third-party companies generally already satisfy the criteria for interests in structured entities, these business relationships have already been included in the disclosures on relationships with unconsolidated structured entities above and are not necessary here.

The UMH Group acts as sponsor for the 'Unilmmo: Wohnen ZBI' fund and 'ZBI Union Wohnen Plus' fund. The title allows the investors to associate the fund with the UMH Group. As sponsor, the UMH Group provides various services and its distribution channel.

'Unilmmo: Wohnen ZBI' is an open-ended real estate fund issued by ZBI Fondsmanagement AG. The fund invests in residential buildings, housing complexes and residential and commercial buildings in Germany. The properties are held directly.

'ZBI Union Wohnen Plus' is a special fund for institutional investors and invests predominantly in German residential properties.

The UMH Group has an exclusive distribution right for the two funds via its distribution network. In addition, the UMH Group helps ZBI Fondsmanagement AG manage the funds. The UMH Group receives compensation for distribution and for services provided.

The UMH Group generated income of EUR 4,456 thousand (previous year: EUR 1,716 thousand) from this in the financial year. No losses were incurred on this business activity in the financial year.

[66] List of shareholdings

The shareholdings of Union Asset Management Holding AG were as follows as at the end of the reporting period:

Consolidated subsidiaries

Name, registered office	Shareholding – direct	Shareholding – indirect
Asset management companies		
Union Investment Institutional GmbH, Frankfurt am Main ¹⁾	100.0 %	–
Union Investment Institutional Property GmbH, Hamburg ¹⁾	90.0 %	–
Union Investment Luxembourg S.A., Luxembourg	100.0 %	–
Union Investment Privatfonds GmbH, Frankfurt am Main ¹⁾	100.0 %	–
Union Investment Real Estate GmbH, Hamburg ¹⁾	90.0 %	–
Union Investment Real Estate Austria AG, Vienna	–	94.5 %
Union Investment Towarzystwo Funduszy Inwestycyjnych S.A., Warsaw	100.0 %	–
Financial service institutions		
Quoniam Asset Management GmbH, Frankfurt am Main ²⁾	88.0 %	–
Union Investment Austria GmbH, Vienna	100.0 %	–
VisualVest GmbH, Frankfurt am Main ¹⁾	100.0 %	–
Banks		
Union Investment Service Bank AG, Frankfurt am Main ¹⁾	100.0 %	–
Securities trading companies		
attrax S.A., Luxembourg	100.0 %	–
Union Investment Financial Services S.A., Luxembourg	–	100.0 %
Service companies		
UIR Verwaltungsgesellschaft mbH, Hamburg	–	90.0 %
Union IT-Services GmbH, Frankfurt am Main ¹⁾	100.0 %	–
Union Service-Gesellschaft mbH, Frankfurt am Main ¹⁾	100.0 %	–

¹⁾ Exercising Section 264 (3) of the German Commercial Code (HGB), the shareholder meetings of these subsidiaries resolved not to disclose their annual financial statements or their management reports for the financial year from 1 January to 31 December 2018 in accordance with Section 325 HGB.

²⁾ The share of voting rights for this company is 100%.

Consolidated investment funds

Name, registered office	Shareholding – direct	Shareholding – indirect
UI Vario: 2, Luxembourg	–	100.0 %

Joint ventures accounted for using the equity method

Name, registered office	Shareholding – direct	Shareholding – indirect
BEA Union Investment Management Limited, Hong Kong	49.0 %	–

Associates accounted for using the equity method

Name, registered office	Shareholding – direct	Shareholding – indirect
compertis Beratungsgesellschaft für betriebliches Vorsorgemanagement mbH, Wiesbaden	49.0 %	–
R+V Pensionsfonds Aktiengesellschaft, Wiesbaden	25.1 %	–
VR Consultingpartner GmbH, Frankfurt am Main	51.0 %	–
ZBI Partnerschafts-Holding GmbH, Erlangen	49.9 %	–

Investment funds held for sale

Name, registered office	Shareholding – direct	Shareholding – indirect
Global Credit Cash Duration EUR hedged I dis, Luxembourg	–	99.9 %
Globalne Rynki Wschodz ce, Warsaw	–	100.0 %
UII European Hospitality Fund, Hamburg	100.0 %	–
UniAbsolute Return Globalny FIZ, Warsaw	–	26.5 %
UniGotówkowy Aktywa Polskie, Warsaw	–	78.2 %
UnInstitutional Global Credit, Luxembourg	–	32.9 %
UniRak Nordamerika, Luxembourg	–	34.1 %

Unconsolidated subsidiaries

Name, registered office	Shareholding – direct	Shareholding – indirect
UI Management S.a.r.l., Luxembourg	–	100.0 %
UII Issy 3 Moulins SARL, Paris	–	90.0 %
UII PSD KN ImmoInvest GP GmbH, Hamburg	–	90.0 %
UII SCE Management GP GmbH, Hamburg	–	90.0 %
UII Verwaltungsgesellschaft mbH, Hamburg	–	90.0 %
UIR FRANCE 1 S.a.r.l., Paris	–	90.0 %
UIR FRANCE 2 S.a.r.l., Paris	–	90.0 %
UNION INVESTMENT REAL ESTATE ASIA PACIFIC PTE. LTD., Singapore	–	90.0 %
Union Investment Real Estate France SAS, Paris	–	90.0 %
URA Verwaltung GmbH, Vienna	–	94.5 %

[67] Contingent liabilities

As in the previous year, there are no contingent liabilities as at the end of the reporting period.

[68] Other commitments

The Union Investment Group has capital preservation commitments under Section 1 (1) no. 3 of the German Personal Pension Plan Certification Act (AltZertG) amounting to EUR 13,808,314 thousand (previous year: EUR 12,708,232 thousand). These commitments are the total amount of the contributions paid by investors into the individual variants of the UniProfiRente and UniProfiRente Select products of Union Investment Privatfonds GmbH, which, in accordance with statutory provisions, must be made available as a minimum amount at the start of the pay-out phase, plus the pay-out amounts guaranteed by Union Investment Privatfonds GmbH for contracts already in the pay-out phase.

In connection with actual guarantee funds launched by fund management companies in the UMH Group, there are also minimum payment commitments of EUR 2,634,926 thousand (previous year: EUR 3,814,043 thousand).

The fair value of the shortfall in cover for these guarantee commitments is reported in the statement of financial position under 'Liability derivatives' (note [49]).

[69] Operating lease disclosures

UMH Group as lessee

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Future minimum lease payments under non-cancellable operating leases	434,736	295,614	139,122
of which up to one year	54,509	49,536	4,973
of which one year to five years	198,916	151,163	47,753
of which more than five years	181,311	94,915	86,396
Future minimum lease payments are attributable to:	434,736	295,613	139,123
Land and buildings leases	346,252	227,862	118,390
Vehicle leases	6,032	5,698	334
IT leases	82,452	62,053	20,399
Future rental receipts expected under non-cancellable subleases at the end of the reporting period	303	338	-35
Lease and sublease payments recognised as an expense in the period	55,142	38,837	16,305
of which minimum lease payments	54,649	36,602	18,047
of which contingent rents	493	2,235	-1,742
of which payments under subleases	–	–	–

Some lease arrangements include index-linked contingent rents.

Individual leases for buildings have options to renew the lease at the end of the initial term.

UMH Group as lessor

	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Future minimum lease payments under non-cancellable operating leases	303	338	-35
of which up to one year	54	36	18
of which one year to five years	210	210	–
of which more than five years	39	92	-53
Future minimum lease payments are attributable to:	303	338	-35
Land and buildings leases	303	338	-35
Vehicle leases	–	–	–
IT leases	–	–	–

[70] Financial guarantees

Following the disposal of GVA GENO-Vermögens-Anlage Gesellschaft mbH, Frankfurt am Main, (GVA), in the 2011 financial year UMH AG issued guarantees to DZ BANK and WGZ BANK as security for loans extended by these banks to two closed-end investment funds marketed by GVA. Following the merger of DZ BANK and WGZ BANK on 29 July 2016, the full amount of the guarantee relates to DZ BANK.

As at 31 December 2018, the nominal amount of these guarantees was USD 62,400 thousand (previous year: USD 62,400 thousand) or EUR 54,474 thousand (previous year: EUR 52,056 thousand).

[71] Number of employees

The following table gives a breakdown by category of the average number of employees in the financial year, calculated in accordance with Section 267 (5) HGB:

	2018 Number	2017 Number	Change Number
Female employees	1,329	1,278	51
of which full-time employees	765	732	33
of which part-time employees	564	546	18
Male employees	1,714	1,632	82
of which full-time employees	1,605	1,533	72
of which part-time employees	109	99	10
Total employees	3,043	2,910	133
For information only:			
Female trainees	61	56	5
Male trainees	87	74	13
Total trainees	148	130	18

[72] Auditor fees

The following table shows the breakdown of auditor fees by type of service:

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Audits of financial statements	655	744	-89
Other assurance services	121	95	26
Tax consultancy services	–	4	-4
Other services	1,301	1,759	-458
Total	2,077	2,602	-525

Auditor fees comprise expenses relating to the audit of the consolidated financial statements and group management report of UMH AG, the statutory audit of the annual financial statements and management report of UMH AG, and the audit of the separate financial statements, management reports and consolidation packages of subsidiaries included in the consolidated financial statements for which an audit is required. This category also includes the fees for the auditor's review of the condensed interim consolidated financial statements packages during the year. The fees charged for other assurance services essentially included fees for the audit performed in accordance with Section 36 of the German Securities Trading Act (WpHG) and other assurance and audit-related services. The fees for other services mainly resulted from the auditing of funds.

[73] Events after the end of the reporting period

There were no events of particular significance after the end of the financial year.

[74] Related party disclosures

As at the end of the reporting period, DZ BANK directly held 72.32 % of the share capital of UMH AG (previous year: 72.32 %). In accordance with IFRS 10, UMH AG is therefore controlled by DZ BANK and is a related party of the UMH Group. The other companies included in the DZ BANK consolidated group, non-consolidated subsidiaries, associates and joint ventures of DZ BANK continue to be related parties.

The list of shareholdings (note [66]) shows the related parties controlled by the UMH Group or over which the UMH Group can exercise a significant influence.

In the UMH Group, the following are related parties (individuals) as defined by IAS 24.9: the Board of Managing Directors and the Supervisory Board of DZ BANK, the Board of Managing Directors and the Supervisory Board of UMH AG, the heads of segments / divisions and further key management personnel in the UMH Group and their respective close family members.

UMH AG maintains extensive business relationships with the entities included in the consolidated financial statements as part of its normal business activities. The transactions within these relationships are conducted on an arm's-length basis.

UMH AG and other entities included in the consolidated financial statements enter into relationships with other related parties in their normal business activities. Such business is transacted on an arm's-length basis.

Related party disclosures

Assets	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Loans and advances to banks	720,382	306,108	414,274
of which DZ BANK	451,819	292,529	159,290
of which entities also controlled by DZ BANK	268,518	13,536	254,982
of which joint ventures of DZ BANK	45	43	2
Loans and advances to customers	8,126	2,387	5,739
of which entities also controlled by DZ BANK	323	867	-544
of which unconsolidated subsidiaries	114	32	82
of which associates of UMH AG	7,580	1,384	6,196
of which joint ventures of UMH AG	109	104	5
Other assets	11,121	9,372	1,749
of which DZ BANK	0	0	-
of which entities also controlled by DZ BANK	1,534	877	657
of which unconsolidated subsidiaries	72	65	7
of which pension plans for employees	9,515	8,430	1,085

Equity and liabilities	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change EUR thousand
Liabilities to banks	138	356	-218
of which DZ BANK	-	7	-7
of which entities also controlled by DZ BANK	138	349	-211
Liabilities to customers	39	41	-2
of which entities also controlled by DZ BANK	26	37	-11
of which associates of UMH AG	13	4	9
Other liabilities	107,811	108,252	-441
of which DZ BANK	74,467	74,800	-333
of which entities also controlled by DZ BANK	30,405	30,916	-511
of which joint ventures of DZ BANK	2,147	1,564	583
of which associates of UMH AG	223	245	-22
of which joint ventures of UMH AG	569	727	-158

Consolidated income statement	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Interest income and current income	-880	-366	-514
of which DZ BANK	-587	-290	-297
of which entities also controlled by DZ BANK	-293	-76	-217
Interest expenses	-1,068	-954	-114
of which DZ BANK	-888	-913	25
of which entities also controlled by DZ BANK	-180	-41	-139
Fee and commission income	-61,337	25,805	-87,142
of which DZ BANK	-63,166	412	-63,578
of which entities also controlled by DZ BANK	-9,459	24,967	-34,426
of which joint ventures of DZ BANK	-767	32	-799
of which unconsolidated subsidiaries	42	–	42
of which associates of UMH AG	11,583	–	11,583
of which joint ventures of UMH AG	430	394	36
Fee and commission expenses	-87,204	-197,701	110,497
of which DZ BANK	-48,052	-120,876	72,824
of which entities also controlled by DZ BANK	-35,625	-72,028	36,403
of which joint ventures of DZ BANK	–	-1,063	1,063
of which associates of UMH AG	-986	-950	-36
of which joint ventures of UMH AG	-2,541	-2,784	243
Administrative expenses	-8,510	-8,299	-211
of which DZ BANK	-4,388	-4,438	50
of which entities also controlled by DZ BANK	-2,454	-2,057	-397
of which joint ventures of DZ BANK	-79	-596	517
of which unconsolidated subsidiaries	-1,422	-1,023	-399
of which associates of UMH AG	-167	-185	18
of which joint ventures of UMH AG	–	0	0

Consolidated income statement	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Other operating result	3,465	1,587	1,878
of which DZ BANK	1,898	317	1,581
of which entities also controlled by DZ BANK	1,084	948	136
of which joint ventures of DZ BANK	-70	-88	18
of which unconsolidated subsidiaries	365	405	-40
of which associates of UMH AG	188	5	183

Other disclosures	31 Dec. 2018 EUR thousand	31 Dec. 2017 EUR thousand	Change TEUR
Financial guarantees	54,474	52,056	2,418
of which DZ BANK	54,474	52,056	2,418

Please see the information in note [70] regarding financial guarantees.

The fair value of the plan assets managed by the associate R+V Pensionsfonds Aktiengesellschaft, Wiesbaden, was EUR 23,584 thousand as at the end of the reporting period (previous year: EUR 25,029 thousand). Funding of EUR 21 thousand was provided in the financial year (previous year: EUR 551 thousand).

The 'Other assets' item includes pension plans for the benefit of employees with a value of EUR 9,515 thousand (previous year: EUR 8,430 thousand). This includes the fair value of reimbursement claims against R+V Lebensversicherung AG, Wiesbaden, a company also controlled by DZ BANK, amounting to EUR 6,716 thousand (previous year: EUR 5,810 thousand). Funding of EUR 932 thousand was provided in the financial year (previous year: EUR 959 thousand).

Remuneration paid to related parties

The UMH Group's key management personnel are deemed to comprise the Board of Managing Directors and the Supervisory Board of UMH AG, the heads of segments/divisions and other staff in key positions in the group.

In accordance with IAS 19.151, disclosures are also made with regard to the post-employment benefits paid to these persons.

	2018 EUR thousand	2017 EUR thousand	Change EUR thousand
Short-term remuneration	10,573	10,731	-158
Long-term remuneration	2,670	2,587	83
Contributions to defined contribution plans	48	55	-7
Current service cost of defined benefit plans	2,582	2,145	437
Total	15,873	15,519	354

The remuneration paid to the members of the Supervisory Board of UMH AG for the performance of their duties amounted to EUR 361 thousand in the financial year (previous year: EUR 472 thousand). The remuneration paid to the members of the Board of Managing Directors of UMH AG in the financial year amounted to EUR 5,015 thousand (previous year: EUR 4,531 thousand).

[75] Board of Managing Directors of Union Asset Management Holding AG

Name	Professional capacity
Hans Joachim Reinke	Chief Executive Officer
Alexander Schindler	Member of the Board of Managing Directors
Jens Wilhelm	Member of the Board of Managing Directors
Dr Andreas Zubrod	Member of the Board of Managing Directors (until 31 December 2018)

[76] Supervisory Board of Union Asset Management Holding AG

Name and Supervisory Board post	Professional capacity
Dr Cornelius Riese Chairman (since 1 January 2019) ¹⁾ Member (until 31 December 2018) ¹⁾	Co-Chief Executive Officer (since 1 January 2019) Member of the Board of Managing Directors (until 31 December 2018) DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main
Wolfgang Kirsch Chairman (until 31 December 2018) ¹⁾	Chief Executive Officer DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (until 31 December 2018)
Rainer Schaidnager Deputy Chairman ¹⁾	Chairman of the Board of Managing Directors Raiffeisenbank Kempten-Oberallgäu eG, Kempten
Uwe Fröhlich Member (until 4 May 2018)	Co-Chief Executive Officer (since 1 January 2019) Fully authorised representative (until 31 December 2018) DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main
Dr Matthias Hildner Member	Chief Executive Officer Wiesbadener Volksbank eG, Wiesbaden
Marija Kolak Member (since 4 May 2018)	President, Bundesverband der Deutschen Volksbanken und Raiffeisenbanken e.V. (BVR), Berlin
David Milleker Employee representative	Chief economist, Union Investment Institutional GmbH, Frankfurt am Main
Roland Müller Employee representative ¹⁾	Works Council member, Union Asset Management Holding AG, Frankfurt am Main
Prof. Dr Wolfgang Müller Member	Chief Executive Officer BBBank eG, Karlsruhe
Wolfgang Nett Employee representative	Sales director, Union Investment Privatfonds GmbH, Frankfurt am Main
Jörn Nordenholz Member	Chief Executive Officer Volksbank eG, Sulingen
Heike Orth Employee representative	Group leader, Admin Service, Institutional Clients Union Investment Institutional GmbH, Frankfurt am Main
Dr Norbert Rollinger Member	Chief Executive Officer R+V Versicherung AG, Wiesbaden
Stefan Schindler Member	Chief Executive Officer Sparda-Bank Nürnberg eG, Nuremberg
Andreas Theis Member	Member of the Board of Managing Directors Volksbank Eifel eG, Bitburg
Claudia Vives Carrasco Employee representative	Real estate manager Union Investment Real Estate GmbH, Hamburg

¹⁾ Also a member of the Executive Committee of the Supervisory Board

[77] Supervisory mandates held by members of the Board of Managing Directors and employees

As at 31 December 2018, members of the Board of Managing Directors and employees also held mandates on the statutory supervisory bodies of major corporations. Companies included in the consolidated financial statements are indicated with an asterisk (*).

Mandates held by members of the Board of Managing Directors of Union Asset Management Holding AG:

Name	Mandate(s)
Hans Joachim Reinke	Union Investment Institutional GmbH, Frankfurt am Main (*) Deputy Chairman of the Supervisory Board Union Investment Luxembourg S.A., Luxembourg (*) Chairman of the Board of Directors Union Investment Privatfonds GmbH, Frankfurt am Main (*) Chairman of the Supervisory Board Union Investment Real Estate GmbH, Hamburg (*) Deputy Chairman of the Supervisory Board Union Investment Service Bank AG, Frankfurt am Main (*) Chairman of the Supervisory Board
Alexander Schindler	Union Investment Institutional GmbH, Frankfurt am Main (*) Chairman of the Supervisory Board Quoniam Asset Management GmbH, Frankfurt am Main (*) Chairman of the Supervisory Board
Jens Wilhelm	Union Investment Privatfonds GmbH, Frankfurt am Main (*) Deputy Chairman of the Supervisory Board Union Investment Real Estate GmbH, Hamburg (*) Chairman of the Supervisory Board Union Investment Service Bank AG, Frankfurt am Main (*) Deputy Chairman of the Supervisory Board

Mandates held by employees of Union Asset Management Holding AG:

Name	Mandate(s)
Sonja Albers	Union Investment Service Bank AG, Frankfurt am Main (*) Member of the Supervisory Board

Mandates held by members of management boards/senior management and employees:

Name	Mandate(s)
Dr Frank Engels Member of management (Union Investment Privatfonds GmbH)	Union Investment Luxembourg S.A., Luxembourg (*) Member of the Board of Directors (since 1 February 2018)
Giovanni Gay Member of management (Union Investment Privatfonds GmbH)	attrax S.A., Luxembourg (*) Chairman of the Board of Directors Union Investment Luxembourg S.A., Luxembourg (*) Deputy Chairman of the Board of Directors
Rainer Kobusch Member of the Board of Managing Directors (Union Investment Service Bank AG)	attrax S.A., Luxembourg (*) Deputy Chairman of the Board of Directors
Dr Reinhard Kutscher Chief Executive Officer (Union Investment Real Estate GmbH)	DZ HYP AG, Hamburg and Münster (since 27 July 2018, previously Deutsche Genossenschafts-Hypothekenbank Aktiengesellschaft, Hamburg) Member of the Supervisory Board
Klaus Riemer Member of management (Union Investment Privatfonds GmbH)	attrax S.A., Luxembourg (*) Member of the Board of Directors
Nikolaus Sillem Member of management (Union Investment Institutional GmbH)	Union Investment Luxembourg S.A., Luxembourg (*) Member of the Board of Directors Quoniam Asset Management GmbH, Frankfurt am Main (*) Deputy Chairman of the Supervisory Board
Jörn Stobbe Member of management (Union Investment Institutional Property GmbH) (Union Investment Real Estate GmbH)	1. FC Köln GmbH & Co. KGaA, Cologne Member of the Supervisory Board (until 10 October 2018) ADO Properties S.A., Luxembourg Member of the Board of Directors Geneba Properties N.V., Amsterdam Member of the Supervisory Board (until 15 August 2018)

[78] Miscellaneous other disclosures

The Board of Managing Directors signed these consolidated financial statements on 11 March 2019 and approved them for submission to the Supervisory Board. It is the responsibility of the Supervisory Board to review the consolidated financial statements and then to declare whether the consolidated financial statements are approved.

Frankfurt am Main, 11 March 2019

Union Asset Management Holding AG



Hans Joachim Reinke
Chief Executive Officer



Alexander Schindler
Member of the Board
of Managing Directors



Jens Wilhelm
Member of the Board
of Managing Directors

Independent auditor's report

To Union Asset Management Holding AG

Audit opinions

We have audited the consolidated financial statements of Union Asset Management Holding AG, Frankfurt am Main, and its subsidiaries (the group), comprising the consolidated income statement for the financial year from 1 January 2018 to 31 December 2018, the statement of comprehensive income for the financial year from 1 January 2018 to 31 December 2018, the consolidated statement of financial position as at 31 December 2018, the statement of changes in equity and the statement of cash flows for the financial year from 1 January 2018 to 31 December 2018, and the notes, including a summary of significant accounting policies. In addition, we audited Union Asset Management Holding AG's group management report for the financial year from 1 January 2018 to 31 December 2018. In line with the requirements of German law, we did not audit the content of the corporate governance declaration according to Section 289f (4) of the German Commercial Code (HGB) (disclosures on the proportion of women) included in section C of the management report or of the non-financial statement included in section E of the management report.

In our opinion, based on the findings of our audit,

- the attached consolidated financial statements comply in all material respects with IFRSs, as adopted by the EU, and the additional requirements of German law pursuant to Section 315e (1) HGB and, in accordance with these requirements, give a true and fair view of the group's net assets and financial position as at 31 December 2018, and of its results of operations for the financial year from 1 January 2018 to 31 December 2018, and
- the attached group management report as a whole presents an accurate view of the group's position. The group management report is consistent with the consolidated financial statements, complies with German legal regulations and suitably presents the opportunities and risks of future development. Our audit opinion regarding the management report does not extend to the contents the corporate governance declaration in section C of the management report or to the non-financial statement in section E of the management report.

Pursuant to Section 322 (3) Sentence 1 HGB, we state that our audit has not led to any reservations with regard to the compliance of the consolidated financial statements or the group management report.

Basis for the audit opinions

We conducted our audit of the consolidated financial statements and the group management report in accordance with Section 317 HGB and the German generally accepted standards for the audit of financial statements promulgated by the Institute of Public Auditors in Germany (IDW). Our responsibility according to these regulations and standards is described in further detail in the "Responsibility of the auditor for the audit of the consolidated financial statements and the group management report" section of our auditor's report. We are independent of the consolidated companies in compliance with the provisions of German commercial law and professional law and have fulfilled our other German professional obligations in compliance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions regarding the consolidated financial statements and the group management report.

Other information

The legal representatives are responsible for the other information. Other information includes the content of the corporate governance declaration according to Section 289f (4) of the German Commercial Code (HGB) relating to the proportion of women in section C of the management report and the non-financial statement included in section E of the management report.

Our audit opinions regarding the consolidated financial statements and the group management report do not extend to the other information, and accordingly we provide neither an audit opinion nor any other form of audit conclusion in this regard.

As part of our audit, we have a responsibility to read the other information and to evaluate whether it

- exhibits material discrepancies with the consolidated financial statements, the group management report or the knowledge we have obtained during our audit, or
- otherwise seems significantly incorrect.

If, on the basis of our work, we conclude that this other information is significantly incorrect, we are obliged to report this fact. We have nothing to report in this regard.

Responsibility of the legal representatives and the Supervisory Board for the consolidated financial statements and the group management report

The legal representatives are responsible for preparing the consolidated financial statements, which in all material respects comply with IFRSs, as adopted by the EU, and the additional requirements of German law pursuant to Section 315e (1) HGB, and for the consolidated financial statements giving a true and fair view of the net assets, financial position and results of operations of the group in accordance with these requirements. Furthermore, the legal representatives are responsible for the internal controls that they deemed necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

When preparing the consolidated financial statements, the legal representatives are responsible for assessing the group's status as a going concern. In addition, they have a responsibility to disclose matters related to the status as a going concern, if relevant. They are also responsible for accounting on the basis of the going concern principle, unless they intend to liquidate the group or discontinue its business operations, or there is no realistic alternative.

Moreover, the legal representatives are responsible for preparing the group management report, which as a whole provides an accurate view of the group's position and is consistent with the consolidated financial statements in all material respects, complies with German legal regulations and suitably presents the opportunities and risks of future development. The legal representatives are also responsible for the arrangements and measures (systems) that they considered necessary to enable the preparation of a group management report in compliance with applicable German legal regulations and to allow sufficient, suitable evidence to be provided for the statements in the group management report.

The Supervisory Board is responsible for monitoring the group's accounting process for the preparation of the consolidated financial statements and the group management report.

Responsibility of the auditor for the audit of the consolidated financial statements and the group management report

Our objective is to obtain reasonable assurance as to whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an accurate view of the group's position and is in all material respects consistent with the consolidated financial statements and with the findings of the audit, complies with German legal regulations and suitably presents the opportunities and risks of future development, and to issue an auditor's report containing our audit opinions regarding the consolidated financial statements and the group management report.

Reasonable assurance is a high level of assurance but not a guarantee that an audit carried out in compliance with Section 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the IDW will always uncover a material misstatement. Misstatements can result from transgressions or inaccuracies and are deemed material if it could be reasonably expected that they would individually or together influence the financial decisions made by users on the basis of the consolidated financial statements and group management report.

We exercise due discretion during the audit and maintain a critical attitude. In addition,

- we identify and evaluate the risk of material misstatements, whether due to fraud or error, in the consolidated financial statements and the group management report, plan and implement audit procedures in response to these risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk that material misstatements are not uncovered is higher in the case of transgressions than in the case of inaccuracies, as transgressions can entail fraudulent collaboration, falsifications, deliberate omissions, misleading depictions or the suspension of internal controls;
- we gain an understanding of the internal control system relevant for the audit of the consolidated financial statements and of the arrangements and measures relevant for the audit of the group management report in order to plan audit procedures that are appropriate given the circumstances but not with the aim of providing an audit opinion regarding the effectiveness of these systems;
- we evaluate the appropriateness of the accounting policies used by the legal representatives and the reasonableness of the estimated values presented by the legal representatives and the associated disclosures;

- we draw conclusions about the appropriateness of the going concern principle applied by the legal representatives and, on the basis of the audit evidence obtained, whether there is material uncertainty regarding events or circumstances that could cause significant doubt about the group's ability to continue as a going concern. If we come to the conclusion that there is material uncertainty, we are obliged to call attention to the associated disclosures in the consolidated financial statements and in the group management report in the auditor's report or, if these disclosures are inappropriate, to modify our respective audit opinion. We draw our conclusions on the basis of the audit evidence obtained up to the date of our auditor's report. However, future events or circumstances may mean that the group is no longer a going concern;
- we evaluate the overall presentation, the structure and the content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events such that the consolidated financial statements give a true and fair view of the net assets, financial position and results of operations of the group in accordance with IFRSs, as adopted by the EU, and the additional requirements of German law pursuant to Section 315a (1) HGB;
- we obtain sufficient appropriate audit evidence for the company's accounting information or business activities within the group in order to provide audit opinions regarding the consolidated financial statements and the group management report. We are responsible for directing, monitoring and implementing the audit of the consolidated financial statements. We bear sole responsibility for our audit opinions;
- we evaluate the consistency of the group management report with the consolidated financial statements, its legality and the view it gives of the position of the group;
- we conduct audit procedures regarding the forward-looking disclosures made by the legal representatives in the group management report. On the basis of sufficient appropriate audit evidence, we examine the significant assumptions underlying the legal representatives' forward-looking disclosures in particular and evaluate the appropriateness of the derivation of the forward-looking disclosures from these assumptions. We do not provide a separate audit opinion regarding the forward-looking disclosures or the underlying assumptions. There is a considerable, unavoidable risk that future events will differ significantly from the forward-looking disclosures.

Topics for discussion with those responsible for monitoring include the planned scope and scheduling of the audit as well as significant audit findings, including any deficiencies in the internal control system that we find during our audit.

Eschborn/Frankfurt am Main, 11 March 2019

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft



Heist
Public auditor



Kruskop
Public auditor

Shareholders and executive bodies of Union Asset Management Holding AG

Shareholders

DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main	72.32 %
VR GbR Frankfurt am Main	24.25 %
Local cooperative banks including holding companies of the primary banks, trade associations and special-purpose entities of Germany's Genossenschaftliche Finanz-Gruppe and other entities	3.43 %

As at: 11 March 2019.

Board of Managing Directors of Union Asset Management Holding AG

Name	Professional capacity
Hans Joachim Reinke	Chief Executive Officer
Alexander Schindler	Member of the Board of Managing Directors
Jens Wilhelm	Member of the Board of Managing Directors
Dr Andreas Zubrod	Member of the Board of Managing Directors (until 31 December 2018)

Supervisory Board of Union Asset Management Holding AG

Name and Supervisory Board post	Professional capacity
Dr Cornelius Riese Chairman (since 1 January 2019) ¹⁾ Member (until 31 December 2018) ¹⁾	Co-Chief Executive Officer (since 1 January 2019) Member of the Board of Managing Directors (until 31 December 2018) DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main
Wolfgang Kirsch Chairman (until 31 December 2018) ¹⁾	Chief Executive Officer DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (until 31 December 2018)
Rainer Schaidnager Deputy Chairman ¹⁾	Chairman of the Board of Managing Directors Raiffeisenbank Kempten-Oberallgäu eG, Kempten
Uwe Föhlich Member (until 4 May 2018)	Co-Chief Executive Officer (since 1 January 2019) Fully authorised representative (until 31 December 2018) DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main
Dr Matthias Hildner Member	Chief Executive Officer Wiesbadener Volksbank eG, Wiesbaden
Marija Kolak Member (since 4 May 2018)	President, Bundesverband der Deutschen Volksbanken und Raiffeisenbanken e.V. (BVR), Berlin
David Milleker Employee representative	Chief economist, Union Investment Institutional GmbH, Frankfurt am Main
Roland Müller Employee representative ¹⁾	Works Council member, Union Asset Management Holding AG, Frankfurt am Main
Prof. Dr Wolfgang Müller Member	Chief Executive Officer BBBank eG, Karlsruhe
Wolfgang Nett Employee representative	Sales director, Union Investment Privatfonds GmbH, Frankfurt am Main
Jörn Nordenholz Member	Chief Executive Officer Volksbank eG, Sulingen
Heike Orth Employee representative	Group leader, Admin Service, Institutional Clients Union Investment Institutional GmbH, Frankfurt am Main
Dr Norbert Rollinger Member	Chief Executive Officer R+V Versicherung AG, Wiesbaden
Stefan Schindler Member	Chief Executive Officer Sparda-Bank Nürnberg eG, Nuremberg
Andreas Theis Member	Member of the Board of Managing Directors Volksbank Eifel eG, Bitburg
Claudia Vives Carrasco Employee representative	Real estate manager Union Investment Real Estate GmbH, Hamburg

¹⁾ Also a member of the Executive Committee of the Supervisory Board

Advisory Board

Matthias Battefeld	Member of the Board of Managing Directors Hannoversche Volksbank eG	Sascha Monschauer	Member of the Board of Managing Directors Volksbank Rhein-Ahr-Eifel eG
Ralph Blankenberg	Chairman of the Board of Managing Directors Volksbank Ulm-Biberach eG	Andreas Otto	Chief Executive Officer Volksbank im Bergischen Land eG
Günter Brück	Member of the Board of Managing Directors Volksbank Alzey-Worms eG	Martina Palte	Member of the Board of Managing Directors Berliner Volksbank eG
Gerd-Ulrich Cohrs	Member of the Board of Managing Directors Volksbank Lüneburger Heide eG	Eckhard Rave	Member of the Board of Managing Directors VR Bank Westküste eG
Andreas Fella	Member of the Board of Managing Directors Raiffeisenbank Main-Spessart eG	Reiner Richter	Member of the Board of Managing Directors Volksbank Lahr eG
Bernd Finkbeiner	Member of the Board of Managing Directors VR-Bank Ellwangen eG	Martin Schadewald	Member of the Board of Managing Directors Volksbank Jever eG
Gerald Fleischmann	Chief Executive Officer VOLKSBANK WIEN AG	Roland Schäfer	Chief Executive Officer Volksbank Bruchsal-Bretten eG
Josef Frauenlob	Chief Executive Officer Volksbank Raiffeisenbank Oberbayern Südost eG	Georg Schneider	Member of the Board of Managing Directors VR-Bank Handels- und Gewerbebank eG
Dr Christoph Glenk	Chief Executive Officer VR-Bank Feuchtwangen-Dinkelsbühl eG	Dr Klaus Schraudner	Member of the Board of Managing Directors Pax Bank eG
Mirko Gruber	Deputy Chairman of the Board of Managing Directors Volksbank Raiffeisenbank Rosenheim-Chiemsee eG	Uwe Schulze-Vorwick	Member of the Board of Managing Directors Volksbank Bochum Witten eG
Peter Herbst	Member of the Board of Managing Directors Nordthüringer Volksbank eG	Thomas Sterthoff	Chief Executive Officer VB Bielefeld-Gütersloh
Markus Hörmann	Member of the Board of Managing Directors Volksbank Tirol AG	Thomas Taubenberger	Member of the Board of Managing Directors VR Bank Tübingen eG
Thomas Jakoby	Member of the Board of Managing Directors VVB Münster	André Thaller	Chief Executive Officer PSD Bank Nord eG
Thorsten Jensen	Member of the Board of Managing Directors VR Bank Nord eG	Roland Trageser	Deputy Chairman of the Board of Managing Directors Volks- und Raiffeisenbank Main-Kinzig-Büdingen eG
Jochen Kerschbaumer	Member of the Board of Managing Directors Wiesbadener Volksbank eG	Edmund Wanner	Chief Executive Officer Volksbank Straubing eG
Martin Ließem	Member of the Board of Managing Directors VR-Bank Bonn eG	Michael Weidmann	Member of the Board of Managing Directors Sparda-Bank Hessen eG
Jörg Lindemann	Member of the Board of Managing Directors Volksbank Darmstadt-Südhessen eG	Rolf Witezek	Member of the Board of Managing Directors Volksbank Mittelhessen eG
Jan Mackenberg	Member of the Board of Managing Directors Volksbank Osterholz-Scharmbeck eG	Matthias Zander	Chairman of the Board of Managing Directors Volksbank Kraichgau eG

As at: 11 March 2019.

Glossary

Amortised cost (IAS 39)

Amortised cost is the amount at which a financial asset or financial liability is measured at initial recognition minus principal repayments, plus or minus amortisation using the effective interest method and less any reduction impairment.

Associate (Investments in associates)

An associate is an entity in which an investor can exercise significant influence over the entity's financial and operating policy decisions. Associates are generally included in the investor's consolidated financial statements using the equity method.

Available-for-sale financial assets (IAS 39)

Available-for-sale financial assets are non-derivative financial assets that cannot be assigned to any other category as specified in IAS 39. Changes in the fair value of assets in this category are recognised in equity. Only permanent impairment losses are recognised in the income statement.

Cash flow

Cash flow is the term given to inflows and outflows of cash and cash equivalents.

Deferred taxes

Deferred taxes are income taxes that are to be paid or refunded in the future, that arise from measurement differences between the tax base and the IFRS financial statements and that do not constitute a current tax liability due to the tax authorities, or a current tax receivable due from the tax authorities, on the date they are recognised. Deferred taxes are recognised in respect of timing differences and, in certain circumstances, in respect of tax loss carry-forwards.

Derivatives

Derivatives are financial instruments with the following characteristics: their value changes in response to the change in a specified underlying instrument (for example share price, foreign exchange rate, interest rate); they generally require only a small initial investment or no initial investment at all; and they are settled at a future date in cash or by the delivery of the underlying instrument.

Designated at fair value through profit or loss (IAS 39)

IAS 39 offers the option of designating any financial asset or financial liability irrevocably at fair value through profit or loss (fair value option). Further criteria must be satisfied before the option can be exercised. Exercise of the option normally reduces accounting mismatches.

Effective interest method

The effective interest method is a method of determining the effective interest income or expense on interest-bearing financial instruments. The effective interest method is used, for example, to allocate premiums or discounts and capitalised transaction costs over the term of a financial instrument so as to generate a constant rate of interest on the carrying amount.

Equity method

The equity method is a prescribed method for recognising and measuring investments in associates and joint ventures in consolidated financial statements prepared in accordance with IFRS. The measurement of the investment in the investor's financial statements is based on the proportion of equity attributable to the investor. Changes in this share of equity are reflected in the financial statements of the investor by an adjustment to the measurement of the investment (mirror image method).

Fair value

Fair value is the price at which an orderly transaction to sell an asset or to transfer a liability would take place between market participants at the measurement date.

Finance lease

A lease is classified as a finance lease if substantially all the risks and rewards incidental to ownership of the leased asset are transferred to the lessee. As the beneficial owner, the lessee must account for the asset and recognise a liability for the payment of lease instalments to the lessor. The lessor recognises the present value of the lessee's lease payments as a receivable.

Financial assets mandatorily measured at fair value through profit or loss (IFRS 9)

This category includes financial assets that do not meet the cash flow condition under IFRS 9 or that are acquired with the intention to subsequent disposal in the near future. For this purpose, these financial assets must be part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking or they must be derivative financial instruments that are not designated as hedges in effective hedging relationships.

Financial assets measured at amortised cost (IFRS 9)

Allocation to this category takes place if the financial assets is held within a business model whose objective is to hold financial assets to collect the contractual cash flows. The contractual terms of the financial asset results in contractual cash flows that are solely payments of principal and interest on the principal amount outstanding (cash flow condition).

Financial assets measured at fair value through other comprehensive income (IFRS 9) (fair value OCI)

Allocation to this category takes place if the financial asset is held within the framework of a business model whose objective is both the recognition of contractual cash flows and the sale of financial assets. In addition, the contractual terms of the financial asset on specified dates must result in cash flows that are solely payments of principal and interest on the principal amount outstanding. There is also the irrevocable option to initially designate equity instruments as 'financial assets measured at fair value through other comprehensive income' (fair value OCI option).

Financial assets measured at fair value through profit or loss (IFRS 9) (fair value option)

Financial assets may be assigned to the category by exercising the fair value option if they are used to eliminate or substantially reduce recognition or measurement inconsistencies (accounting mismatches). The fair value option is used to eliminate or substantially reduce accounting mismatches resulting from the different measurement of non-derivative financial instruments and derivative financial instruments used to hedge them.

Financial instrument

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial instruments held for trading (IAS 39)

Financial assets and financial liabilities are classified as financial instruments held for trading if they are primarily purchased with the intention of reselling them in the near term or sold with the intention of repurchasing them in the near term. Derivatives not designated as an effective hedge are also allocated to this category.

Financial liabilities mandatorily measured at fair value through profit of loss (IFRS 9)

This category includes financial liabilities that are issued with the intention of repayment in the near future. For this

purpose, these financial liabilities must be part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking or they must be derivative financial instruments that are not designated as hedges in effective hedging relationships.

Financial liabilities measured at amortised cost (IFRS 9) (AC)

Financial liabilities are to be categorised as 'financial liabilities measured at amortised cost' for subsequent measurement. This excludes 'financial liabilities measured at fair value through profit or loss', financial liabilities that arise when a transfer of a financial asset does not meet the derecognition requirement or the accounting is based on its continuing involvement, financial guarantees, credit commitments with a below-market interest rate and contingent consideration that is recognised by a purchaser in a business combination in accordance with IFRS 3.

Financial liabilities measured at fair value through profit of loss (IFRS 9) (fair value option)

Financial liabilities may be assigned to this category by exercising the fair value option if they eliminate or significantly reduce recognition or measurement inconsistencies (accounting mismatches), which are managed as a portfolio based on the fair value or contain one or more embedded derivatives subject to separation.

Goodwill

Goodwill is the positive difference between the price paid for a business combination and the sum of the fair values for the proportion of assets acquired and liabilities assumed. It encompasses future economic benefits that cannot be separately identified and recognised as individual assets.

Held for sale

A non-current asset or disposal group is classified as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use.

Held-to-maturity investments (IAS 39)

Held-to-maturity investments consist of non-derivative financial assets listed on an active market with fixed or determinable payments and fixed maturity that an entity has the positive intention and ability to hold to maturity. IAS 39 provides for a separate measurement category for such financial instruments. However, this category is not used in the UMH Group.

Impairment (Impairment of assets)

An asset is impaired if its recoverable amount is less than its carrying amount. The methodology for calculating the amount of an impairment loss depends on each individual case and the relevant IFRS provisions.

International Financial Reporting Standards (IFRS)

International Financial Reporting Standards (IFRS) are the accounting standards published by the International Accounting Standards Board (IASB). In addition to the IFRS published since 2003, the standards include the previously published International Accounting Standards (IAS), the interpretations of the Standing Interpretations Committee (SIC) and the interpretations of the International Financial Reporting Interpretations Committee (IFRIC).

Joint venture

A joint venture is a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control.

Loans and receivables

Loans and receivables are non-derivative financial assets that have fixed or determinable payments and that are not quoted on an active market. This category includes, in particular, receivables and some types of investment securities.

Non-controlling interests

Non-controlling interests comprise the share of subsidiaries' equity not attributable to the parent company.

Operating lease

All leases that do not satisfy the requirements for finance leases are classified as operating leases. Beneficial ownership of the leased asset remains with the lessor and the asset is recognised and measured in the lessor's financial statements.

Other financial liabilities

All financial liabilities that are not classified as held for trading or designated at fair value through profit or loss are classified as other financial liabilities. Other financial liabilities are measured at amortised cost.

Purchase method

The purchase method must be used to account for business combinations in consolidated financial statements prepared in accordance with IFRS. The purchase method is based on the notion that all the assets and liabilities held by the acquiree – rather than this entity's shares – are acquired at their respective fair value. Hidden reserves and liabilities reported in the acquiree's financial statements must therefore be disclosed in the consolidated financial statements.

Revaluation reserve (IAS 39)

The revaluation reserve is a separate item under equity. Changes in the fair value of available-for-sale financial assets are reported in this item.

2018 corporate social responsibility report

Key performance indicators

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Sustainability in the Union Investment Group

The 2018 annual report and CSR report of the Union Investment Group provide an overview of the key economic, environmental and social developments and progress of the Union Investment Group in the 2018 financial year.

Overview

Sustainability management is a top priority at Union Investment. This is clear from the way in which the topic is handled organisationally. The sustainability officer reports directly to the Chairman of the Board of Managing Directors of Union Asset Management Holding. In addition, sustainability is firmly embedded in all relevant areas – from central purchasing to institutional business.

Five areas of activity provide the framework for dealing with sustainability matters. Relevant measures are agreed annually with all units, and implementation is set out in the sustainability programme. What is more, the sustainability programme is submitted to the Board of Managing Directors each year for a decision.

Since the first fund managed with a sustainability filter was launched in 1990, the fund volume in wholly sustainable funds has grown to EUR 41.4 billion as at 31 December 2018. In 2018, Scope named Union Investment as the best asset manager in the 'Socially Responsible Investing' category for the fifth time in a row. Expertise in sustainable investment is one of the core competences at Union Investment. Union Investment has introduced sustainability to a wide range of investors with more than 100 sustainable investment funds.

In the light of the increasing importance of sustainability as an issue for institutional investors but also for private investors – even though from an initially low level – a strategy of sustainable investments was resolved by the Board of Managing Directors especially for the core business in the context of the strategy revision. This defines over 70 measures in four action areas to expand the services and expertise relating to sustainability.

Climate strategy

The issues of climate change and global warming are connected to key risks for society and business. The relevance of these issues has increased considerably over the last few months. The special report of the IPCC (Intergovernmental Panel on Climate Change) pointed out the urgency to restricting global warming to no more than 1.5°C. In the context of the COP 24 in Katowice (Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC)), regulations were resolved for state reporting on measures to combat

climate change. And not least with the publication of the EU action plan, the European Commission has underlined its target of reorienting growth in the future on a sustained basis with the assistance of the financial services industry and in the process – initially – placing a key accent on climate.

In line with this high level of importance, as early as 2015 Union Investment already resolved its own climate strategy – at the same time as the key resolutions of the UN Climate Conference in Paris in 2015. The objective for Union Investment is to reduce its CO₂ emissions by 85 % to 2050 against the base year of 2009. The next step on this path is dealing with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The recommendations of the working group deployed by the Financial Stability Board have extensive repercussions at the level of governance, strategy, risk management and key performance indicators – both for the management of Union Investment and also for its key business, i.e. asset management. In 2018, Union Investment started dealing meaningfully with the requirements of the TCFD recommendations. The first results will be presented in 2019.

Sustainable products

As at 31 December 2018, the Union Investment Group managed EUR 41.4 billion of investors' money in 112 sustainable investment funds and mandates as well as a further 54 funds in our subsidiary Quoniam. Investors' funds under management rose by EUR 7.9 billion year-on-year.

In the 2018 financial year, nine sustainable investment funds / fund management mandates were launched or converted to sustainability standards. At the subsidiary Quoniam, 14 mandates with ESG criteria were launched or converted to sustainability standards.

For the sustainable institutional public funds managed according to ESG criteria, our clients receive monthly sustainability reports. In the reports, the exclusion rates of the fund assets and the ESG scores of the funds are compared with the respective peer group and the ESG scores of the largest investments are set out.

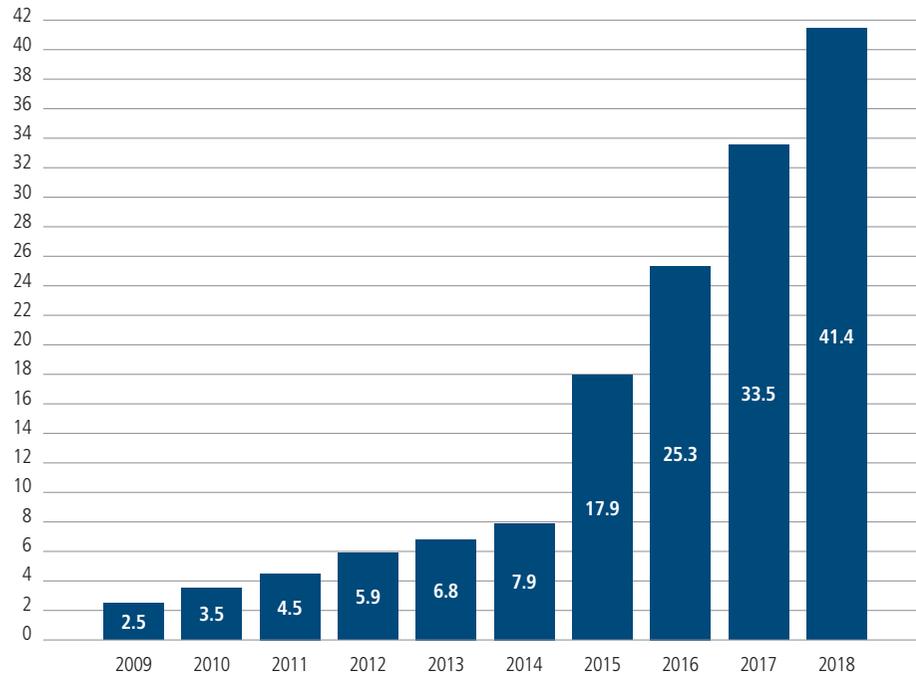
Investors in special funds can incorporate ESG information in their individual client reports if they wish.

Corporate social responsibility (CSR)

As a responsible investor and active asset manager, Union Investment practises active share ownership (CSR) in the form of a multidimensional CSR approach. The primary aim is to actively

Development of assets under management with sustainability criteria (ESG)

in EUR billion



influence companies, thus helping to increase enterprise value. As well as business aspects, social, environmental and corporate-governance issues are also addressed in a targeted way here.

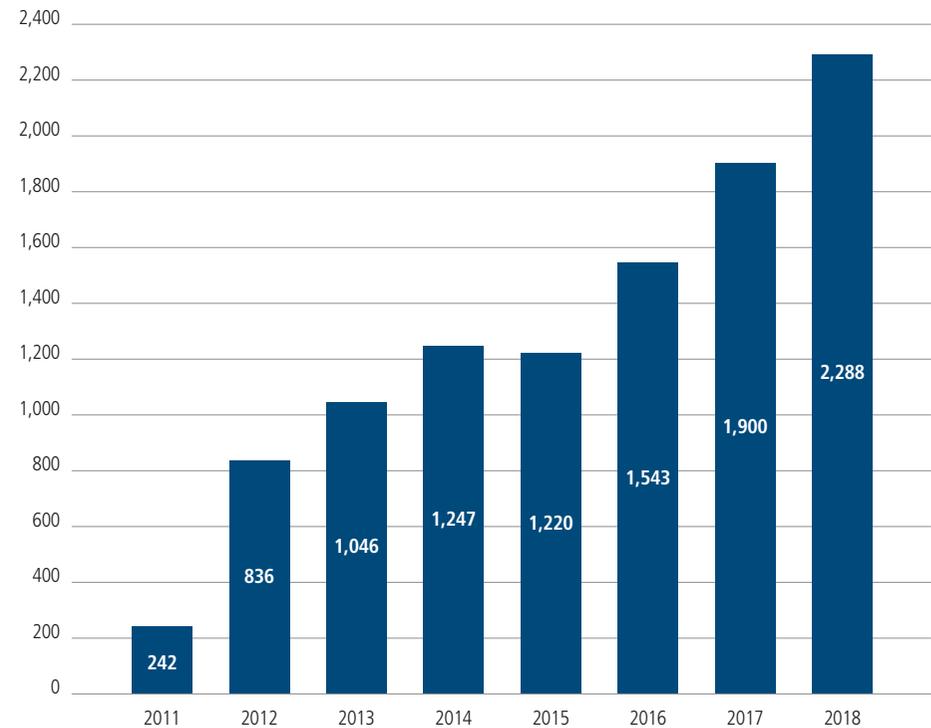
In dialogues with companies and at annual general meetings, Union Investment’s Portfolio Management segment regularly influences the corporate governance and business policy of public limited companies in the interests of investors and ultimately to the benefit of the fund concerned. Our principle is that Union Investment supports all measures that increase enterprise value on a long-term basis, and votes against those that are incompatible with this aim.

A binding voting policy is essential to transparent and consistent exercising of the voting rights entrusted to us. Therefore, Union Investment has put in place extensive voting guidelines geared

towards the recommendations of the German Corporate Governance Code and the guidelines of the German Investment Funds Association. The guidelines are set out in the **Union Investment Proxy Voting policy**.

Union Investment performed its fiduciary duty and represented investors’ interests by exercising voting rights at 2,288 annual general meetings in 28 countries in the reporting year. Alongside the voting behaviour, UnionVoice, the constructive company dialogue, is the second important pillar of Union CSR. The main objective of UnionVoice is talking to companies to improve sustainability and thus shareholder value in the interests of our investors.

Number of AGM votes over time



In the past reporting year, a total of 403 UnionVoice activities were implemented. The corporate contacts cover 32 countries, starting with Germany with 85 contacts, making up approximately 21.1 %, closely followed by the USA with 70 contacts (17.4 %) The ten largest countries make up a total of 78.4 % of global activities. Union Investment has many years' experience as an active shareholder, which it is applying more and more.

ESG integration in Portfolio Management

We firmly believe that integrating sustainability aspects in the investment process goes hand in hand with positive effects on the risk management of our funds. In this connection, the ESG Committee handles interlinking Portfolio Management and sustainability expertise, and is the central body for integrating ESG into our investment funds.

Our sustainability research and management is managed using the Sustainable Investment Research Information System (SIRIS) developed specially for Union Investment. SIRIS has been in use in Portfolio Management since 2013, and is maintained and continuously enhanced. Since 2017, SIRIS has been used across Portfolio Management at Union Investment and is available to every portfolio manager.

Union Investment strengthens the sustainability expertise of our portfolio managers through training courses at our in-house ESG Academy.

Conferences and studies

To raise awareness of the importance of sustainability in investment decisions, Union Investment holds an annual sustainability conference on different topics each time. In 2018, the topic of the United Nations' Sustainable Development Goals (SDGs) in politics, business and investment was the focus.

Each year, Union Investment examines the attitude of German major investors to sustainable investment and summarises the results in a sentiment index. In addition, we regularly have current sustainability issues scientifically assessed by various academics and internally within Portfolio Management.

Real estate

Union Investment is one of the leading real estate investment managers in Europe and is firmly committed to spreading the use of sustainable real estate investments. Sustainability for real estate investments was defined as a strategic element in 2007 and implemented in all managed real estate funds through standardised processes. Detailed information can be found in the "Union Investment real estate portfolio" section.

About this report

Standards 102-50

Reporting period and reporting boundaries

The economic section of this report and the employee key figures relate to the group companies in Germany and abroad. Unless otherwise stated, the key data in respect of social and environmental issues refers only to the main companies in the locations in Germany, Luxembourg and Austria for the 2018 reporting year. The key figures for the real estate portfolio of the Union Investment Group are shown for the 2015, 2016 and 2017 financial years and cover parts of the global real estate portfolio held by Union Investment. The report is prepared once a year.

Standards 102-48 + 102-49 + 102-52 + 102-54

Transparency and comparability of reporting

This report was prepared in accordance with the GRI (Global Reporting Initiative) standards: core option. Union Investment also takes into account sector-specific requirements that are documented in the Financial Service Sector Supplement and the Construction and Real Estate Sector Supplement. Furthermore, the supplements were prepared in compliance with the GRI G4 standard. The report is based on the principles of materiality, stakeholder inclusiveness and sustainability context.

In addition to following the GRI guidelines, the report complies with the requirements of the German Property Federation for sustainability reporting in the real estate sector. Union Investment is a signatory to the German Property Federation sustainability code and undertakes to comply with the ten principles of the German Property Federation sustainability code when conducting its business activities. In accordance with the code, the Union Investment Group publishes its objectives, action plans, activities and progress each year, including disclosures relating to the clusters relevant to the group ('2: Operating and leasing' and '3: Investing').

At company level, there were no material changes in the period under review relating to the 'employees', 'society' or 'products and services' areas of activity, hence the data is directly comparable with previous publications.

In the 'environment' area of activity, some of the key environmental figures at the company level for the reporting year are extrapolated on the basis of prior consumption and emissions. This results in current performance indicators. As soon as the actual figures are available for the extrapolated figures, these will be applied in future reports, meaning that there may

temporarily be discrepancies between the environmental performance indicators at company level over time.

Union Investment bases its reports covering the real estate portfolio on international standards such as the Greenhouse Gas Protocol (GHG Protocol). These standards are being continuously refined with modifications to the methodology used. In preparing its report on the real estate portfolio, Union Investment has taken into account these annual changes to the calculation and adjustment methods used for the CO₂ data records. Some of the reported values can therefore differ from those reported in the previous year.

GRI Standards 102-40 + 102-42

Determining the key stakeholders

The stakeholder groups relevant to Union Investment were identified by way of an internal survey using a structured questionnaire. The stakeholders surveyed should demonstrate a fundamental understanding of sustainability in investment. In a materiality analysis conducted in 2017, 167 people from the various stakeholder groups were asked about relevant aspects from the five CSR areas of activity that are relevant to Union Investment by way of an online survey using a structured questionnaire. The relevant areas of activity for the company are derived from the sustainability strategy adopted by the Board of Managing Directors, internal employee surveys and discussions among the members of the CSR round table. The CSR round table is a twice-yearly panel at which members from all areas of the company report on the progress made in integrating sustainability into core processes. The following areas of activity were identified as material: products and services, dealing responsibly with employees, impact of business operations on the environment and society, and transparent communications.

GRI Standards 102-43 + 102-44

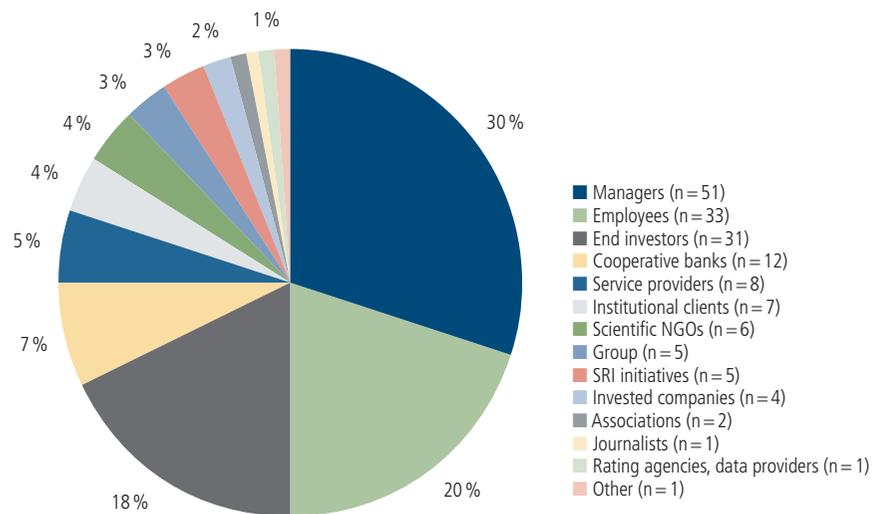
Stakeholder engagement

Dialogue and engagement with the stakeholder groups is target-group-specific and assumes different forms and intensities: the Union Investment shareholders are involved via the established supervisory bodies, and for the local cooperative banks there are annual regional series of events in which all the aspects of partnership with Union Investment are discussed in detail. The employees are kept informed about the state of the company by means of regular events and via internal media. Interests and concerns can also be shared. There is ongoing dialogue with regulatory bodies and politicians, supervisory bodies and authorities which takes place in relation to topics. The worlds of science and culture are specifically incorporated into internal topical opinion forming processes via the Union Investment Foundation and in partnerships

and studies. Via the account managers, there is regular and in-depth customer service for institutional clients, while the retail clients are looked after by the respective cooperative banks and by our Customer Service department. In addition, we are represented at numerous industry meetings, with or without explicit reference to sustainability. Both these customer groups are surveyed regularly to gauge their satisfaction with the business relations.

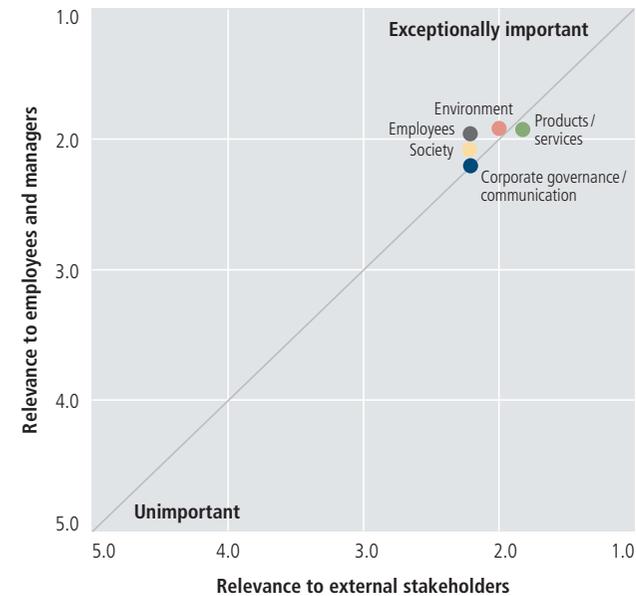
In 2017, external stakeholder communication with investors and sales partners again focused on how to deal with low interest rates and, accordingly, how to safeguard jeopardised prosperity. Due to the development of the capital markets in recent years, the issue of risk management is of great relevance to institutional clients in particular, and we work on this and discuss it actively with our clients. Parallel to this, a sharper focus is being placed on the topic of sustainability, especially in the institutional area. Union Investment supported the topic suggestions by sharpening the focus of its portfolio and communication policies. Regular engagement with stakeholders has demonstrated that, in the financial services sector, input that results in action primarily comes from highly informed stakeholder groups, while broad surveys rarely generate expedient input due to the abstractness of the products. We therefore make a distinction between general surveys of satisfaction on the one hand and very specific topic-based engagement of directly impacted stakeholders on the other.

Key stakeholders and percentage of stakeholder groups in the materiality analysis:



**GRI Standards 102-43 + 102-46 + 103-1
Determining, prioritising and validating the key topics**

Using a materiality matrix, the areas of activity are broken down in terms of their relevance according to the stakeholder survey on a scale of 1 (exceptionally important) to 5 (unimportant). The relevance of the areas of activity for Union Investment is derived accordingly.



The key aspects within the areas of activity are examined in order to determine their impact on Union Investment’s current and future business activities. At the same time, we must be in a position to influence the respective issue, either directly or indirectly. If an issue meets these criteria, it is included in the next stage of the process.

The overlap between the aspects that are relevant to stakeholders and the aspects considered to be relevant by Union Investment (see the objectives and activities of the sustainability programme on page 148) serves to define the key aspects underlying the CSR report.

GRI Standard 102-47 Identified material topics:

The key aspects identified in the course of the materiality analysis have been allocated to the corresponding GRI G4 categories and G4 aspects as shown in the table below:

Union Investment CSR area of activity	Identified material topics	Allocation to GRI standards
Corporate governance / communication	Corporate governance / communication	<ul style="list-style-type: none"> • Basis of preparation • Business: Economic performance • Business: Procurement practices • Business: Anti-competitive practice • Social: Socio-economic compliance
Products and services	Product portfolio	<ul style="list-style-type: none"> • Disclosures for the financial services industry: Product responsibility
	Product and service labelling	<ul style="list-style-type: none"> • Disclosures for the financial services industry: Product responsibility
Employees	Employees	<ul style="list-style-type: none"> • Social: Employment • Social: Occupational health and safety • Social: Training and education • Social: Diversity and equal opportunity • Social: Equal remuneration for women and men • Social: Non-discrimination • Business: Anti-corruption
Environment	Environmental management system	<ul style="list-style-type: none"> • Environment: Materials • Environment: Energy • Environment: Water • Environment: Effluents and waste • Environment: Environmental compliance
	Climate protection	<ul style="list-style-type: none"> • Environment: Emissions • Environment: Energy
Society	Advocacy, association and committee work	<ul style="list-style-type: none"> • Social: Political influence
	Supply chain responsibility	<ul style="list-style-type: none"> • Environment: Supplier environmental assessment • Social: Supplier social assessment

102-51+ 102-52 Formal aspects and additional information

English and German versions of the annual report and CSR report are available to download from our **website**. An overview of the Union Investment Group is available online at <https://unternehmen.union-investment.de/>.

Management approaches – GRI Standards 103-1 + 103-2 + 103-3

The following management approaches to the key aspects on which determination of the report content for the 2018 annual report and CSR report was based were identified by means of a **materiality analysis** from 2017. The aspects identified as key to Union Investment and its stakeholders can be allocated to the GRI standards. This allocation can be found on the table on page 142 of the 2018 annual report and CSR report.

The management approaches described are examined internally at regular intervals and enhanced as required. Operational goals and measures regarding the respective aspects are set out in the **sustainability programme** (2018 annual report and CSR report pages 148). The sustainability code, which is available **online stipulates** how Union Investment meets its responsibilities in its business activities and acts in all its relationships with investors, employees, suppliers, the environment and society.

Management approach to corporate governance / communication

The materiality analysis shows that aspects significant to stakeholders in the “corporate governance and communication” area of activity are disclosures regarding corporate strategy, values and principles, governance and comparisons with competitors (benchmarks, ratings and rankings).

As a financial service provider, Union Investment relies particularly on the trust of its investors. Complying with social standards and meeting expectations of us is an important aspect of business activities and responsible action for us. We have defined “organisation and communication”, “environment”, “employees” and “society” as guiding CSR topics, and “products and services” as our core business. For our CSR action areas and stakeholder groups, we develop guidelines for responsible action that we follow. In doing so, we adhere to best-practice standards in Germany, and regard this process as a continuous improvement process for the company. For instance, we recognised the Principles for Responsible Investment as a key standard for the implementation of sustainability in our core line of business back in 2010 and have continued to systematically develop our services ever since. In the real estate business, we additionally comply with the leading German Property Federation code for sustainable real estate business and report accordingly in our annual sustainability report. We therefore ensure that we evolve at the same pace as the foreseeable increase in requirements. The key aspects of our sustainability development and goals are published each year in the sustainability programme.

With the sustainability programme, Union Investment manages goals and measures relating to all aspects of sustainability. Both the programme and the measures were specified for a period lasting several years, are supplemented each year and passed by the Union Asset Management Holding AG Board of Managing Directors. The performance indicators are measured on the basis of recognised external standards. A six-monthly review of the set goals by the Head of Sustainability Management and corresponding reporting to the Board of Managing Directors of Union Asset Management Holding AG ensure a regular planning and controlling process. Data quality is ensured by application of an established electronic CSR management system.

In the context of the annual company-wide planning process, all business units of the group are required to come up with the environment trends and development requirements for their own service provision. This also includes relevant ESG aspects for the respective business processes. This ensures that their own performance capability and competitiveness are analysed and potential for improvement is identified on a regular basis for all stages of the value chain. In addition, specific continuation of the CSR strategy and key measures for the defined action areas results in separate goals being set and subsequently integrated in the business strategy. Consequently, specific ESG developments are interlinked with corporate planning at various levels.

Key action areas of the sustainability strategy are additionally integrated via the performance assessment, evaluation and incentive systems at all management levels of the company and are also expressed via anchoring of ESG key ratios in the balanced scorecard system of corporate governance.

Dialogue and engagement with various stakeholder groups assume different forms and intensities: for instance, the Union Investment shareholders are involved via the established supervisory bodies. For the cooperative partner banks, there are various series of events each year, including regional ones, where all aspects of collaboration with Union Investment are discussed intensively. With regard to employees, there are numerous events and internal media in which information about the company’s situation is provided and interests and concerns can be discussed. Investors, special interest groups and other stakeholders are systematically involved in gauging opinions via surveys, advisory boards or other information formats.

Management approach to the product range

As a custodian for more than four million investors, responsible handling of the invested money and a requirement-oriented range of products and services for our end investors (retail clients of the local cooperative banks) and institutional clients are essential. This is also reflected by the materiality analysis, in which the “products and services” area of activity is of the utmost relevance to stakeholders and Union Investment.

Responsibility for looking after our investors’ money involves the challenge of responding to current and significant economic, environmental and social trends and incorporating them in the product range geared towards investors’ requirements. For instance, the social challenge of demographic change is closely linked with the structuring of retirement pension products for the general public. Climate change is particularly important when it comes to developing and managing our real estate and securities assets, and ensuring sound and responsible corporate governance is part of our multidimensional CSR approach in Portfolio Management.

Our product range is geared towards our investors’ needs

Consultants of local cooperative banks find out directly from private investors what end clients need in terms of products. Our investors’ needs are constantly ascertained through discussion between consultants and the Union Investment’s Customer Service department, at events and via field sales and passed on to the relevant people at Union Investment. This results in impetus for marketing and products tailored to investors’ requirements. We are in direct dialogue with institutional investors, so we find out what they want from our products at first hand. Internal dialogue between account managers and Portfolio Management thus leads to ideal solutions for professional investors.

We follow national and international industry standards

We align our product range with internationally recognised standards and implement them wherever this appears to be prudent: for instance, in 2010, we signed the Principles for Responsible Investment as a key standard for implementing stability in our core business. In the real estate business, we comply with the German Property Federation code for sustainable real estate business.

¹⁾ Guidelines with specific environmental and social components [G4-DMA (formerly F51)].

We are actively involved in enhancing industry standards

Developing products in line with requirements and engaging in regulatory projects in the interests of investors are a key part of our client-oriented solution management.

As a fair market player, we take into account the **code of conduct** of the German Investment Funds Association. Numerous company representatives of Union Investment are actively involved in industry associations, committees and initiatives of the finance and asset management industries, such as:

- German Investment Funds Association (BVI)
- German Equities Institute (DAI)
- European Securities and Markets Authority (ESMA)
- European Fund and Asset Management Association (EFAMA)
- European Parliamentary Financial Services Forum (EPFSF)
- Sustainable Investments Forum (FNG)
- Principles for Responsible Investment (PRI)
- Royal Institution of Chartered Surveyors (RICS)
- German Property Federation (ZIA)

We invest responsibly¹⁾

As a cooperatively organised company and custodian, Union Investment always invests in the interests of its investors. Responsible investing has always been at the heart of the company’s business model. We entrenched the principles for responsible investment in our core business in our **guidelines on responsible investment**. Various positive and negative ESG selection criteria are systematically applied in the portfolios in accordance with the guideline and the fund prospectuses.

We are an active shareholder

As an active shareholder, Union Investment holds more than 4,000 meetings with companies each year. These are also focused on issues of social, environmental and regulatory corporate governance. In addition, we represent the interests of our investors at annual general meetings of companies in which we invest. The principles of our voting behaviour are set out in the **Proxy Voting policy**.

Management approach to product and service labelling

Investing is a matter of trust – as evidenced by the fact that transparent and comparable labelling of our products and services is important to stakeholders, for instance. Union Investment is committed to abiding by the code of conduct of the German Investment Funds Association. Accordingly, we comply with the standards of the code in disclosing fund performance as well as responsible and sustainable investments.

Management approach to employees

As a service company, the skills and motivation of our employees are key success factors for the future viability of Union Investment and its position among competitors. The materiality analysis shows that the surveyed stakeholders and the company itself see the “employees” area of activity as having a similar degree of relevance.

HR activities at Union Investment are undertaken in a forward-looking, long-term and employee-oriented manner via an approved HR strategy. Our aim is to consistently position ourselves as an employer of choice. This is why we give our employees exciting tasks and challenging development opportunities and enable them to share in the operating result through performance-related incentive systems.

Treating our employees with respect is a key pillar of our sustainability strategy. The principle of equal opportunity is the focal point here. We also made a public commitment to this by signing the “Diversity Charter” in summer 2013. To us, this means equal treatment and

support of all employees – regardless of their origin, skin colour, nationality, gender, age or physical disabilities. Union Investment does not tolerate any discrimination of employees or third parties on the grounds of their age, gender, ethnic origin, nationality, religion, political opinions, philosophy, race, disability or sexual identity. Accordingly, all employees receive mandatory training on the German General Equal Treatment Act. We are actively involved in the advancement of women.

We maintain our employees’ efficiency and motivation on the basis of strategic health-care management. Union Investment provides numerous prevention, intervention and rehabilitation measures and instruments.

It is not merely lip service for Union Investment to offer its employees optimum labour conditions, but moreover an important aim and part of our HR strategy. We aim to achieve an optimum balance between career and family, as well as between the interests of the employees and the company’s objectives. To this end, we offer our employees a plethora of support forms.

We are very keen to give our employees targeted help with their career and personal development and prepare them for future challenges. To this end, we provide a wide range of training options. HR development is geared towards two central principles here. In the context of requirements orientation, we assist employees with regard to their current tasks. By contrast, in the context of potential orientation, we highlight future opportunities.

To face up to demographic change, we have been investing in our junior staff (apprentices, trainees and graduates). We provide rigorous training in two different careers and a trainee programme in various disciplines. The topic of “succession planning” is a core part of our talent management approach.

Increasing professional and private stress and longer life working time require particular attention in respect to the health of our employees. With our strategic health management we want to retain performance levels and motivation of our employees, by promoting and supporting independent activity.

Our employees’ satisfaction is gauged every two years via an anonymous online survey of all employees, the Union Investment climate barometer. The objective to identify what employees

think of the climate at Union Investment in a way that pinpoints their satisfaction with the various aspects of their work at Union Investment and makes their identification with the company's values and goals transparent. Every other year, alternating with the climate barometer, there is the manager feedback process. Its purpose is to review and implement the standards defined in the management guidelines. These standards were jointly devised by the Board of Managing Directors and managers and describe how management is to be lived out at Union Investment. Measures are systematically derived from the climate barometer and management feedback formats and implemented.

Management approach to the environmental management system

As the materiality analysis shows, it is important to Union Investment's stakeholders that the impacts of our business operations on the environment are systematically recorded and optimised. That is why the environmental management system is a key aspect in the "environment" area of activity.

We publish the key figures on our company's environmental impacts recorded via the environmental management system in our annual report and CSR report each year. The data is gathered on a decentralised basis by specialist departments and consolidated in Environmental Management. The environmental management officer and his deputy manage the environmental management system and ensure its continuous enhancement. Data gathering, calculation and reporting are certified in line with the ISO 14001 standard, and are therefore subject to regular monitoring and enhancement. For the real estate portfolios in our investment funds that are particularly affected by environmental issues, there is special environment-oriented building management, geared towards international standards. The environmental data is published in line with the Germany's leading code for the real estate industry, the German Property Federation code.

Union Investment's environmental targets and measures are managed via the sustainability programme and reported to the Board of Managing Directors of Union Asset Management Holding AG.

Our environmental management thrives on the involvement of all employees

Union Investment's employees undergo skills-based training on operational environmental protection on joining the company. In addition, occasional "UniKompetenz" seminars are held on sustainability issues. They can be used as a training measure on a voluntary basis. With a knowledge database available in the intranet, information on relevant guidelines is available to employees at any time.

Management approach to climate protection

As an asset manager, our climate-relevant impacts at company level are limited compared with companies in the manufacturing sector. The materiality analysis confirms that the "environment" area of activity is important to both Union Investment and our stakeholders, but other areas of activity are more relevant. The publicly discussed topic of "climate protection" is a key aspect for our stakeholders in the "environment" area of activity. In addition to key figures on operational ecology, for instance greenhouse gas emissions arising from our activities as a company, stakeholders such as institutional investors are increasingly interested in product ecology, for instance the "CO₂ footprint" of the companies in our portfolios.

With the **climate strategy** adopted at the end of 2015, we show it is a serious matter for us as a company to make our contribution to the climate target adopted at the UN Climate Change Conference at the end of 2015. Our climate strategy is aimed at reducing our company's greenhouse gas emissions in line with current benchmarks by 40 % by 2030 and 85 % by 2050, compared with 2009 in each case. In terms of product ecology, we want to offer our clients specific solutions for making their investments in a climate-friendly way on the basis of specific sustainability funds and to report publicly in accordance with leading reporting standards.

Both issues – operational and product ecology – come down to two things: firstly, Union Investment wants to raise awareness of the corresponding climate effects and any risks and make them transparent. The second step is to implement specific changes ourselves or arrange them with our clients and suppliers. For us as a company, as part of a third step, the climate strategy contains provisions for compensation through the purchase of CO₂ certificates.

The next step in the direction of climate protection is taking place on the basis of dealing with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The recommendations of this body, which was set up by the G20 and the Financial Stability Board are becoming increasingly accepted on a broader international basis. For example, they have already been integrated into the EU Action Plan for financing sustainable growth.

Alongside the structural changes relating to governance, strategy, risk management and key performance indicators, both for the company and the core business, i.e. asset management, the change in perspective represents a material challenge. For example, the CO₂ footprint of a company provides a retrospective view, while the TCFD scenario assessment looks forward into the future. Here it is a question of the assessment of how business relationships change in a decarbonising economy, the impact on established and potential new business models and if and how companies can react. Within the context of a project, Union Investment started to deal with the TCFD requirements in 2018. However, the complexity related to the scenario assessment will require more time, in particular the consideration in the core business.

Management approach to advocacy, association and committee work

As the materiality analysis shows, it matters to our stakeholders that Union Investment represents the interests of its investors and partners in relation to regulators and policymakers as one of Germany's biggest asset managers.

Consequently, we work actively to achieve a regulatory environment that is designed to favour investors and encourage sustainable development. Key issues are transparency obligations, accountability and regulations that ensure stability of the financial markets in the interests of our investors and sustainable development. Transparency in terms of political advocacy is essential to us here. This is why we provide information on the fundamental positions we have taken in our national and international advocacy (in associations and in our comments on draft legislation). Content will be published on the page "**FinanzAgenda**", for example, our position on the EU Commission's Action Plan for financing sustainable growth.

Union Investment supports the transparency initiative of the European institutions and is listed in their transparency register. Major initiatives are rooted and published in the sustainability programme.

Management approach to supply-chain responsibility

Union Investment's supply chain predominantly comprises providers of office supplies, paper, energy and water for the buildings the company uses, and agency services. As the materiality analysis shows, environmentally relevant procurement aspects matter to our stakeholders.

As a responsible company, Union Investment has integrated guidelines concerning environmentally sound and socially responsible procurement and supplier management into its business processes via its environmental management system: Union Investment is keen only to select suppliers and service providers that comply with applicable occupational safety and environmental regulations at European level. Environmentally relevant partners of Union Investment should have an environmental management system or intend to set one up in the medium term. Products that we circulate, such as advertising materials, must meet the CE labelling requirement of the EU directives.

In the context of procurement and supplier management, it is initially ensured that sufficient consideration is given to social and environmental aspects when selecting business partners. It is important here to prevent the suppliers from deviating from the sustainability code and the environmental objectives. Therefore, an assessment of environmental relevance must be performed for all suppliers. This is conducted by the responsible employees on the basis of a defined matrix. Product group-specific and economic criteria are taken into account here. After a contract has been concluded, the environmental relevance of the suppliers is regularly checked and is adapted accordingly if necessary.

Union Investment is keen to continuously improve the environmental performance of the selected environmentally relevant suppliers when assessing environmental relevance. In the context of a relevance check, we select the business partners we have in mind for supplier meetings. This selection is based on the suppliers' impact on the environment and society. Measures to improve environmental performance can be jointly defined and implemented in regular supplier meetings. Operational measures and checks of their efficiency are documented by Union Investment's Supplier Management employees. An example for the integration of sustainability aspect in our supply chain is shown online in the **Brochure on the annual report**.

Regular internal audits assure the quality of procurement and supplier management processes and procedures.

Union Investment sustainability programme

With its sustainability programme, Union Investment manages and monitors its internal sustainability activities and objectives across all areas of involvement. Each year, together with the sustainability management at the Union Investment Group, the responsible departments check the implementation level of the measures and objectives of the sustainability programme. In consultation with the sustainability management, new measures may be added and approved by the Board of Managing Directors of Union Investment. This has enabled us to ensure that a consistent logic is in place for managing sustainability issues with the support of IT systems and that matching data material is available for all sustainability objectives and activities. In addition to new measures, in 2018 the targets expiring in the analysis period were re-examined, and if required adjusted or reformulated.

- New measures

Strategy/organisation

Objectives and activities	Timetable	Status	Notes
Integrate sustainability into company management	2018		
1. Actively participate in external work groups or associations on environmental issues	2018	Completed	
2. Examine the Sustainable Development Goals with regard to sustainability management	2018	Completed	
3. Collect and implement key figures relating to sustainability in Austria	2018	Cancelled	Due to complete integration, Austria is no longer recorded as a separate location.
4. Develop methods for relative and absolute measurement of the performance contribution of sustainable investment	2019	On schedule	
5. Examine the German federal government's National Action Plan on Human Rights	2018	Completed	
6. Develop a method of measurement for recording the climate risk in line with Task Force on Climate-related Financial Disclosures (TCFD) requirements	2019	On schedule	
7. Establish a CSR training platform	2019	Extended	
Integrate new sustainability topics into company management (CSR)	2022	New	
1. Draft an implementation concept for the German federal government's National Action Plan on Human Rights	2019	New	
Continue to develop sustainability management	2018		
1. Implement the 2018+ sustainability strategy	2019	On schedule	
2. Continue to develop the goals of the sustainability programme	2018	Completed	
3. Integrate ESG data into the data warehouse	2019	On schedule	
4. Establish a Steering Committee for sustainable investment issues	2018	Completed	

Communication

Objectives and activities	Timetable	Status	Notes
Establish systematic sustainability communication	2018		
1. Implement events on qualification and for increasing employee awareness on environmental topics	2018	Completed	
2. Design and implement a Union Investment Sustainability Day for employees	2019 (2018)	Extended	
3. Further develop the communication positioning on sustainability for the Union Investment Group	2018	Completed	
4. Integrate "sustainability" in expanding the corporate website to an issues hub	2019	On schedule	
Expand systematic sustainability communication to relevant stakeholders	2022	New	
1. Increase detail of the communication positioning on sustainability for the Union Investment Group	2020	New	

- New measures

Environment

Objectives and activities	Timetable	Status	Notes
Reduce per employee energy consumption of electricity, gas, district heating and fuel by 10% (reference year 2014)	2018		
1. Implement the business strategy at the Frankfurt location by moving into another building at the Maintor Porta site which is certified DGNB Gold.	2020	Extended	
2. Further develop the "Green Car Policy" and reduce the maximum CO ₂ levels for new cars on an ongoing basis	2018	Completed	
Reduce per employee energy consumption (electricity, gas, district heating and fuel) by 5% to 2022 (reference year 2018)	2022	New	
1. Implement an energy audit in line with DIN EN 16247	2019	New	
2. Promote e-mobility by setting up a public e-loading station at the MaintorPorta site	2019	New	
Reduce the CO₂ emissions by 40% to 2030 (reference year 2009)	2022 (2018)	Extended	
1. Further details and successive implementation of the workplace concept	2019	On schedule	
2. Develop a building strategy for the Luxembourg site	2019	On schedule	
3. Align the vehicle fleet policy to changed general conditions	2020	New	
4. Promote e-mobility by setting up a public e-loading station at the MaintorPorta site	2019	New	
Reduce overall paper consumption by 25% per master securities account (reference year 2014)	2018		
1. Reduce printing materials for individual products on an ongoing basis and align customer brochures to current customer requirements	2018	Completed	
Reduce printer and photocopying paper consumption per employee by 10% (reference year 2014)	2018		
1. Increase employee awareness in dealing with photocopying paper	2018	Completed	
Cover the entire annual paper requirements with a recycling paper share of at least 17%; the remaining share should be at least 95% covered by FSC/PEFC certified paper			
1. Further measures to optimise printing orders	2018	Completed	
Reduce resources consumption and use on an ongoing basis	2022	New	
1. Reduce residual waste volumes by 25% (reference year 2018)	2022	New	
2. Reduce paper volumes for retail fund reporting by 8 tonnes.	2019	New	
3. Optimise baskets for office suppliers and promotional articles in line with social / environmental aspects	2022	New	
4. Increase recycling share for printing by 10% (reference year 2018)	2022	New	

Employees

Objectives and activities	Timetable	Status	Notes
Retain and expand work employee work satisfaction	2018		
1. Further develop sustainability training within the scope of UniKompetenz	2018	Completed	
2. Implement the measures from the Union Investment 2017 climate barometer	2018	Completed	
Retain and expand work satisfaction and ability to work	2022	New	
1. Implement an "MOOC" (online course) "Fit for the Working World 4.0"	2019	New	
2. Continue the offer of development measures on resilience, healthy management, etc.	2019	New	
Retaining employees			
1. Further develop management culture: design and implement leadership initiatives in company areas	2018 (2017)	Completed	
2. Implement management feedback 2018	2018	Completed	
3. Participation in Top Employee 2018 competition	2018	Completed	
4. Expand the range of human resource development activities	2018	Completed	
5. Management feedback 2018: implement accompanying development measures	2019	New	
6. Develop management culture further: Leadership initiative in the Infrastructure segment	2019	New	
7. Positioning as attractive, sustainable employee on the career pages of Union Investment	2020	New	
8. Use the Brandeins award as sustainable employer	2019	New	
Promote the balance between career and family	2018		
1. Implement measures to promote women in specialist and management positions	2018	On schedule	
2. Implement measures on "Audit Career and Family"	2020	Extended	
3. "Diversity&Union" measures to promote women in specialist and management functions	2022	New	

- New measures

Society

Objectives and activities	Timetable	Status	Notes
Further development of social involvement at Union Investment	2018		
1. Promote scientific education as foundation project	2018	Completed	
Further develop the social commitment of Union Investment	2022		
1. Consolidated expansion of the support for training and qualification programmes to promote equality of opportunity on the labour market	2020	New	
2. Develop and expand the initiatives for financial education	2020	New	
3. Rework design of the social commitment and draft further specific measures	2019	New	
4. Recycle promotional materials in cooperation with a workshop for disabled persons	2020	New	
Promote sustainable and investor-oriented interests in the financial industry and regulation	2022 (2018)	Extended	
1. Be involved in the introduction of a standardised European product for private pensions	2019	Extended	
2. Refugee commitment - shadowing offers	2019 (2017)	Extended	
3. Be involved in the "FrankfurtHilft" [Frankfurt Helps] initiative for refugees	2018 (2017)	Completed	
4. Accompany regulatory processes for implementing the EU Sustainability Action Plan	2021	New	
Further development of the general social commitment for sustainability	2022 (2018)	Extended	
1. Increase ISO 14001 certification level of the top suppliers	2020 (2017)	Extended	
2. Annual sustainability talks with all top Union Investment suppliers	2018	Completed	
3. Record the CO ₂ footprint in supplier management	2019	On schedule	
4. Reduce the PUE target figure of the computer centre to benchmark level	2018	Completed	
5. Expand the supplier development process	2019 (2018)	Extended	
6. Membership in the Klima Arena in Sinsheim to promote general awareness for climate protection	2019	On schedule	
7. Inspect ongoing cooperation with an NGO on "sustainable finance"	2019	New	

Institutional clients

Objectives and activities	Timetable	Status	Notes
Increase sustainable assets under management by 50 % (from 2014 to 2018)	2018	Completed	
1. Establish further institutional SRI funds to the extent this makes sense economically	2018	Completed	
2. Apply external quality standards for sustainable institutional funds of the Sustainable Investment Forum	2020 (2018)	Extended	
3. Expand number of customers with mandates on active share ownership by 25 % (reference year 2014)	2021 (2018)	Extended	
4. Convert selected institutional public funds to a ESG minimum filter	2018	Completed	
5. Expand inspection options for sustainable key portfolio performance figures in the trading system (CRIMS)	2018	Completed	
6. Train all IC employees on sustainability	2018	Completed	
Increase sustainable AuM from 2019 to 2022 by 100 %	2022	New	
1. Establish further institutional SRI funds to the extent this makes sense economically	2019	New	
2. IC118 Provide regular training offers for IC employees on sustainability	2019	New	
Expand communication on sustainability topics and SRI in institutional business	2018		
1. Survey institutional investors on trends in sustainable investment	2020 (2018)	Extended	
2. Further develop design for sustainability conference for customers	2018	Completed	
3. Add new participants to the "CSR" expert group	2020 (2018)	Extended	
4. Further develop CSR annual report for investors	2018	Completed	
5. Expand individual reporting for CSR customers	2019 (2017)	On schedule	
6. Expand sustainability reporting for all IC funds	2020 (2018)	Extended	
7. Expand the topic of sustainability in the IC internet and in other IC media	2019	On schedule	
8. Create a sustainability report for selected property funds	2019 (2018)	Extended	
9. Training concept for IC employees	2018	Completed	
10. Implement "Sustainability Conference" for customers	2020	New	

- New measures

Retail clients

Objectives and activities	Timetable	Status	Notes
Increase sustainable assets under management by 18 % (from 2014 to 2018)	2018		
1. Include ESG aspects in the private label area in investment committee meetings	2018	Completed	
2. Maintain and update the sustainability criteria in the private label area	2018	Completed	
3. Report on current sustainability issues	2018	Completed	
4. Support and actively discuss sustainability with sales partners	2018	Completed	
5. Examine expansion of the range of sustainable products for retail clients, particularly PrivatFonds, MeinInvestand and VisualVest	2019 (2018)	Extended	
6. Hold internal information events on sustainability in the Retail Clients segment	2018	Completed	
7. Set up a section on sustainability in the "UnionOnline" extranet for consultants	2019	Completed	
8. Continue to develop the information material for retail investors	2018	Completed	
Increase sustainable AuM from 2018 to 2022 by 36 %	2022	New	
1. Implement a sustainable Riester solution	2020	New	
2. Further develop the sustainability criteria of our sustainable funds	2020	New	
Expand communication on sustainable investment	2022	New	
1. Support and actively discuss sustainable investment with distribution partners (duration to the end of 2020)	2020	New	
2. Continue to develop the information material for retail investors and distribution partners	2020	New	
3. Information for external sales force	2019	New	
4. Check consequences of EU regulations, especially in respect to investment advice and taxonomy	2020	New	

Portfolio management

Objectives and activities	Timetable	Status	Notes
Expand and refine investment processes	2018		
1. Expand SIRIS (Sustainable Investment Research Information System) within Portfolio Management as a proprietary research tool	2018	Completed	
2. Extend ESG analyses to various asset classes by issuer	2018	Completed	
3. UN PRI assessment with above-average results	2018	Completed	
4. Create an ESG academy as a training format for portfolio management	2018	Completed	
5. Continue to develop climate activities	2019	On schedule	
6. Continue to develop SIRIS expertise: digital platform for sustainability and CSR, single-value and portfolio analysis, Reporting 2.0	2020	On schedule	
7. Research coverage of sustainability issues (e.g. SDGs) in the context of ESG integration	2019	On schedule	
8. Redraft policies for responsible investment	2019	New	
9. Pilot the TCFD areas of action identified in 2019	2021	New	
10. Expand and focus the ESG team in portfolio management	2020	New	
11. Expand SIRIS reporting (sustainability reporting)	2020	New	
Expand active share ownership	2018		
1. Perform regular collaborative CSR activities	2018	Completed	
2. Increase reach of ESG involvement and proxy voting by 75 % (reference year: 2014)	2018	Completed	
3. Increase ESG investor meetings by 75 % (reference year: 2014)	2018	Completed	
4. Show commitment to integrating climate risks into corporate governance	2018	Completed	
5. Expand active share ownership through greater coverage of AGM votes	2020	On schedule	
6. Integrate climate risks into the CSR process	2020	New	

- New measures

Real estate funds

Objectives and activities	Timetable	Status	Notes
Expand and refine investment processes for real estate funds 1. Further develop the Sustainable Investment Check with additional criteria for acquisitions	(2022) 2018 2020	Extended New	
Increase energy efficiency and improve the environmental impact of portfolio properties 1. Define specific improvement targets for energy, CO ₂ , water and waste for portfolio properties (for a sub-portfolio) 2. Increase the recording of energy, CO ₂ , water and waste data from the relevant parts of the real estate portfolio to approximately 75 % of the total portfolio 3. Implement the optimisation action plans that have been developed 4. Measure the level of target attainment for the optimisation action plans that have been developed: analyse the energy, CO ₂ , water and waste data for the real estate portfolio	2022 (2018) 2020 (2018) 2019 (2018) 2020 2020	Extended Extended On schedule On schedule	Re 1: Target adjustment based on the Energy Saving Ordinance (EnEV) for commercial real estate to be passed by the federal government by 2018.
Develop and increase commitment to sustainability across the real estate sector 1. Collaborate with the German Property Federation 'Sustainability, energy and environment' (NEU) working group and contribute to the work of the DGNB's real estate advisory committee on developing the determination of key figures for the real estate sector in Germany 2. Design and collaborate in studies, initiatives and ratings, for example relating to the Environmental Sustainability Index (ESI), Sustainable Investment in Real Estate (s-i-r-e), the Global Real Estate Sustainability Benchmark (GRESB) and Scope	2022 (2018) 2020 (2018) 2020 (2018)	Extended Extended Extended	

Union Investment real estate portfolio

In the following section, Union Investment reports to its employees, clients, business partners and interested members of the public on its activities in the field of sustainable real estate management. This includes not just a presentation of the various processes and instruments, but also in particular the consumption data gathered and extrapolated for investment funds¹⁾ over the last three periods. Union Investment is therefore making an important contribution to transparency as a basis for the sustainable ongoing development of the real estate investment sector.

1. Understanding sustainability as future viability

Climate Protection Plan 2050 of the Germany federal government, "Action Plan on Sustainable Finance" from the EU Commission, UN Climate Change Conference 2018 in Katowice - many landmark political decisions have been resolved or are being brought forward. With very high consumption of resources and potential for emissions, the real estate industry is one of those in the spotlight and is included in the ambitious target of achieving extensive "climate neutrality" by 2050. Sustainability has thus no longer become a choice. It is an essential element of every long-term strategy.

As a forward-looking asset manager, for ten years Union Investment has already been working on the sustainable alignment of its activities relating to buildings in its portfolio. After all, the future viability of its property portfolio is the foundation stone for the most important aim of managing and increasing investor assets in a responsible manner. To do this Union Investment has implemented a sustainability strategy which it pursues on an ongoing basis. For implementation Union Investment has developed its own instruments, which are applied not only at building but also at portfolio level. By measuring consumption data and by implementing various sustainability criteria, an important basis was established for further improving the properties. With the assistance of advancing digitalisation, this database is becoming increasingly precise and the optimisation measures implemented more and more effective. Further measures such as integrating tenants and staff, but also commitment across the industry are being leveraged to find new solutions for more sustainability.

¹⁾ Each less the number of residential buildings and properties under construction or restructuring; see also 3.2 Portfolio under review.

2. Sustainability management processes

2.1 Comprehensive understanding of sustainability

Union Investment is committed to responsible action and has vowed to play its own part in maintaining an intact environment. This includes integrating sustainability comprehensively and systematically into its business processes. For the real estate sector, this means reducing the environmental impact of properties on an ongoing basis while maintaining long-term financial success and thereby gradually improving the property portfolio.

In 2011, Union Investment introduced a comprehensive environmental management system (EMS) and was successfully certified according to the international standard DIN EN ISO 14001. In addition to operational ecology, i.e. the environmental impact of operations, this system looks at product ecology, i.e. the environmental impact of the "real estate funds" product. As part of the environmental management system, the quality of the processes is secured and their progress is monitored. Each year audits are implemented to check progress. In addition, recertification takes place every three years, the last time in 2017 when the auditor determined no deviations.

Union Investment has established the responsibilities of its business units by enshrining the issue of sustainability in its guidelines and programmes at company level. Union Investment's voluntary commitment to structuring its business processes in accordance with the requirements of the German Property Federation code (sustainability code of the German Property Federation) has therefore been satisfied.

Union Investment's sustainability instruments are applied throughout the entire life cycle of the respective properties. Objectives are pursued in the acquisition, letting and management and in the renovation and revitalisation of buildings that contribute to maintaining the value of the properties and their future viability and support business performance in the long term. External service providers are integrated into the internal processes.

Union Investment also understands holistic sustainability management to encompass not only the consumption and emissions resulting directly and indirectly from operations but also the environmental impact of the properties held in the portfolio. As the main environmental impacts result from the consumption and emissions caused by the properties held, these are presented explicitly in the following sections. Accordingly, the CO₂ emissions generated in the real estate portfolio are reported as Scope 3 emissions in accordance with the United Nations Greenhouse Gas Protocol. The direct and indirect emissions resulting from operations (Scopes 1 and 2) are shown on page 187 of the report.

2.2. Analysis and evaluation instruments

The core of sustainability management at Union Investment is formed by its proprietary portfolio sustainability management tool, SoFi PSM. SoFi PSM not only creates the necessary transparency regarding the portfolio's sustainability aspects but also tracks the objectives and activities derived from this. The data history now covers nine years. Among others, the following instruments and processes are managed with SoFi PSM:

Key performance indicators (KPIs)

The key performance indicators comprise all the consumption data specific to real estate, such as electricity, heating and water consumption, the volume of waste produced and CO₂ emissions. Recording and evaluating consumption figures allows property optimisation potential to be identified and savings targets to be defined, both at property and portfolio levels. Measures for more efficient use of resources and for reducing operating costs can then be introduced and the targets monitored. SoFi PSM therefore forms the foundation of the long-term orientation of Union Investment's international real estate portfolio. The recording of consumption data is firmly integrated into standard asset and property management processes at Union Investment, and ensures that the portfolio is analysed on an annual basis.

Sustainable Investment-Check (SI Check)

With the sustainable investment check developed specifically by Union Investment, buildings are assessed in terms of their sustainable quality as early as the purchasing process. Optimisation potential can be identified and measures to improve the properties can be planned at an early stage. The SI check is also applied to buildings already within the portfolio on an annual basis, with criteria in the areas of energy, building automation, resources, economy, user comfort, measures in operation and location being examined and analysed. This instrument determines not only the current condition of a building but also checks its specific development potential annually. The SI check was developed on the basis of common certification systems and is continuously expanded and adapted to the latest market developments.

The combination of the SI check for qualitative assessment and the recording of KPIs for quantitative analysis guarantee that Union Investment comprehensively documents and evaluates real estate and portfolio data on an annual basis. At the same time, it follows up the impact of the actions it has taken and is successively integrating this review of the success of the actions into work processes as a standard requirement.

Internal benchmarking

Union Investment applies reliable data adjustment to the KPIs recorded in compliance with the German Property Federation recommendations "Sustainability Benchmarking - What and How Should Comparisons be Made". This ensures the comparability of the portfolio buildings and facilitates internal benchmarking based on the type of use. Asset and fund managers can use these benchmarks to obtain indications of potential improvements at property and portfolio levels.

Green due diligence (GDD)

Green due diligence serves to determine specific optimisation measures for selected portfolio properties in terms of business, environmental and social aspects and therefore involves more than just an energy analysis. Drawing on SoFi PSM data, properties in need of optimisation are specifically selected and then undergo extensive examination conducted by experts. In the process, property-specific measures to reduce energy costs and overheads, increase user comfort or enhance the value of the building are identified and evaluated on the basis of cost-effectiveness studies in combination with emission and environmental analyses. This gives the property manager a sound basis for decisions regarding the building's ongoing development. The impact of the activities implemented is tracked in order to measure the attainment of goals and to take further action as necessary.

Certification

While the aforementioned instruments allow sustainability criteria to be managed throughout the entire real estate portfolio, the certification of portfolio properties is an additional tool that makes sustainable property qualities transparent for users and other stakeholders in particular. Union Investment examines whether such certification makes sense for individual properties. For new construction projects and extensive renovations, certification is an important sign of quality in implementing sustainability criteria. These must be taken into account during the property planning and construction phases in order to create optimum conditions for subsequent sustainable building operations.

Proportions of portfolio properties with certification or pre-certification

2016		2017		2018	
Number of properties	By appraisal value	Number of properties	By appraisal value	Number of properties	By appraisal value
112	55 %	133	57 %	148	63 %

Source: Union Investment, correct as at 31 December of the respective year. The statistics include the following funds: DEFO Immobilienfonds 1, DIFA-Fonds Nr. 3, German^M, Immofonds 1, Ull German Real Estate, Ull Hotel Nr. 1, Ull Shopping Nr. 1, Unilmmo: Deutschland, Unilmmo: Europa, Unilmmo: Global, Unilmmstitutional European Real Estate.

Certified and pre-certified properties in the portfolio

Property	Country	City	Type of use	Fund	Certification
EMPORIO	Germany	Hamburg	Office	Unilmmo: Deutschland	LEED CS 2.0, Platinum
EMPORIO Hotel Scandic	Germany	Hamburg	Office	Unilmmo: Deutschland	DGNB NHO Gold
Finsbury Circus	UK	London	Office	Unilmmo: Deutschland	BREEAM New Construction, Office 08 Excellent
CityQuartier DomAquaree	Germany	Berlin	Hotel	Unilmmo: Deutschland	DGNB NSQ 10 Gold
Rhein-Galerie	Germany	Ludwigshafen	Shopping	Unilmmo: Deutschland	DGNB Version 2009 Platinum
CityQuartier Paris-Trocadero	France	Paris	Office	Unilmmo: Deutschland	HQE Gestion Durable Exceptionnel, HQE Batiment Durable Tres Bon
ATMOS	Germany	Munich	Office	Unilmmo: Deutschland	DGNB NBV 08 Gold
Rund Vier	Austria	Vienna	Office	Unilmmo: Deutschland	DGNB NBV 09A Gold
LogPark	Germany	Neu Wulmstorf, Minenbüttel	Logistics	Unilmmo: Deutschland	DGNB NIN 09 Gold
Centurion Commercial Center	Germany	Hamburg	Office	Unilmmo: Deutschland	DGNB NBV 08 Platinum
Meliá	France	La Défense-Courbevoie	Hotel	Unilmmo: Deutschland	HQE Batiment Tertiaires en exploitation Excellent, HQE Batiment Durable Excellent
Airport Garden's	Germany	Dusseldorf	Office	Unilmmo: Deutschland	LEED EBOM v2009 Gold
Rosmarin-Karree	Germany	Berlin	Office	Unilmmo: Deutschland	BREEAM In-Use DE Part 2 Very Good, BREEAM In-Use DE Part 1 Very Good
Eventes	Finland	Espoo	Office	Unilmmo: Deutschland	LEED CS 2009 Gold
City Zen, Building A	France	Bois-Colombes	Office	Unilmmo: Deutschland	BREEAM v 2009 Europe Commercial: Offices Very Good, HQE NF HQE Bâtiments tertiaires
City Zen, Building B	France	Bois-Colombes	Office	Unilmmo: Deutschland	BREEAM v 2009 Europe Commercial: Offices Very Good, HPE Certivea BBC 2005
Barcelo	Germany	Hamburg	Hotel	Unilmmo: Deutschland	BREEAM In-Use DE Part 01 Very Good
Euro Plaza 4	Austria	Vienna	Office	Unilmmo: Deutschland	DGNB NBV 09A Platinum
Manufaktura	Poland	Lodz	Shopping	Unilmmo: Deutschland	BREEAM In-Use DE Part 1 Excellent, BREEAM In-Use DE Part 2 Excellent
G1	UK	Glasgow	Office	Unilmmo: Deutschland	BREEAM Office 05 Very Good
Akzo Nobel	Netherlands	Amsterdam	Office	Unilmmo: Deutschland	BREEAM NL New Build (Nieuwbouw Opleverfase 2011 v1.0) Excellent (NL 4*)
UPM	Finland	Helsinki	Office	Unilmmo: Deutschland	LEED NC Platinum, LEED EBOM v 4.0 Platinum
Holiday Inn	Germany	Frankfurt am Main	Hotel	Unilmmo: Deutschland	DGNB NHO 09 Gold
Bülow Carré	Germany	Stuttgart	Office	Unilmmo: Deutschland	LEED CS 2.0, Platinum
Forum am Hirschgarten	Germany	Munich	Office	Unilmmo: Deutschland	DGNB NBV 09 Gold
K2 Ellipse	Luxembourg	Luxembourg	Office	Unilmmo: Deutschland	BREEAM In-Use Part 1 Excellent, BREEAM In-Use Part 2 Very Good
K2 Forte	Luxembourg	Luxembourg	Office	Unilmmo: Deutschland	BREEAM In-Use Part 1 Excellent, BREEAM In-Use Part 2 Very Good
Holzmarkt 1	Germany	Cologne	Office	Unilmmo: Deutschland	DGNB NBV 12 Platinum
Germany Headquarters Mercedes-Benz Sales	Germany	Berlin	Office	Unilmmo: Deutschland	DGNB NBV 09 Gold
Rungedamm 32	Germany	Hamburg	Logistics	Unilmmo: Deutschland	DGNB NIN 09 Gold
MegaCenter Rhein-Main	Germany	Dieburg	Logistics	Unilmmo: Deutschland	DGNB NIN 09 Platinum

Property	Country	City	Type of use	Fund	Certification
Green Worx	Austria	Vienna	Office	Unilmmo: Deutschland	LEED CS Platinum
Dominikanski A + C	Poland	Wroclaw	Office	Unilmmo: Deutschland	LEED CS v2009 Platinum
Dominikanski B	Poland	Wroclaw	Office	Unilmmo: Deutschland	LEED CS v2009 Platinum
Shannon Building	Ireland	Dublin	Office	Unilmmo: Deutschland	LEED CS v2009 Gold
Andel's Berlin	Germany	Berlin	Hotel	Unilmmo: Deutschland	BREEAM DE In-Use Part 01 Very Good
Holiday Inn	Poland	Warsaw	Hotel	Unilmmo: Deutschland	LEED NC Gold
Vattenfall HQ	Sweden	Solna	Office	Unilmmo: Deutschland	GreenBuilding, Miljö Byggnad Building V 2.0 Gold
Maraton	Poland	Poznan	Office	Unilmmo: Deutschland	LEED CS v2009 Platinum
160 Aldersgate Street	UK	London	Office	Unilmmo: Deutschland	BREEAM Refurbishment and Fit-Out 2014: Offices Excellent
600 Thirteenth Street	USA	Washington, D.C.	Office	Unilmmo: Europa	LEED EBOM v2009 Silver, LEED EBOM v2009 Gold
Fleetinsel	Germany	Hamburg	Hotel	Unilmmo: Europa	BREEAM DE In-Use Part 01 Very Good, BREEAM DE In-Use Part 02 Good
Seestern 3	Germany	Dusseldorf	Office	Unilmmo: Europa	LEED CS v2009 Gold
Spandau Arcaden	Germany	Berlin	Shopping	Unilmmo: Europa	DGNB GIB Gold
IT-Port	Germany	Unterschleissheim	Office	Unilmmo: Europa	LEED EBOM v2009 Gold
France Avenue	France	Paris	Office	Unilmmo: Europa	HQE Batiment Durable Tres Bon
Radisson Blu Hotel Marseille	France	Marseille	Hotel	Unilmmo: Europa	BREEAM In Use Part 01 Very Good
Torre Diagonal Mar	Spain	Barcelona	Office	Unilmmo: Europa	LEED EBOM v2009 Gold, BREEAM ES In-Use Part 02 Excellent
CityQuartier Fünf Höfe	Germany	Munich	Shopping	Unilmmo: Europa	BREEAM In-Use DE Part 01 Excellent
Les Grands Prés	Belgium	Mons	Shopping	Unilmmo: Europa	BREEAM In-Use Part 01 Very Good
Park.Gate	Germany	Munich	Office	Unilmmo: Europa	LEED EBOM v2009 Gold
140 Broadway	USA	New York	Office	Unilmmo: Europa	LEED EBOM v2009 Gold
111 South Wacker	USA	Chicago	Office	Unilmmo: Europa	LEED CS Gold, LEED EBOM v2009 Platinum
Limbecker Platz	Germany	Essen	Shopping	Unilmmo: Europa	DGNB NHA 09 Gold
L'Unico	Luxembourg	Luxembourg	Office	Unilmmo: Europa	BREEAM In-Use Part 01 Excellent, BREEAM In-Use Part 02 Very Good
PIXEL	Luxembourg	Luxembourg	Office	Unilmmo: Europa	BREEAM In-Use Part 01 Excellent, BREEAM In-Use Part 02 Very Good
UN-Studio	Netherlands	Amsterdam	Office	Unilmmo: Europa	BREEAM NL In-Use Part 01 Very Good, BREEAM NL In-Use Part 02 Good
Forum Kayseri	Turkey	Melikgazi / Kayseri	Shopping	Unilmmo: Europa	BREEAM Retail Europe Very Good, BREEAM In-Use Part 01 Outstanding
Fifty-One	Switzerland	Zurich	Office	Unilmmo: Europa	LEED CS v2009 Gold
ARCOTEL Kaiserwasser	Austria	Vienna	Hotel	Unilmmo: Europa	BREEAM AT In-Use Part 01 Very Good
Shibuya Prime Plaza	Japan	Tokyo	Office	Unilmmo: Europa	LEED EBOM v2009 Gold
Central Seine	France	Paris	Office	Unilmmo: Europa	HQE Gestion Durable Exceptionnel, HQE Exploitation Excellent
Radisson Blu Hotel Cracow	Poland	Cracow	Hotel	Unilmmo: Europa	BREEAM In-Use Part 01 Very Good
Hofgartenpalais	Germany	Dusseldorf	Office	Unilmmo: Europa	LEED EBOM v2009 Gold

Property	Country	City	Type of use	Fund	Certification
Saint Martial	France	Limoges Cedex 1	Shopping	Unilmmo: Europa	BREEAM In-Use Part 01 Good, BREEAM In-Use Part 02 Good
KINETIK	France	Boulogne-Billancourt	Office	Unilmmo: Europa	BREEAM v 2009 Europe Commercial: Offices Excellent, HQE Batiment Durable Excellent
555 Mission Street	USA	San Francisco	Office	Unilmmo: Europa	LEED CS, LEED EBOM v2009 Platinum
Multicube	Germany	Heddesheim	Logistics	Unilmmo: Europa	DGNB NIN 09 Platinum
Motel One	Netherlands	Amsterdam	Hotel	Unilmmo: Europa	BREEAM NL Neubau (Nieuwbouw Opleverfase 2011 v1.0) Excellent
Barceló Raval	Spain	Barcelona	Hotel	Unilmmo: Europa	BREEAM ES In-Use Part 01 Good, BREEAM ES In-Use Part 02 Good
Europlaza 5	Austria	Vienna	Office	Unilmmo: Europa	DGNB NBV 09 Platinum
Senator	Poland	Warsaw	Office	Unilmmo: Europa	BREEAM NC V2008 Office Very Good
Research Park Plaza III & IV	USA	Austin	Office	Unilmmo: Europa	LEED EBOM v2009 Gold
One Snowhill	UK	Birmingham	Office	Unilmmo: Europa	BREEAM Office 06 Very Good
ITO	Netherlands	Amsterdam	Office	Unilmmo: Europa	BREEAM NL In-Use Part 01 Good, BREEAM NL In-Use Part 02 Acceptable
SOM	Netherlands	Amsterdam	Office	Unilmmo: Europa	BREEAM NL In-Use Part 01 Good, BREEAM NL In-Use Part 02 Acceptable
Southpoint	Australia	Brisbane	Office	Unilmmo: Europa	Green Star Office As Built V3 2018 5*, Nabers Energy 5*
J6 Front	Japan	Tokyo	Shopping	Unilmmo: Europa	LEED EBOM v2009 Gold
EY HQ	Finland	Helsinki	Office	Unilmmo: Europa	LEED CS Gold
space2move A + B	Austria	Vienna	Office	Unilmmo: Europa	LEED CS Gold
space2move C	Austria	Vienna	Office	Unilmmo: Europa	LEED CS Gold
1000 Main	USA	Houston	Office	Unilmmo: Europa	LEED EBOM v2009 (ARC) Gold, LEED EBOM v2009 (recert. ARC) Gold
4 Grand Canal Square	Ireland	Dublin	Office	Unilmmo: Europa	BREEAM Excellent
5 Grand Canal Square	Ireland	Dublin	Office	Unilmmo: Europa	BREEAM Excellent
Watermark Place	UK	London	Office	Unilmmo: Europa	BREEAM Office 06 Excellent
Königstrasse 27 / 27 a	Germany	Stuttgart	Shopping	Unilmmo: Europa	LEED CS v2009 Gold
Amazon VI	USA	Seattle	Office	Unilmmo: Europa	LEED CS Gold, LEED EBOM v2009 Platinum
101 Seaport Boulevard	USA	Boston	Office	Unilmmo: Europa	LEED CS v2009 Platinum, LEED EBOM v2009 Platinum
LondonHouse	USA	Chicago	Hotel	Unilmmo: Europa	LEED NC v2009 Silver
Mercado	Germany	Nuremberg	Shopping	Unilmmo: Europa	BREEAM In-Use De Part 01 Very Good
Rathaus-Galerie	Germany	Leverkusen	Shopping	Unilmmo: Europa	DGNB New Construction Retail Buildings v2009 Gold
Midtown21	USA	Seattle	Office	Unilmmo: Europa	LEED C&S v2009 Gold
The Copyright Building	UK	London	Office	Unilmmo: Europa	BREEAM NC Offices v2014 Excellent
Siemens U6	Sweden	Solna	Office	Unilmmo: Europa	Miljöbyggnad Gold
LAGO	Germany	Konstanz	Shopping	Unilmmo: Global	BREEAM DE In-Use Part 01 Very Good, BREEAM DE In-Use Part 02 Good
1 Coleman Street	UK	London	Office	Unilmmo: Global	BREEAM Office 05 Very Good
Torre Mayor	Mexico	Mexico City	Office	Unilmmo: Global	LEED EBOM v2009 Gold

Property	Country	City	Type of use	Fund	Certification
Radisson Blu Hotel London Stansted Airport	UK	Essex	Hotel	Unilmmo: Global	BREEAM In-Use Part 01 Very Good
Forum Mersin	Turkey	Mersin - Yenişehir	Shopping	Unilmmo: Global	BREEAM In-Use Part 01 Outstanding, BREEAM In-Use Part 02 Outstanding
STEP 6	Germany	Stuttgart	Office	Unilmmo: Global	DGNB GIB Gold
Vision Crest Commercial (VCC)	Singapore	Singapore	Office	Unilmmo: Global	LEED EBOM v2009 Gold
Woodland Pointe	USA	Herndon	Office	Unilmmo: Global	LEED EBOM v2009 Gold
Glass City Harumi	Japan	Tokyo	Office	Unilmmo: Global	LEED EBOM v2009 Gold
3 Stawy	Poland	Katowice	Shopping	Unilmmo: Global	BREEAM In-Use Part 01 Very Good, BREEAM In-Use Part 02 Excellent
West-Park	Switzerland	Zurich	Office	Unilmmo: Global	BREEAM In-Use Part 01 Excellent, BREEAM In-Use Part 02 Very Good
Torre Oriente	Portugal	Lisbon	Office	Unilmmo: Global	LEED EBOM v2009 Gold
Horizon Plaza	Poland	Warsaw	Office	Unilmmo: Global	BREEAM In-Use Part 01 Excellent, BREEAM In-Use Part 02 Excellent
4085 Campbell Avenue	USA	Menlo Park	Office	Unilmmo: Global	LEED EBOM v2009 Gold
155 Clarence Street	Australia	Sydney	Office	Unilmmo: Global	4.5 Star NABERS (Green Star) Office as Built v3 2016 5 * , Nabers Energy 5*
Converse at Lovejoy Wharf	USA	Boston	Office	Unilmmo: Global	LEED CS Gold, LEED EBOM v2009 Gold
Dos Patios	Mexico	Mexico City	Office	Unilmmo: Global	LEED CS Gold
Hyatt Place Airport	Germany	Frankfurt am Main	Hotel	Unilmmo: Global	LEED CS v09 Silver
2000 McKinney Avenue	USA	Dallas	Office	Unilmmo: Global	LEED EBOM v2009
Ten 10th Street	USA	Atlanta	Office	Unilmmo: Global	LEED EBOM v2009 Silver, LEED EBOM v2009 Gold
Courtyard WTC	USA	New York	Hotel	Unilmmo: Global	LEED NC v2009 Silver
QBC3	Austria	Vienna	Office	Unilmmo: Global	DGNB NBV v2009A Platinum, LEED CS v2009 Platinum
The Triangle	USA	Denver	Office	Unilmmo: Global	LEED CS v2009 Gold
Hub	Sweden	Stockholm	Office	Unilmmo: Global	BREEAM In-Use Part 01 Very Good
Torre Diagonal Litoral B-3	Spain	Barcelona	Office	Unilmmstitutional European Real Estate	LEED EBOM v2009 Gold
Zebra Tower	Poland	Warsaw	Office	Unilmmstitutional European Real Estate	LEED CS Gold
Alberga A	Finland	Helsinki - Espoo	Office	Unilmmstitutional European Real Estate	BREEAM New Construction Very Good
Europa-Galerie	Germany	Saarbrücken	Shopping	Unilmmstitutional European Real Estate	DGNB NHA 09 Gold
Stibbe Court	Netherlands	Amsterdam	Office	Unilmmstitutional European Real Estate	BREEAM New Construction Excellent
MainTor Porta	Germany	Frankfurt am Main	Office	Unilmmstitutional European Real Estate	DGNB NBV 09 Platinum
Le Terrazze	Italy	La Spezia	Shopping	Unilmmstitutional European Real Estate	BREEAM In-Use Part 01 Very Good, BREEAM In-Use Part 02 Very Good

Property	Country	City	Type of use	Fund	Certification
K2 Dolce	Luxembourg	Luxembourg-Kirchberg	Office	Uninstitutional European Real Estate	BREEAM In-Use Part 01 Excellent, BREEAM In-Use Part 02 Very Good
Riviera	Poland	Gdynia	Shopping	Uninstitutional European Real Estate	BREEAM In-Use Part 01 Excellent, BREEAM In-Use Part 02 Excellent
FIRST	Netherlands	Rotterdam	Office	Uninstitutional European Real Estate	BREEAM NL New Construction Excellent
XYZ Building	UK	Manchester	Office	Uninstitutional European Real Estate	BREEAM NC Offices v2011 (shell only) Excellent
U7	Sweden	Solna	Office	Uninstitutional European Real Estate	BREEAM SE-2019 Kontor Nybyggnad Very Good
Chal-Tec	Germany	Kamp-Lintfort	Logistics	Uninstitutional European Real Estate	DGNB NLO 15 Gold
HIEX Munich City West	Germany	Munich	Hotel	UII Hotel Nr. 1	DGNB NHO 12 Platinum
Hampton by Hilton	Germany	Berlin	Hotel	UII Hotel Nr. 1	LEED CS v2009 Silver
De Klanderij	Netherlands	Enschede	Shopping	UII Shopping Nr. 1	BREEAM NL In-Use NL Very Good
Ferio	Poland	Stare Miasto	Shopping	UII Shopping Nr. 1	BREEAM In-Use Part 01 Very Good, BREEAM In-Use Part 02 Very Good
Lipinski	Poland	Warsaw	Shopping	DIFA-Fonds Nr. 3	BREEAM In-Use Part 01 Very Good
HIEX Berlin Alexanderplatz	Germany	Berlin	Hotel	DIFA-Fonds Nr. 3	DGNB NHO 12 Gold
55 Avenue Hoche	France	Paris	Office	DEFO Immobilienfonds 1	BREEAM In Use 2015 Part 01 Good
Marina Offices	Netherlands	Amsterdam	Office	DEFO Immobilienfonds 1	BREEAM NL NC 2011 v1.0 Pass
Hampton by Hilton	Poland	Warsaw	Hotel	DEFO Immobilienfonds 1	LEED NC Gold
Space20	Germany	Darmstadt	Office	UII German Real Estate	DGNB NBV 09 Gold
Kettwiger Strasse 2 – 10	Germany	Essen	Shopping	UII German Real Estate	DGNB MBV 10 Gold, DGNB NHA 09 Gold
WQ1_Haus am Fluss	Germany	Bremen	Office	UII German Real Estate	DGNB NBV 12 Silver
Hägenstrasse	Germany	Hanover	Logistics	UII German Real Estate	DGNB NLO 15 Gold
Morphosys	Germany	Planegg	Office	German ^M	DGNB NBV 12 Gold
TM50 (BA I)	Germany	Nuremberg	Office	German ^M	LEED NC Gold
FIEGE MC Region Hanover	Germany	Burgwedel	Logistics	Immofonds 1	DGNB NLO 15 Platinum
STEP 8.3	Germany	Stuttgart	Office	Immofonds 1	DGNB NBV 15 Gold

Source: Union Investment, correct as at 31 December 2018.

2.3 Ratings

Green Star classification in GRESB rating

Union Investment took part in the Global Real Estate Sustainability Benchmark (GRESB) rating for the sixth year in succession. The initiative, which was formed by investors in 2009, assesses the sustainability performance of real estate funds on the basis of an annual analysis. In last year's survey, Union Investment took part with eight real estate funds. All eight were classified as "Green Star". Funds are designated Green Stars – the highest of a total of four ratings – if they have integrated sustainability management and their processes and reporting procedures focus on sustainability criteria. In addition, the assessment also takes into account the management of environmental performance, such as the real estate portfolio's energy consumption and CO₂ emissions. This benchmarking helps to actively manage sustainability performance and steadily improve the sustainability of the real estate portfolio.

Scope regards Union Investment as a leader in implementation of sustainability strategy

Another rating that Union Investment systematically takes part in is the Scope rating. Scope has included sustainability criteria in its assessment of open-ended real estate funds since 2013. In 2018, the Unilmmo: Deutschland, Unilmmo: Europa, Unilmmo: Global, UniInstitutional European Real Estate and Uni-Institutional German Real Estate funds were predominantly rated as above average by industry standards in sustainability matters. Overall, Scope confirmed once again that Union Investment is a leader in organisational and administrative implementation of sustainability strategy.

2.4 Raising stakeholder awareness

Fully sustainable real estate management thrives on continuous and open exchange with relevant interest groups. Union Investment therefore informs and raises awareness among its employees and also market participants, clients and tenants regarding the opportunities and necessities of sustainability using a variety of media and events.

Increasing employee awareness was a focal area in 2018. In the first half of the year, suggestions for improving sustainable activities were collected from employees in the framework of an ideas competition. In the second half of the year, the internal Sustainability Challenge rounded off the awareness campaign. Employees in teams documented their sustainable activities for a whole month - on the way to work, in the office, on a business trip and at home. The competition was accompanied by realising sustainable ideas and by topic days. During work time, employees were able to participate in specialist lectures (e.g. presented by the WWF) or in workshops (making ecological cleaning agents oneself) or testing sustainable alternatives (such as e-bikes and e-cars). Being able to experience the mix of competition, information and sustainability elicited a great response from employees, as reflected in the high participation numbers. There were weekly winners, and at the end a winning team was selected.

Another opportunity for dialogue is the knowledge portal run by Union Investment at www.nachhaltige-immobilien-investments.de. Specialist articles by various market players on sustainability aspects and their practical implementation set out different perspectives and also encourage discussion with tenants, clients and business partners. This is complemented by current information and news.

2.5 Obligations placed on property users

The operating phase is the longest part of a property's lifecycle, and therefore constitutes a significant lever for sustainability in and at the property. Partnership-based cooperation between tenants and lessors is essential if the property's potential is to be fully utilised. Through green leases, users and owners undertake to use and manage the property sustainably in order to ensure that it maintains its value in the long term and, not least, that operating costs remain reasonable. This includes, for example, the provision of information on and regular exchange of sustainability-related data, stipulations regarding low-pollutant construction and cleaning materials, and assistance with low-impact usage. For certified properties, the parties can also agree to seek or improve certification.

In 2017, the "Green Lease" work group headed by the German Property Federation set itself the target of enhancing the sustainability clauses and stepping up work on establishing an industry standard. Union Investment was able to make its own contribution here with its many years of experience on the opportunities and challenges of green leases. A guideline summarising the results was published in 2018. Here it should be emphasised that a precise definition of a Green Lease was determined for the first time. Union Investment expanded its standard lease agreements for offices, logistics buildings and hotels in Germany with the "Green Provisions" in line with the German Property Federation definition and is also deploying them, primarily for new leases.

2.6 Obligations placed on service providers

Under the environmental management system, Union Investment has undertaken to incorporate environmentally relevant criteria into the development of products and services, new contracts for tender and the selection of business partners. In real estate asset management, this has been a factor in the selection of property and facility managers since 2014 and in contract design. As it aims to constantly improve its environmental performance, Union Investment requires its service providers to apply sustainable principles to their activities and to impose similar obligations on their business partners. Union Investment examines the compliance of its service providers with the obligations of environmental law annually in a process conducted at the property level.

2.7 Information sharing and benchmarking within the industry

As part of its participation in a number of initiatives, Union Investment regularly shares information with other portfolio holders. It has been a member of the Urban Land Institute (ULI), which campaigns for the sustainable development of living environments, since 1999. As a founding member of the German Sustainable Building Council (DGNB), Union Investment has also been contributing its expertise and experience to wide-ranging work groups and expert panels since 2007. The DGNB certification system, for example, was established with the help of pilot certification projects closely supported by Union Investment. In addition, a representative of Union Investment is currently the Chairman and permanent member of the DGNB's real estate advisory committee, which advises the office on strategic orientation and current issues.

Union Investment has been a member of the German Property Federation since June 2008 and has been heavily involved in the development of the industry-wide sustainability code. Together with other major institutions and holders of real estate portfolios, Union Investment was also involved in developing an industry-wide sustainability benchmarking guideline for real estate properties. The German Property Federation published this in 2017. The objective of sustainability benchmarking is to provide an important basis for the value-added development of the majority of the existing properties in the portfolio, integrating environmental, economic and social criteria. Union Investment is involved in many other work groups and committees of the German Property Federation and actively advances the issue of sustainability within the industry.

As a member of the German Investment Funds Association, Union Investment played an active part in drawing up the guidelines for sustainable real estate portfolio management published in 2016. The guidelines aim to identify performance indicators at the fund and portfolio levels in order to ensure sustainability and hence long-term returns for investors.

3. Property-specific portfolio consumption data

With its portfolio sustainability management system SoFi PSM, Union Investment tracks property-specific consumption data for the buildings in its portfolio each year. One of the aims is to identify optimisation potential for properties and monitor the savings targets through internal benchmarking. Corresponding work on buildings can then be initiated.

3.1 Methods

By recording consumption data for its property portfolio, Union Investment ensures the transparency of its portfolio and can derive recommendations for action at the property and portfolio levels.

Consumption data for a given calendar year is recorded in the autumn of the following calendar year. This is because the information sources applied include utility bills which are usually only produced at the end of a year. The additional time required for quality assurance means that there is a lag of one year in the recording of consumption data for reporting. Accordingly, this report is based on the consumption data for 2017. Consequently, the data for 2018 cannot be included in the current analysis. The analysis encompasses final energy consumption, CO₂ emissions, water consumption and the volume of waste produced.

The figures in this report are shown as absolute values as well as specific values per square metre and year. In light of the international orientation and heterogeneous nature of the portfolio, specific consumption data was adjusted for aspects that are specific to countries, properties and uses and that influence a property's environmental performance. These include building characteristics such as vacancy rates and special uses, and also take into account local weather conditions. This results in comparable consumption data that can be assessed with the help of internal benchmarks. The data used for the analysis of environmental performance was recorded for the entire floor area of each building and includes consumption by tenants.

The consumption data for 2015 and 2016, which was already published in the 2017 CSR report, has been presented again in this report to take into account the latest SoFi PSM developments and optimisations. For the first time, the 2017 consumption data were adjusted in line with the formulas described in the German Property Federation recommendations "Sustainability Benchmarking - What and How Should Comparisons be Made". The related modifications to calculation methods can lead to changes in absolute and specific values, which are due exclusively to the change of the methods used. Optimisations are also applied retrospectively.

The continuously changing nature of the portfolio means that comparability between years is limited, particularly with regard to the absolute figures. To improve the comparability of the current years, the following analysis also discusses the consumption data for a like-for-like portfolio. The updated data recording and methodology will lead to optimised results in the future, thereby providing better comparability over the long term.

Consumption data:

Absolute values provide information on the overall consumption of an indicator. The consumption data for the portfolio included in the analysis is extrapolated for the total portfolio using a floor area factor. Absolute values cannot be used as comparative values as they do not relate to other key performance indicators (e.g. square metres).

Specific values Specific values define a quantity dependent on its environment. The specific KPIs of Union Investment mainly relate to the energy reference area in square metres and years. These values therefore essentially describe resource efficiency in relation to area. As previously, only the consumption data actually recorded for the portfolio reviewed is included in the calculation. Specific values therefore provide comparable indicators that allow comparisons between properties or funds. In addition, specific consumption/KPIs at Union Investment are adjusted for factors such as vacancy rates, climate and special users to filter out fluctuations within these factors and to create optimum comparability of values.

Like-for-like portfolio contains only buildings which have been part of the Union Investment portfolio for two consecutive calendar years and for which there are quality-assured consumption figures.

3.2 Portfolio under review

Union Investment's real estate portfolio is subject to constant change. Properties are continuously purchased and sold during the course of the year as part of active portfolio management. Selected portfolio properties are also subject to restructuring and renovation processes.

This dynamic development means that the portfolio cannot be examined exhaustively. Accordingly, Union Investment aims to record data for a large, representative subportfolio consisting of at least 75 % of its total portfolio (in terms of floor area). The consumption data for the properties examined is then extrapolated for the portfolio as a whole.

The portfolio as a whole contains actively managed properties in the office, retail, hotel and logistics usage types. As at 31 December 2018, the portfolio consisted of 358 properties with a value of around EUR 30 billion. Properties under construction or conversion and residential properties are not included in this analysis.

In 2018, the ambitious goal of recording data for 75 % of the portfolio was again exceeded. In total, 281 properties, i.e. 81 % of the portfolio floor area, consumption data was recorded and subjected to external quality assurance. This was 13 properties and just under 280,000 m² more building space than in the previous year.

The properties reviewed are representative of the overall portfolio in terms of usage types and floor area, and the data extrapolated for the portfolio as a whole is conclusive.

Portfolio under review

Type of use 2015	Number of properties	Floor area (m ²)	Floor area (%)
Office buildings	153	2,709,672	51
Retail buildings	46	1,508,719	29
Hotel buildings	30	575,043	11
Logistics buildings	11	471,655	9
Total	240	5,265,089	100

Type of use 2016	Number of properties	Floor area (m ²)	Floor area (%)
Office buildings	164	2,908,703	50
Retail buildings	53	1,649,395	28
Hotel buildings	38	692,288	12
Logistics buildings	13	604,386	10
Total	268	5,854,772	100

Type of use 2017	Number of properties	Floor area (m ²)	Floor area (%)
Office buildings	174	3,152,417	51
Retail buildings	52	1,715,929	28
Hotel buildings	45	706,889	12
Logistics buildings	10	555,477	9
Total	281	6,130,713	100

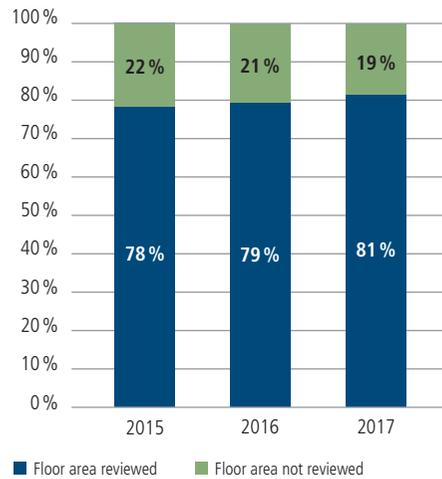
Extrapolated portfolio

Type of use 2015	Number of properties	Floor area (m ²)	Floor area (%)
Office buildings	183	3,334,834	49
Retail buildings	65	1,791,582	27
Hotel buildings	46	840,399	12
Logistics buildings	16	781,247	12
Total	310	6,748,062	100

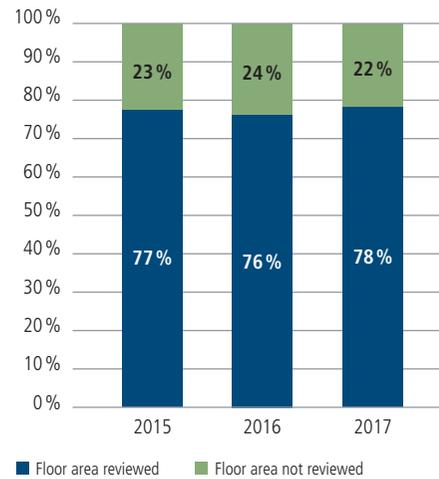
Type of use 2016	Number of properties	Floor area (m ²)	Floor area (%)
Office buildings	211	3,641,661	49
Retail buildings	76	2,066,228	28
Hotel buildings	51	884,929	12
Logistics buildings	16	824,914	11
Total	353	7,417,732	100

Type of use 2017	Number of properties	Floor area (m ²)	Floor area (%)
Office buildings	207	3,627,950	48
Retail buildings	79	2,081,011	28
Hotel buildings	56	977,629	13
Logistics buildings	16	866,934	11
Total	358	7,553,524	100

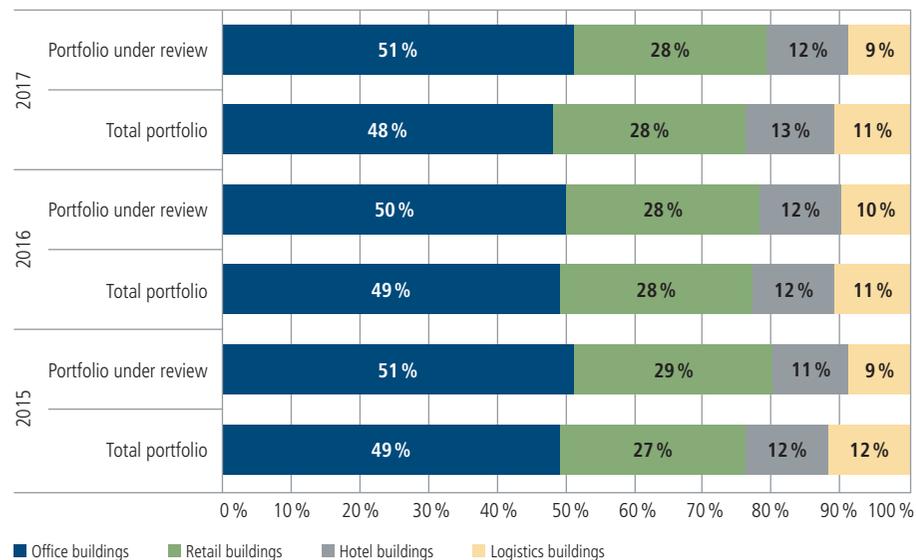
Floor area in total portfolio reviewed
in %



Number of buildings in total portfolio reviewed
in %



Comparison of reviewed portfolio floor area and total portfolio floor area by building use
in %



3.3. Main findings

Overall, there has been a satisfactory trend for consumption/emissions. The particularly relevant specific figures for energy consumption declined slightly. At 56 kg CO₂ pro m²/year, specific CO₂ emissions were reduced by more than 20% (compared with the previous year figures). At 0.60 m³/m², the average water consumption of the overall portfolio has remained constant compared with 2015 and is precisely in line with the three-year portfolio average. Compared with 2015, the specific volume of waste for the total portfolio fell by just under 3% in 2017 and was slightly below the three-year portfolio average at 6.6 kg/m². The development of the like-for-like consumption data from 2016 to 2017 shows an increase in final energy by 5%. Even so, CO₂ emissions were reduced by approximately 9%. For water consumption, there was also a reduction of 9%. In terms of waste, further reductions were also evident, here of the order of 4%.

3.4 Total values

The extrapolation of the reviewed KPIs to reflect the overall portfolio produced the following absolute and specific values:

Absolute and specific values for all the KPIs for the total portfolio (extrapolated)

Absolute values for all the KPIs for the total portfolio (extrapolated)		2015 (310 properties)	2016 (353 properties)	2017 (358 properties)
Final energy consumption	[GWh/a]	1,443	1,620	1,620
Direct final energy consumption	[GWh/a]	130	139	163
Indirect final energy consumption	[GWh/a]	1,313	1,481	1,457
CO₂ emissions, GRI 305-3	[t CO ₂ /a]	425,597	493,871	434,918
Direct CO ₂ emissions	[t CO ₂ /a]	26,107	27,943	33,246
Indirect CO ₂ emissions	[t CO ₂ /a]	399,490	465,928	401,672
Water consumption GRI 303-1	[m ³ /a]	4,121,341	4,667,281	4,518,574
Volume of waste	[t/a]	45,420	54,186	52,380
Specific values, portfolio under review			2016	2017
Final energy consumption value, G4-CRE1	[kWh/(m ² /a)]	231	228	226
Energy consumption value, heating	[kWh/(m ² /a)]	82	81	84
Energy consumption value, electricity	[kWh/(m ² /a)]	149	147	142
CO₂ emissions, G4-CRE3	[kg CO ₂ /(m ² /a)]	63	64	56
Specific CO ₂ emissions, heating	[kg CO ₂ /(m ² /a)]	14	15	15
Specific CO ₂ emissions, electricity	[kg CO ₂ /(m ² /a)]	49	49	41
Water consumption, G4-CRE2	[m ³ /(m ² /a)]	0.59	0.61	0.57
Volume of waste	[kg/(m ² /a)]	6.4	7.0	6.6

Unadjusted values for 2017 portfolio under review		Portfolio under review	Office buildings	Retail buildings	Hotel buildings	Logistics buildings
Specific final energy consumption, G4-CRE1	[kWh/(m ² /a)]	213	225	215	272	64
CO ₂ specific carbon emissions, G4-CRE3	[kg CO ₂ /(m ² /a)]	56	51	66	78	21
Specific water consumption, G4-CRE2	[m ³ /(m ² /a)]	0.67	0.62	0.67	1.46	0.04

Note on data quality:

Quality assurance – Independent parties manually and objectively reviewed the recorded data for each property to check that it was complete and plausible.

Completeness of data – In cases where some of the consumption data was unavailable, it was added on the basis of reference values. The mechanism developed for this purpose incorporated use-related averages from different sources and historical portfolio data.

Extrapolation – If it was not possible to determine some of the data in full (such as tenant data), data was extrapolated on the basis of usage and with a floor area weighting on the basis of reference values within the software used.

Adjustment – Specific data was adjusted to ensure that the properties in the international portfolio were comparable. Final energy consumption data was adjusted for climate, vacancy rates and special users. The climate adjustment was applied using location-related weather periods for the last few years compared to the long-term average per climate zone. The specific consumption values for water and waste were adjusted for special users. Greenhouse gas emissions (shown as CO₂ equivalents or CO₂), which are calculated on the basis of country-specific emissions factors, are not adjusted. Absolute values are not adjusted.

Energy reference area – The total floor area in a building that is heated or temperature-controlled.

Note: Energy consumption and CO₂ emissions are shown separately according to direct and indirect primary energy sources. Direct primary energy sources are, for example, coal, natural gas, oil, biofuels, etc., i.e. energy generated directly on-site by means of combustion. Indirect primary energy sources are, for example, electricity from fossil fuels, nuclear energy, district heating and others, i.e. purchased energy.

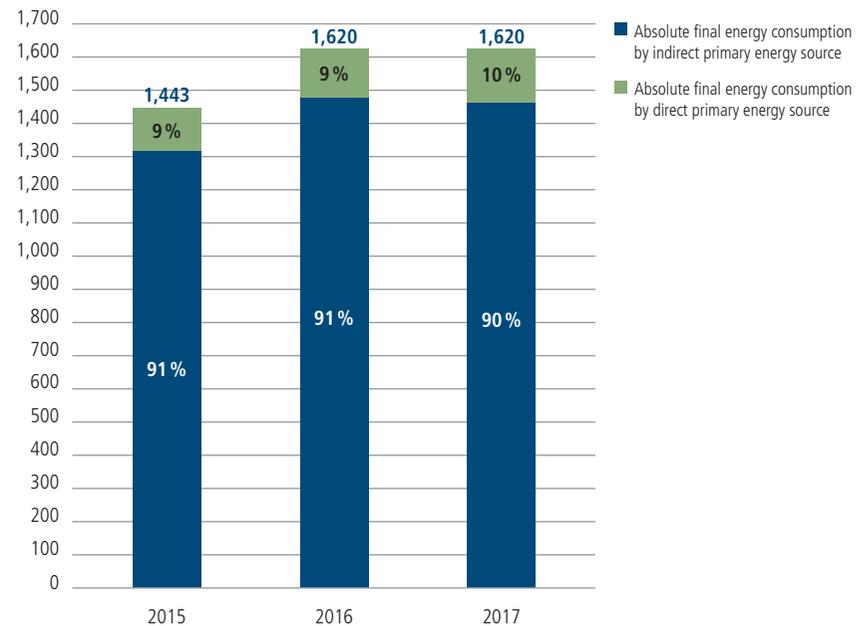
3.5 Absolute and specific consumption values for the portfolio by type of use

Direct energy is energy in which the fossil fuel is actually burnt on-site or in a process owned or controlled by the company concerned (such as natural gas for a heating system in the organisation or the consumption of fuel by a company's vehicle fleet). Indirect energy is energy in which the fossil fuel is burnt off site or outside the control of the company concerned to meet the needs of the organisation for secondary energy (such as electricity, district heating or cooling).

Despite there being a slight increase across the portfolio, in comparison to the previous year the absolute energy consumption figures are at the same level. This also applies to the ratio of direct and indirect energy sources.

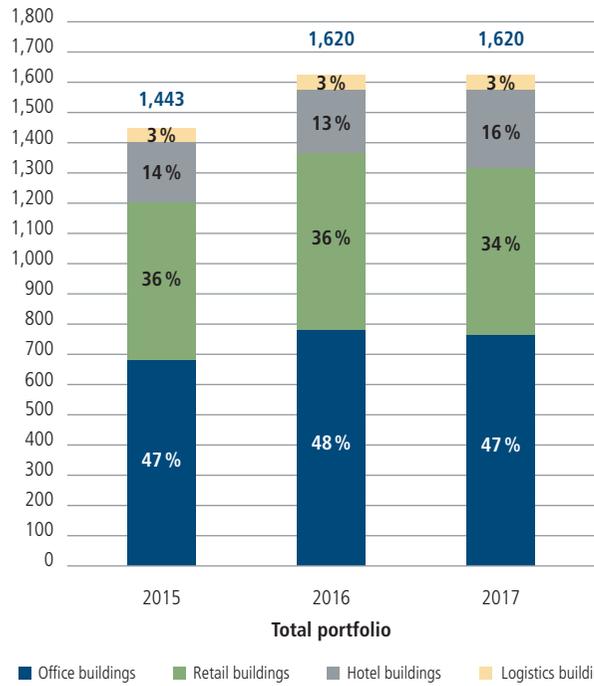
Absolute final energy consumption broken down by direct and indirect primary energy sources (GWh/year)

Share of consumption by extrapolated portfolio by primary energy source per year

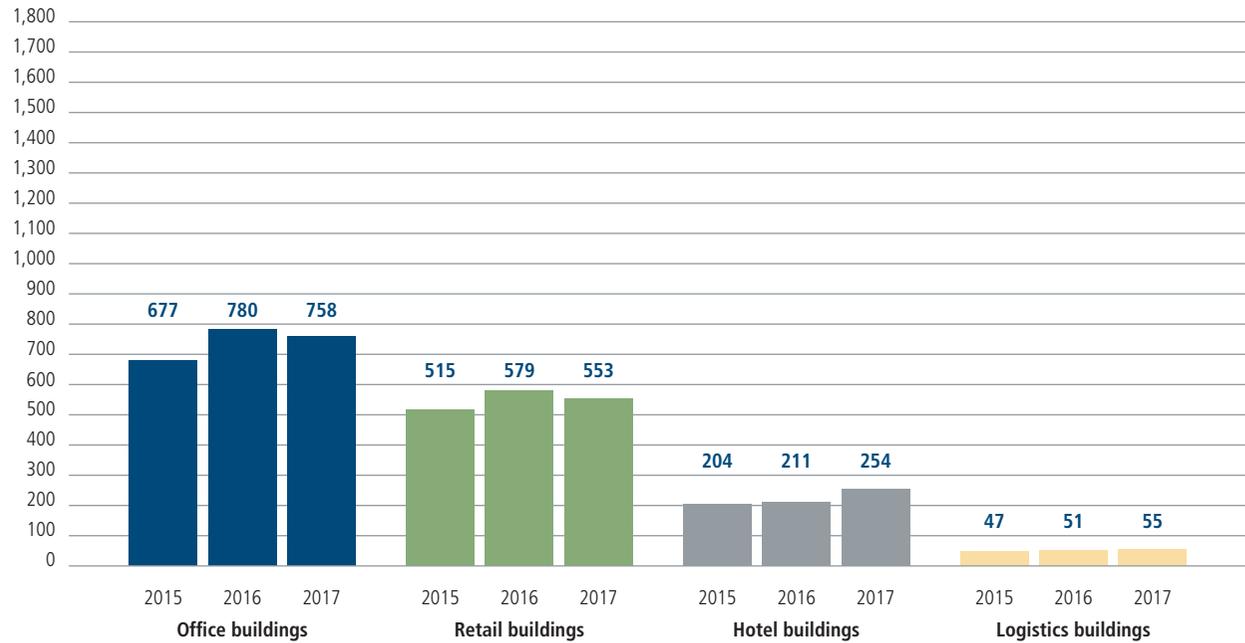


Absolute final energy consumption (GWh/year, extrapolated portfolio)

Share of consumption by type of use per year



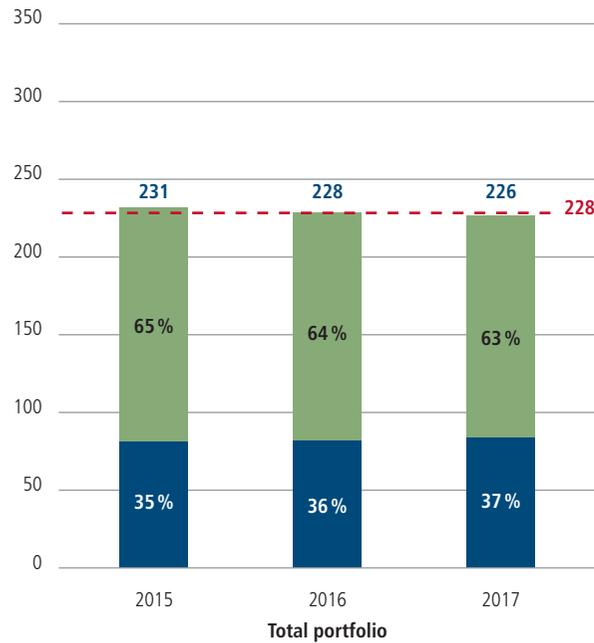
Consumption by type of use and year



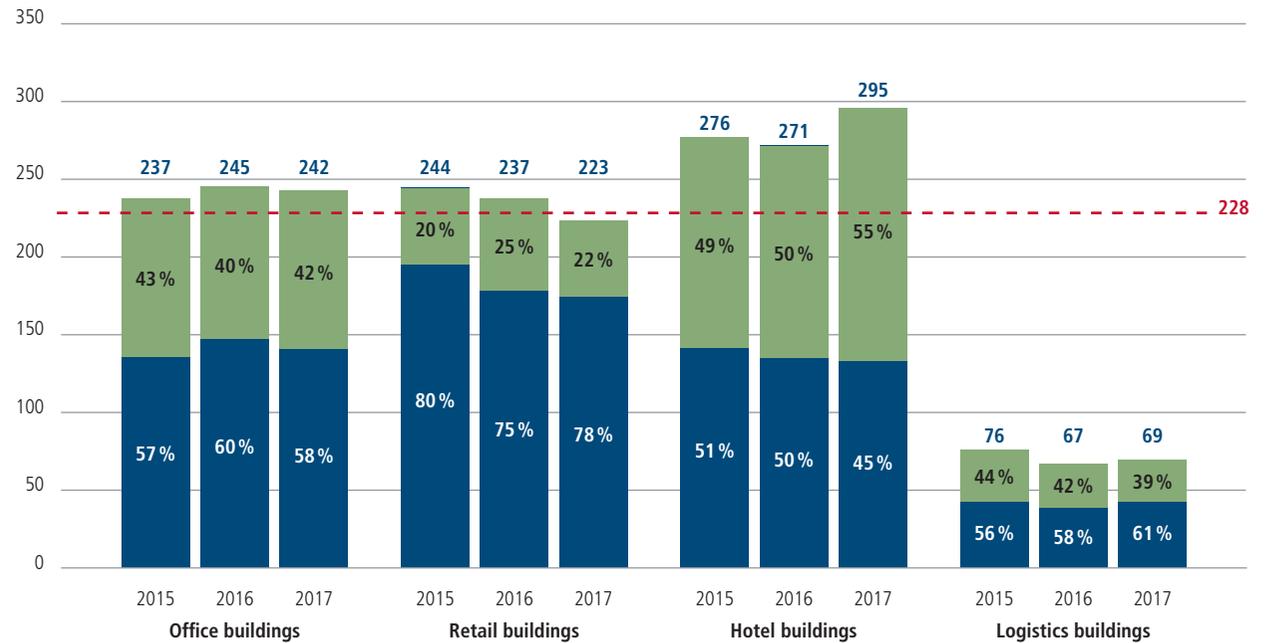
Between 2015 and 2017, there was an increase in absolute energy consumption. The percentage increases in energy consumption in the respective types of use are roughly in line with the percentage growth in floor area.

Specific final energy consumption – G4 CRE1 [kWh/(m²/year)]

Average consumption of portfolio per year, by type of consumption



Average consumption of portfolio by type of use and year, by type of consumption



■ Energy consumption value, electricity [kWh/m²] ■ Energy consumption value, heating [kWh/m²] - - Portfolio average over three years [kWh/m²]

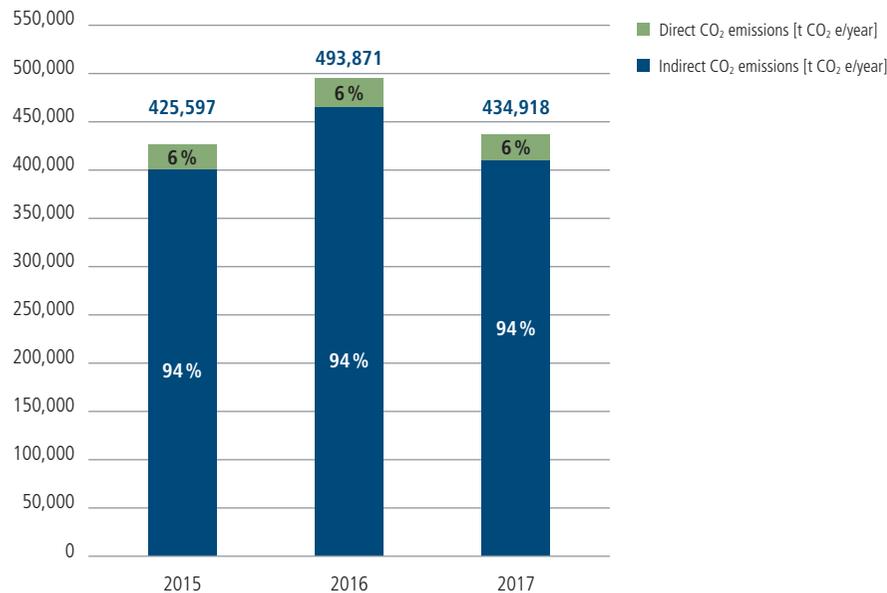
In the overall portfolio, a slight downward trend in the specific energy key indicators is evident from 2015 to 2017. For retail buildings in particular a reduction of approximately 9% was achieved in this period. Office buildings also showed a slight reduction in comparison to the previous year. Measures taken impact the portfolio. The increase in the hotel portfolio results in the specific key energy indicators increasing. Properties with deviating figures have already

been identified and will be subjected to a detailed examination shortly. There was also a slight increase in the logistics portfolio. However, as floor area of the logistics properties accounts for only 13% of the total portfolio and the specific figures are well below average, the increase has hardly any impact in terms of the overall portfolio.

Absolute CO₂ emissions broken down by direct and indirect primary energy sources – GRI 305-3 (t CO₂e/year, extrapolated portfolio)

In the following, the term “CO₂” is used as a simplification and abbreviation for “CO₂ equivalents”. Other greenhouse gases were calculated and converted using factors in line with the specifications of the United Nations’ Greenhouse Gas Protocol. As discussed in section 2.1, Union Investment classifies the emissions generated by its portfolio properties as Scope 3 emissions. Recording the origin of the Scope 3 emissions means that they can also be broken down into direct and indirect emissions.

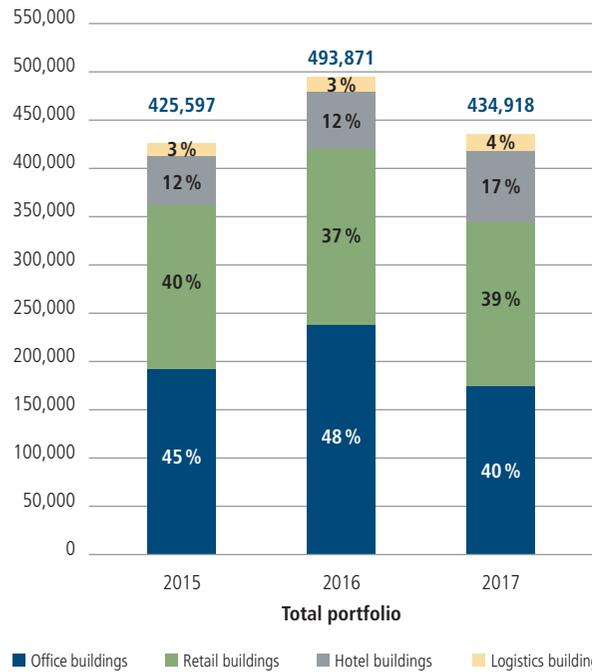
Share of emissions portfolio by primary energy source per year



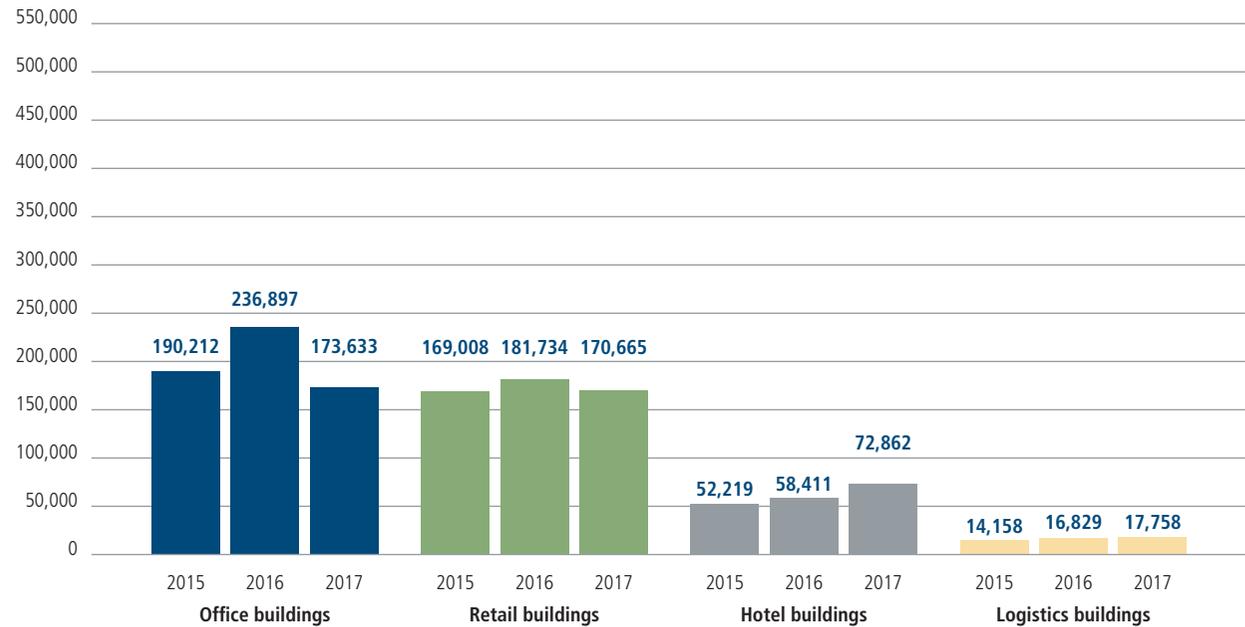
The absolute CO₂ emissions, which are otherwise known as the CO₂ footprint or carbon footprint, are based on the consumption of heating and electricity. In 2017, the CO₂ footprint of the overall portfolio was around 435,000 tonnes. This represents a 12% decrease in the figure compared with the previous year. Despite portfolio growth, energy consumption was at the same level in 2016 and 2017. Thus the reduction in CO₂ emissions results from the more intensified use of regenerative energies.

Absolute CO₂ emissions – GRI 305-3 (t CO₂ e/year, extrapolated portfolio)

Emissions per type of use per year



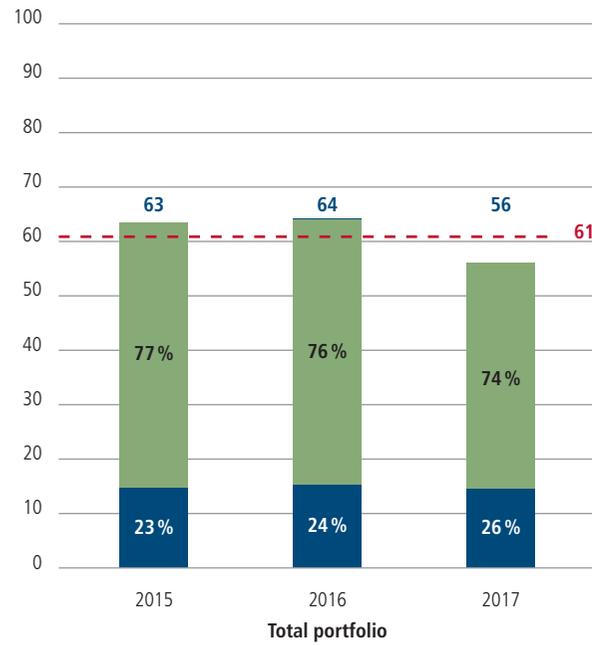
Emissions by type of use per year



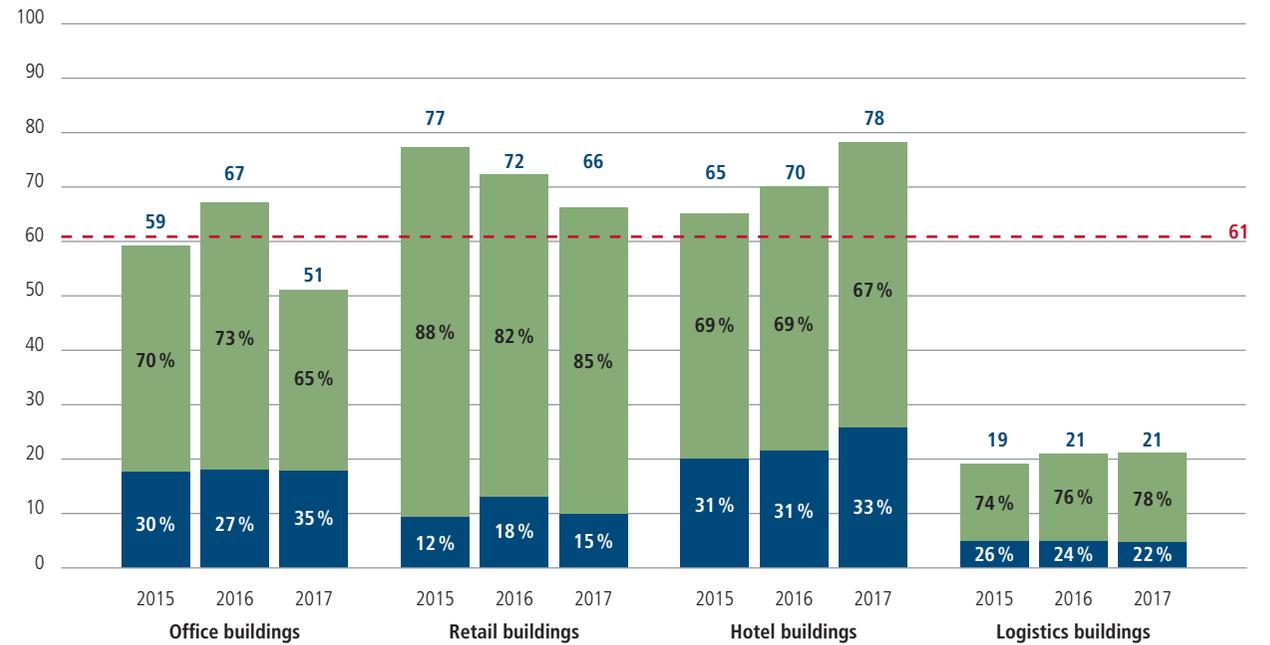
The reduced CO₂ footprint of the overall portfolio is due to the increased use of renewable energies for the office and retail types of use. For office buildings, in 2017 CO₂ emissions were cut by over 25 % in comparison to the previous year. For retail buildings, emissions were 6 % lower. The slight upturn in CO₂ emissions for hotel and logistics buildings is due to the strongly expanded property portfolio.

Specific CO₂ emissions – G4-CRE3 [kg CO₂/(m²/year)]

Average emissions per year, by type of consumption



Average portfolio emissions by type of use and year, and by type of consumption



■ CO₂ emissions, electricity [kgCO₂e/(m²/year)] ■ CO₂ emissions, heating [kgCO₂e/(m²/year)] - - Portfolio average over three years [kgCO₂e/(m²/year)]

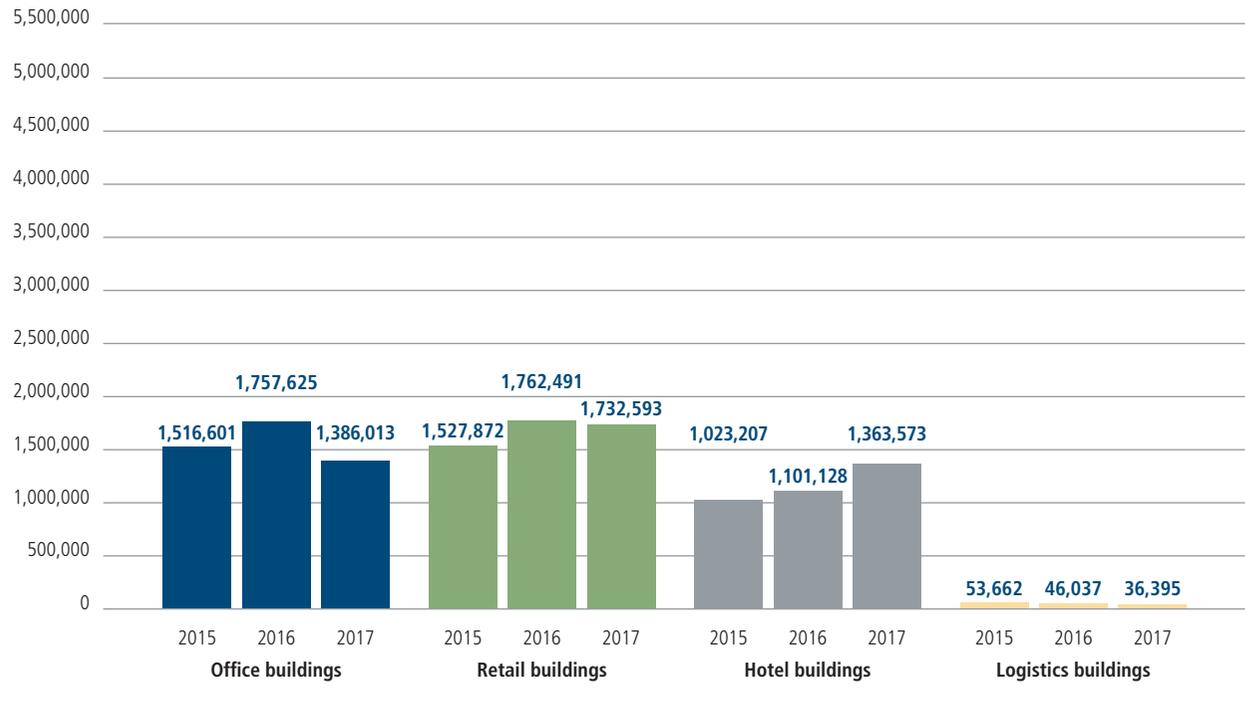
In 2017 specific CO₂ emissions are below the three-year average and at 56 kg CO₂ pro m²/year, were reduced by more than 20% (compared with the previous year figures). Office and logistics buildings are (considerably) below the current average figures. Higher energy consumption figures for hotel buildings also result in increased CO₂ emissions. Likewise, changes resulting from newly purchased or sold properties as well as the energy sources used are major factors.

Absolute water consumption – GRI 303-1 (m³/year, extrapolated portfolio)

Share of consumption per type of use per year



Share of consumption per type of use per year

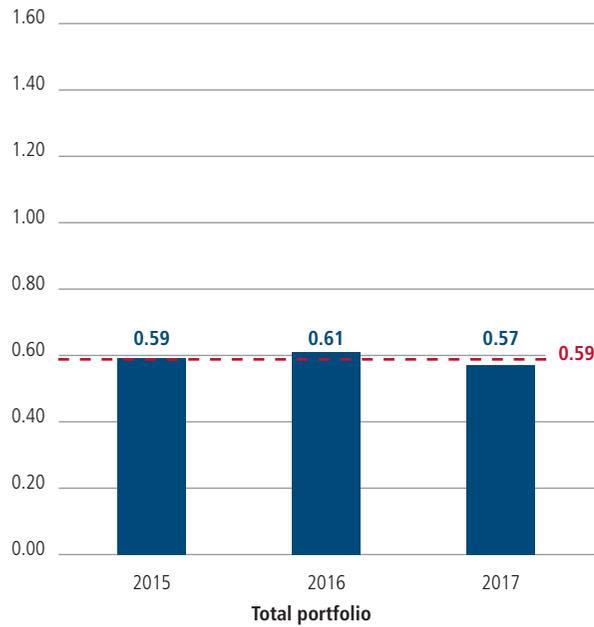


Absolute water consumption comprises the total volume of water consumed. The sources of supply included are drinking water, rain, groundwater and surface water. Compared with 2015, the water footprint for the overall portfolio increased by around 10% to a figure of just over 4.5 million m³ in 2017. This increase is attributable to the growth in the real estate portfolio.

An analysis of the individual types of use also shows that the growth in floor area of the portfolio is associated with the rise in absolute water consumption compared with 2015.

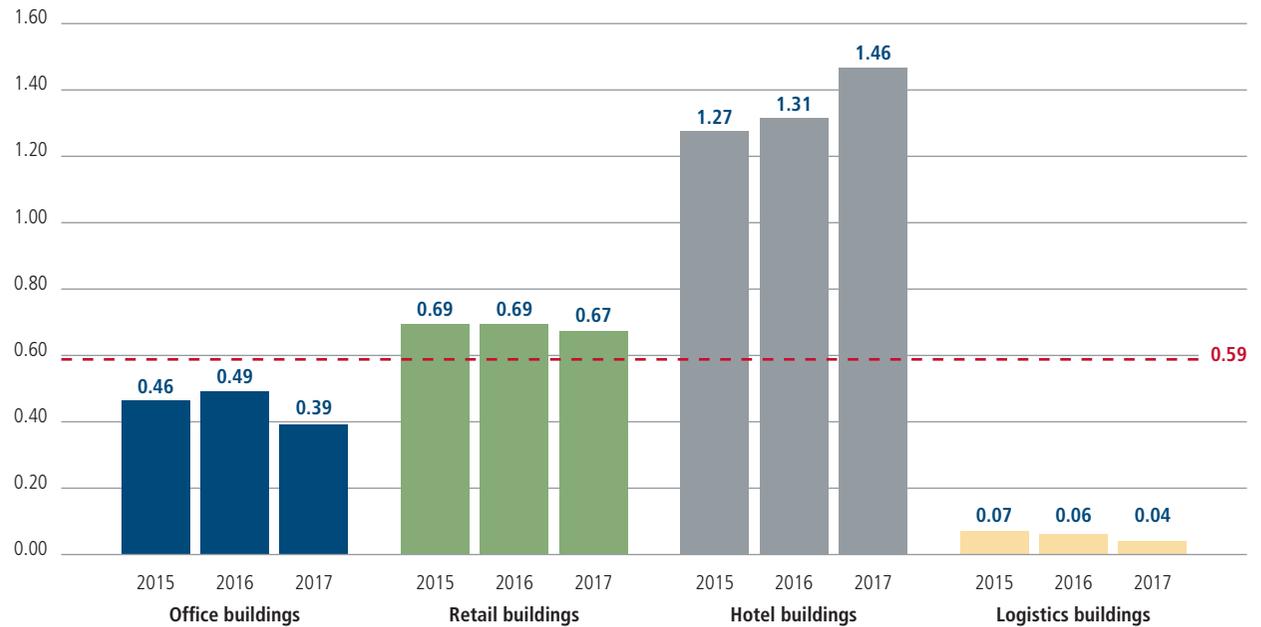
Specific water consumption – G4-CRE2 [m³/(m²/year)]

Average consumption per year



■ Specific water consumption [m³/(m²/year)] - - Portfolio average over three years [m³/(m²/year)]

Average consumption per type of use and year



Specific water consumption is the absolute value adjusted for special users. At 0.57 m³/m², the average water consumption of the overall portfolio declined slightly compared with 2015 and is slightly below the three-year portfolio average.

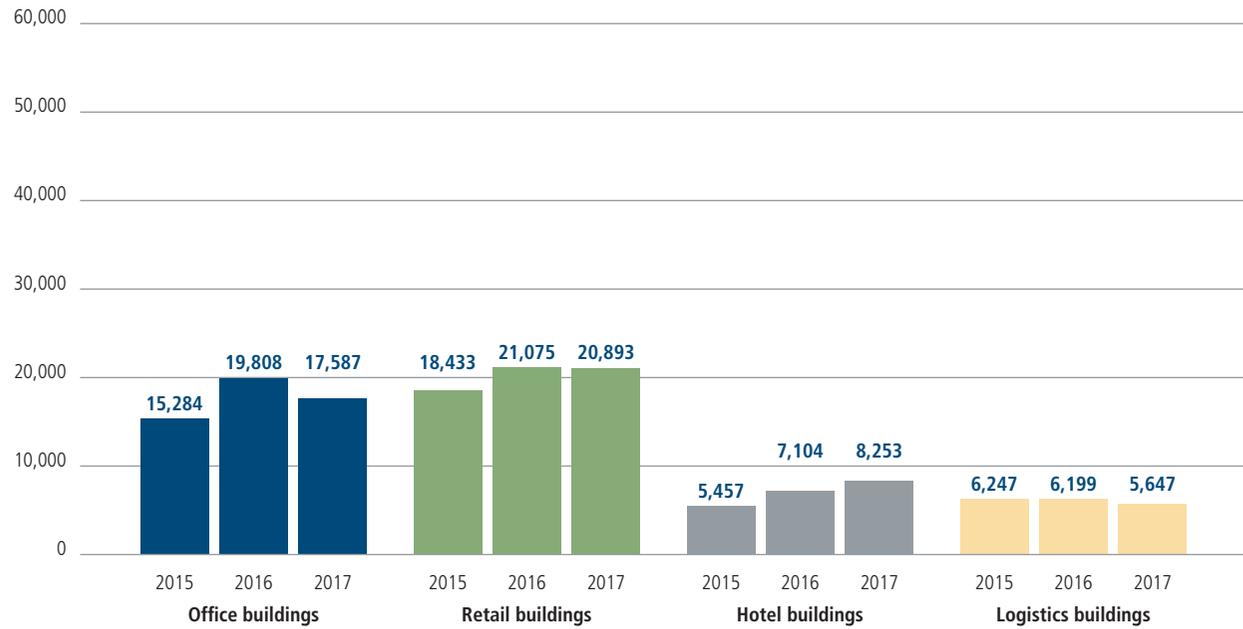
An analysis of the different types of use clearly shows that the values for retail and logistics properties have remained almost constant over the years. By contrast, in the office portfolio, specific water consumption in 2017 was down by around 15% on 2015. Hotel properties use the most water due to the nature of their use. Specific water consumption in the hotel portfolio increased by approximately 15% in 2017. The increase can be explained primarily by certain new purchases with increased consumption.

Absolute volume of waste – (t/year, extrapolated portfolio)

Share of waste volume for type of use per year



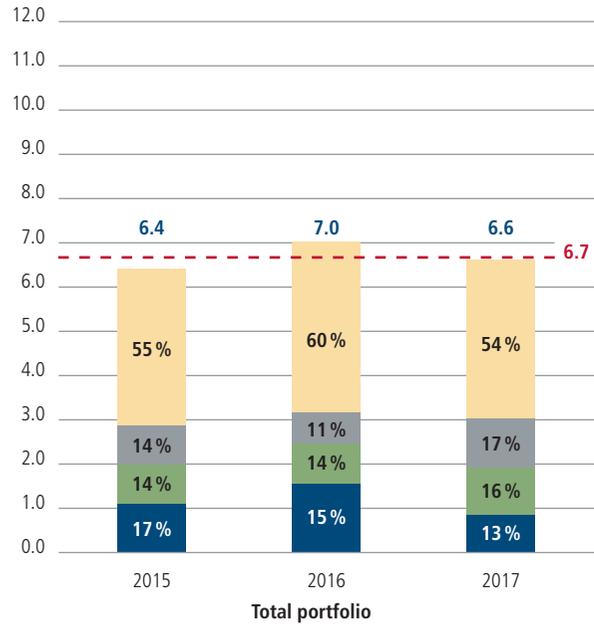
Waste volume per type of use and year



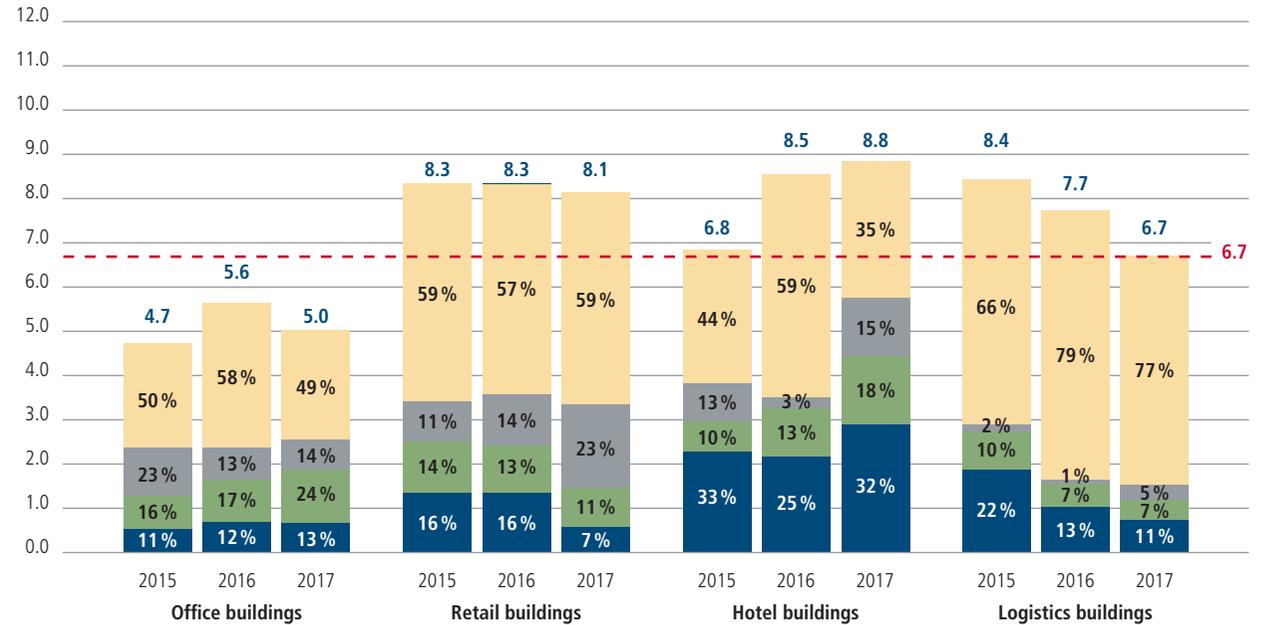
The absolute volume of waste is the total quantity of waste produced in the categories of recycled waste, landfill waste and incinerated waste. In 2017, the absolute volume of waste for the total portfolio was 52,380 tonnes, up 15.3 % on 2015. In 2017, the absolute volume of waste was 3.4 % lower than in 2016, despite an increase in floor area. While waste volumes for office, retail and logistics buildings were lower in comparison to 2016, waste volumes for hotel buildings rose in line with the increase in floor area.

Specific volume of waste [kg/(m²/year)]

Average waste volume



Average waste volume per type of use and year



■ Waste, unspecified [kg/m²]
 ■ Waste, landfill [kg/m²]
 ■ Waste, incinerated [kg/m²]
 ■ Waste, recycled [kg/m²]
 - - - Portfolio average over three years [kg/m²]

The specific volume of waste is adjusted for special uses. Compared with 2015, the specific volume of waste for the total portfolio fell by just under 3 % in 2017 and was slightly below the three-year portfolio average at 6.9 kg/m².

The 30 % increase for hotel buildings is attributable to certain new purchases. On the other hand, for logistics buildings there was a sharp reduction of 20 % in waste volumes.

3.6 Like-for-like portfolio

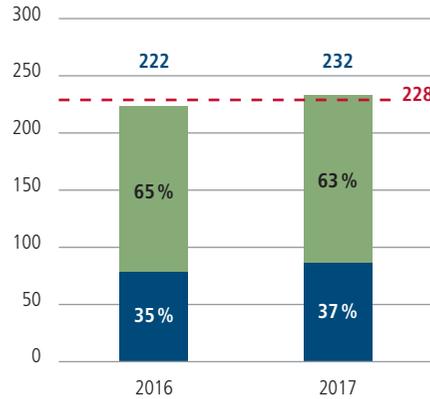
Like-for-like is a metric that adjusts the development in an indicator for new acquisitions or disposals. This is primarily used in dynamic markets to allow comparisons of growth factors, in this case consumption values. The like-for-like analysis of the Union Investment real estate portfolio therefore only includes properties that were in the portfolio in both 2016 and 2017 and for which there is quality-assured consumption data for both of these years. The adjusted analysis allows specific statements to be made on the changes in consumption values within the real estate portfolio. Measures that have contributed to the reduction in the respective types of consumption can thus be tracked and monitored. A disadvantage of this method is that statements only apply to a portion of the portfolio, rather than to the portfolio as a whole. The like-for-like portfolio covers 241 properties or approx. 67 % of the total portfolio.

Type of use	2016 / 2017		
	Number of properties	Floor area (m ²)	Floor area (%)
Office buildings	148	2,693,091	50
Retail buildings	47	1,556,337	29
Hotel buildings	36	602,799	11
Logistics buildings	10	555,477	10
Total	241	5,407,705	100

The development of the like-for-like consumption data from 2016 to 2017 shows an increase in final energy by 5 %. Here individual properties with deviating figures (in comparison to the previous year) have already been identified. A detailed check will take place shortly. Despite the higher final energy consumption, CO₂ emissions were reduced by approximately 9 %. Increased deployment of renewable energies is impacting here. Water consumption was reduced by 8 %. There was also a further reduction of 4 % in waste volumes.

Specific final energy consumption like-for-like [kWh/(m²/year)]

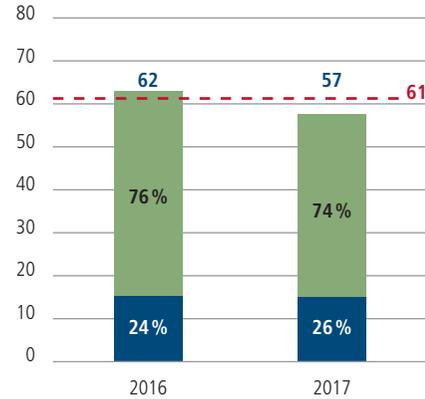
Average like-for-like portfolio consumption per year, by type of consumption



■ Energy consumption value, electricity [kWh/m²]
 ■ Energy consumption value, heating [kWh/m²]
 - - Portfolio average over three years [kWh/m²]

Specific CO₂ emissions like-for-like [kg CO₂/(m²/year)]

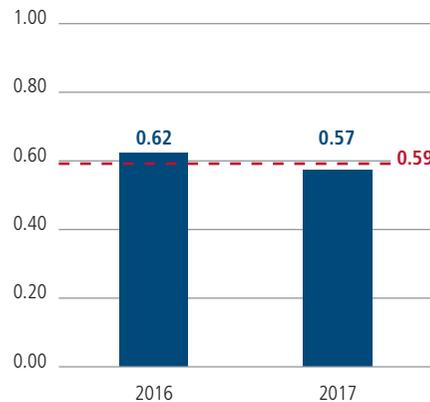
Average emissions per year, by type of consumption



■ CO₂ emissions, electricity [kgCO₂e/(m²/year)]
 ■ CO₂ emissions, heating [kgCO₂e/(m²/year)]
 - - Portfolio average over three years [kg CO₂e/(m²/year)]

Specific water consumption – like-for-like [m³/(m²/year)]

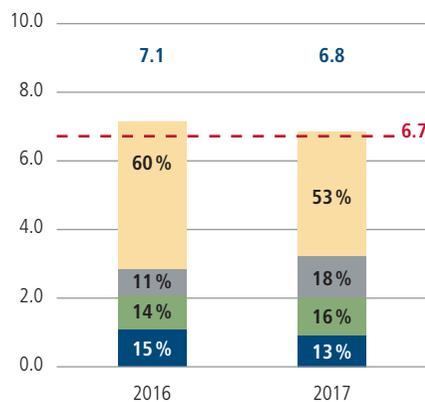
Average consumption per year



■ Specific water consumption [m³/(m²/year)]
 - - Portfolio average over three years [m³/(m²/year)]

Specific volume of waste – like-for-like [kg/(m²/year)]

Average waste volume



■ Waste, unspecified [kg/m²]
 ■ Waste, landfill [kg/m²]
 ■ Waste, incinerated [kg/m²]
 ■ Waste, recycled [kg/m²]
 - - Portfolio average over three years [kg/m²]

4. German Property Federation- and German Investment Funds Association-compliant sustainability reporting

In this report, Union Investment follows the sustainability code of the German Investment Funds Association. The German Property Federation code encompasses an industry code together with stipulations covering industry reporting, sustainability measurement, corporate governance/responsibility and corporate social responsibility.

For benchmarking Union Investment also deploys the German Property Federation guideline “Sustainability Benchmarking - What and How Should Comparisons be Made”.

In respect to sustainability reporting, Union Investment also complies with the “Guidelines for Sustainable Real Estate Portfolio Management” published by the German Investment Funds Association.

GRI content index

GRI standard	Detail	Page / contents / URL	
Organisational profile			
GRI 102: General disclosures 2016	102-1	Name of the organisation	Union Investment Group
	102-2	Activities, brands, products and services	<p>With more than 60 years of expertise in the area of funds and assets under management in excess of EUR 320 billion, the Union Investment Group is one of the biggest and most important service providers within the German asset management sector. As an active asset manager, Union Investment offers needs-based investment solutions – both for private and institutional investors.</p> <p>Once again in 2018, product policy in the retail clients business primarily focused on the clients' security needs, with business development continuing to focus on optimising assets, old-age provision, asset investment and savings.</p> <p>The portfolio of services for institutional clients is designed with discerning institutional investors of varying sizes in mind. The clients within the Genossenschaftliche FinanzGruppe cooperative banking group are partner banks and other specialist banks, and also corporate clients of the cooperative partner banks. Union Investment also competes for institutional investors' investment capital outside of the Genossenschaftliche FinanzGruppe group.</p>
	102-3	Location of headquarters	Weissfrauenstrasse 7, 60311 Frankfurt am Main, Germany
	102-4	Location of operations	Group companies and equity investments as principal places of operation in Germany, Luxembourg, Poland, Austria, France, Singapore with branches in London, New York as well as a joint venture in Hong Kong.
	102-5	Ownership and legal form	<p>Unlisted joint-stock corporation</p> <p>DZ Bank: 72.3 % VR GbR: 24.3 %</p> <p>Local cooperative banks including holding companies of the cooperative banks and trade associations of the German cooperative financial services network and other entities: 3.4 %</p>

GRI standard	Detail	Page / contents / URL
	102-6	Markets served <p>In addition to its activities in Germany, the Union Investment Group offers selected funds in Austria, Italy, Switzerland, the UK, the Netherlands and the Scandinavian markets. The joint venture between Union Investment and the Bank of East Asia (BEA Union Investment Management Ltd.) focuses exclusively on Asia as a future market. The Polish market is also served, through a subsidiary based in Warsaw. Union Asset Management Holding AG sold this subsidiary in 2018. The supervisory authorities still have to approve this transaction which should be concluded in the first half of 2019. This report focuses on the Union Investment Group within Germany.</p> <p>In retail business, Union Investment services are exclusively available to the retail clients of the cooperative partner banks ('Verbund first'). The portfolio of services for institutional clients is designed with discerning institutional investors of varying sizes in mind. The clients within the Genossenschaftliche FinanzGruppe cooperative banking group are banks and other specialist banks, and also corporate clients of the cooperative partner banks. Union Investment also competes for institutional investors' investment capital outside of the Genossenschaftliche FinanzGruppe group inside and outside Germany, for example with pension funds and insurance companies.</p>
	102-7	Scale of the organisation <p>See consolidated financial statements</p>
	102-8	Information on employees and other workers <p>Most of the activities of the Union Investment Group are performed by permanent core employees.</p> <p>The number of employees is constantly subject to change in line with the performance of the company and the market.</p>

102-8 Information on employees and other workers

	Permanent	Temporary	Total
Male	1,746	52	1,798
Female	1,321	58	1,379
Total	3,067	110	3,177

GRI standard	Detail	Page / contents / URL
102-9	Supply chain	<p>For operation, management and enhancement of internal processes, Union Investment buys goods and services from the following 11 product groups (sorted in descending order by purchasing volume):</p> <ul style="list-style-type: none"> – Consulting – Outsourcing (primarily IT outsourcing) – Facility management – Marketing – Information technology – Market data – Events (conferences/events/trade fairs) – Logistics – Travel management – Operating and office equipment – Vehicle fleet <p>In addition to price and quality, Purchasing takes the following objectives into account in its decision-making:</p> <p>a) Risk minimisation (e.g. with regard to security of supply, data protection, performance, efficiency, compliance, reputation etc.)</p> <p>b) Sustainability impact of purchase of the service</p> <p>For the services relevant to the business processes in particular (especially outsourcing of IT services), the supply chains (i.e. including upstream suppliers) are examined on the basis of regulatory requirements and monitored in terms of the stipulations set out above. The supplier chains therefore require a corresponding level of administrative work.</p> <p>Our supplier portfolio (approx. 2,500 suppliers as at 2018) primarily consists of consultants, developers, agencies, service providers, production companies (media), trainers and others. Our suppliers are mostly located in Germany [approx. 85 %] and the EU (approx. 97 %). Approx. 3 % of suppliers are based outside the EU. This mainly relates to market data and software products with foreign headquarters of the manufacturers.</p> <p>The specific characteristics of our industry combined with the aforementioned focus of the purchased goods and services means that, apart from catering, cleaning and security services, we do not use any services/suppliers with material connections to the low-wage sector or with a connection to ethically or socially controversial goods or practices.</p>

GRI standard	Detail	Page / contents / URL
102-10	Significant changes to the organisation and its supply chain	In 2018, Union Asset Management Holding AG sold its Polish subsidiary, Union Investment TFI, to Generali. The supervisory authorities still have to approve this transaction which should be concluded in the first half of 2019.
102-11	Precautionary principle or approach	<p>Union Investment takes a precautionary approach within the company by actively managing and improving its use of resources. The ‘2° sind machbar’ (Two degrees are achievable) climate strategy adopted in 2015 directly stands for our commitment to playing our part in successfully curbing climate change.</p> <p>In our core line of business, our main priority is to safeguard our clients’ assets and secure their pension and provision commitments through our services.</p>
102-12	External initiatives	We strive to comply with strict nationally or internationally recognised standards in everything we do in the area of sustainability. We pledged to apply the UN Principles for Responsible Investment, signed the declaration of conformity with the German Sustainability Code in December 2013 and renewed this declaration in December 2018. In our real estate activities, we signed up to the German Property Federation’s sustainability code for the real estate industry. We are represented in the sustainability committees of our industry associations (EFAMA, BVI, VfU). Since July 2013, Union Investment has been represented on the board of the Sustainable Investments Forum (FNG) and the German Association for Environmental Management and Sustainability by its head of Sustainability Management.
102-13	Membership of associations	<ul style="list-style-type: none"> – Cooperative umbrella association: BVR – Industry associations: BVI, EFAMA – UN Principles for Responsible Investment; – Sustainable Investments Forum (FNG); – German Property Federation (ZIA); – VfU

GRI standard	Detail	Page / contents / URL
Strategy		
GRI 102: General disclosures 2016	102-14	Statement from senior decision-makers
		<p>Union Investment has a sustainability strategy which was adopted by the full Board of Managing Directors and which positions us as an ambitious company in the area of sustainability issues in the years to come too, on the basis of the success achieved thus far. We base our activities on national or international standards and implement them wherever this appears to be prudent. We have laid down the objectives and activities for achieving our strategic goals in all the areas of activity in our public sustainability programme, which is passed by the Board of Managing Directors annually. We recognised the UN Principles for Responsible Investment as a key standard for the implementation of sustainability in our core line of business back in 2010 and have continued to systematically develop our services in accordance with ever greater requirements ever since. The annual UNPRI feedback and other benchmarking standards give us valuable insights into how we need to further develop our core business processes.</p> <p>The primary focus for the next few years is to play an active part in shaping the anticipated changes, e.g. in the context of discussions on the long-term focus of the financial markets, and to implement these changes vigorously in the interests of the company and our investors. At times of low interest rates, we are called upon to develop solutions that contribute to safeguarding and increasing the prosperity of our investors.</p>

GRI standard	Detail	Page / contents / URL
	102-15	Key impacts, risks and opportunities
		<p>As a custodian for over 4 million private investors in German-speaking countries and numerous local and international institutional investors, we also actively uphold owners' interests in terms of sustainability development.</p> <p>We consider sustainability part of our business model and take account of what are for us significant sustainability trends. For example the social challenge of demographic change is closely linked with pension products for the broad population, climate change is particularly important in the development and management of our real estate assets and also in the assessment of listed companies and securing good and responsible corporate management is part of our CSR approach in portfolio management. In the company dialogue, when selecting our investment properties and when buying and developing real estate properties, we actively incorporate sustainability aspects in the decision-making processes and work towards improvements regarding environmental, social and corporate management aspects. Also in purchasing, in the supplier relationship we take account of sustainability aspects and make these a subject of discussion in the dialogue with suppliers. We do this both as a company and in the core business in the context of joint activities with other international asset managers to make our activities more effective. Since 2012, we have also been offering this form of "CSR" to investors who have not invested in Union Investment products in order to extend the reach of our sustainability initiatives even further.</p> <p>As a service company with relatively low direct ecological impact in business operations, we see few direct opportunities and risks in respect to social and ecological aspects. For this reason we use our CSR approach as a key method to influence society and the environment. For our investors, by taking account of environmental, social and corporate management aspects, we offer the opportunity to actively reduce risks in our products.</p> <p>Over the last few months, at the political level we have observed a trend to increasing regulation in the direction of sustained financial services. Of particular interest here are the efforts of the EU Commission with its action plan for financing sustainable growth. We are actively involved in this process on the basis of trade organisations.</p>

GRI standard	Detail		Page / contents / URL
Ethics and integrity			
GRI 102: General disclosures 2016	102-16	Values, principles, standards and norms of behaviour	<p>Union Investment developed a new mission statement in 2010, which was realigned to the end of 2017. It states that the company's mission is geared towards the interests of our investors and enshrines transparency, partnership and professionalism as key elements of the corporate culture alongside our cooperative identity.</p> <p>In 2015, the existing sustainability code was revised and adopted anew. The code contains a comprehensive description of our understanding of good corporate governance and the various areas of activity of sustainability. There are separate guidelines on responsible investment for our core business process of asset management. The sustainability requirements for suppliers of the DZ BANK Group are applied as guidelines for dealing with external suppliers. Separate management guidelines also exist for employee management.</p>
	102-17	Mechanisms for advice and concerns about ethics	<p>Various guidelines and processes are established for internal and external mechanisms for seeking advice on ethical and lawful behaviour, and matters related to organisational integrity. There are whistle-blowing systems that track the relevant specific matters, which in particular guarantee the whistle-blower's anonymity. If necessary, external bodies / advisors are also involved in order to handle/draft the relevant situation.</p>

GRI standard	Detail		Page / contents / URL
Governance			
GRI 102: General disclosures 2016	102-18	Governance structure	<p>The Board of Managing Directors of Union Asset Management Holding AG is the highest decision-making body of the Union Investment Group. The Supervisory Board of Union Asset Management Holding AG is the highest supervisory body. The group-wide managerial and coordination responsibilities are pooled within Union Asset Management Holding AG as the controlling company of the Union Investment Group. In addition to these core responsibilities, this company handles group-wide services. It does not engage in any operating activities.</p> <p>On 4 May 2018, Uwe Fröhlich left the Supervisory Board. Since 4 May 2018, Marija Kolak (President of the National Association of German Cooperative Banks) has been a member of the Supervisory Board. On 31 December 2018, Wolfgang Kirsch, the former Chairman of the Supervisory Board, left the Supervisory Board. With effect from 1 January 2019, Dr. Cornelius Riese was elected as new Chairman of the Supervisory Board.</p>
	102-19	Delegating authority	<p>Improving economic, environmental and social performance is firmly embedded in the company and its structures. Responsibilities and functions are delegated to the line managers on this basis. Coordination of the sustainability strategy and measures is the responsibility of the sustainability officer.</p>
	102-20	Executive-level responsibility for economic, environmental and social topics	<p>The Union Investment Group's sustainability strategy is coordinated by the sustainability officer and the environmental management officer. Both report directly to the CEO.</p>
	102-21	Consulting stakeholders on economic, environmental and social topics	<p>Resolution recommendations are usually addressed to the Supervisory Board via the Board of Managing Directors. Nonetheless, shareholders and employees may, at any time, address recommendations or instructions not only to the Board of Managing Directors but also directly to the Supervisory Board. No specific mechanism has been put in place for this.</p>

GRI standard	Detail	Page / contents / URL
102-22	Composition of the highest governance body and its committees	<p>The Supervisory Board of Union Asset Management Holding AG comprises 15 members, ten of whom are shareholder representatives and five of whom are employee representatives. All the members of the Supervisory Board are bound by the requirements, rights and obligations inherent to the activities of the supervisory board of a public limited company as prescribed in Germany's Stock Corporation Act (AktG).</p> <p>The tenure of the incumbent UMH Supervisory Board, which currently comprises 12 men and 3 women, is scheduled to last until the Annual General Meeting of UMH in 2022.</p> <p>Additionally, the company's Articles of Association require the members of the Supervisory Board appointed by the Annual General Meeting to protect the interests of the shareholders in investment funds issued by subsidiaries on the basis of their personality and expertise, and stipulate that, in principle, only persons who are a member of the governance body of a cooperative company may be appointed as the Supervisory Board member for shareholders. This principle may be deviated from in the case of a maximum of two shareholder representatives. As Union Asset Management Holding AG is not an asset management company within the meaning of Germany's Investment Code (KAGB), the independence requirements stipulated in Section 18 (3) KAGB do not apply to this company. The supervisory boards of the four group companies Union Investment Privatfonds GmbH, Union Investment Institutional GmbH, Union Investment Real Estate GmbH and Union Investment Institutional Property GmbH, which do fall within the scope of Section 18 (3) KAGB, each include a supervisory board member who, in accordance with the law, is independent of the shareholders, the companies associated with them and the company's business partners.</p> <p>There are no obstacles to any of the members of the Supervisory Board of Union Asset Management Holding AG being members of said board on the basis of other mandates already exercised, pursuant to Section 25 c/d of the German Banking Act (KWG).</p> <p>The company's Supervisory Board has set targets for the proportion of women on the company's Supervisory Board and Board of Managing Directors pursuant to Section 111 (5) of the German Stock Corporation Act (AktG), to be met by 31 December 2021.</p> <p>The target set for the Supervisory Board is 20 % (3 out of 15). In the period under review the proportion of women on the Supervisory Board following the Annual General Meeting on 4 May 2018 was 20 % (3 out of 15) and 13.3 % prior to that (2 out of 15). The proportion of women on the Board of Managing Directors in the reporting period was 0 %. The Supervisory Board set a target of maintaining the status quo until 31 December 2021. In addition, the Board of Managing Directors has defined targets in accordance with Section 76 (4) AktG for the two management levels below the Board of Managing Directors; these targets are to be met by 31 December 2021.</p>

GRI standard	Detail	Page / contents / URL
102-23	Chair of the highest governance body	The Chief Executive Officer of Union Asset Management Holding AG is Hans Joachim Reinke. He is not simultaneously the managing director of an operating subsidiary of Union Asset Management Holding AG. The Chairman of the Supervisory Board of Union Asset Management Holding AG is Dr. Cornelius Riese (Co-CEO of DZ BANK AG).
102-24	Nominating and selecting the highest governance body	<p>In accordance with the Articles of Association of UMH AG, the members of the UMH Supervisory Board appointed by the Annual General Meeting must protect the interests of the shareholders in investment funds issued by subsidiaries on the basis of their personality and expertise. In principle, only persons who are members of the governance body of a cooperative company may be appointed as the Supervisory Board member for shareholders.</p> <p>Selection is subject to various criteria, including expertise and experience in the area of financial correlations. The Supervisory Board of Union Asset Management Holding AG additionally passed a resolution setting a target of 20 % for the proportion of women on the UMH Supervisory Board, to be met by 31 December 2021.</p>
102-25	Conflicts of interest	<p>The five employee representatives on the Supervisory Board are elected by the workforce. The members of the Board of Managing Directors of Union Asset Management Holding AG are appointed by the Supervisory Board of Union Asset Management Holding AG. The Supervisory Board bases its decisions on stringent qualification and experience requirements. The qualification and regularity of the governance of Union Asset Management Holding AG are the subject of an audit performed by the Supervisory Board and the auditors.</p> <p>The code of procedure for the Supervisory Board of Union Asset Management Holding AG stipulates that every member of the Supervisory Board must disclose any conflicts of interest relating to their person to the Supervisory Board without undue delay. As a rule, members of the Supervisory Board may not accept third-party benefits or allow such benefits to be pledged to them or to third parties in relation to their exercising their activities, nor may they promise or grant unjustified benefits to third parties. The company ensures that this rule is complied with by introducing and regularly updating internal guidelines and can stipulate criteria for exceptions to the rule (de minimis cases). A Supervisory Board member's consultancy contracts or any other service contracts or contracts for work with the company are subject to the approval of the Supervisory Board.</p>

GRI standard	Detail	Page / contents / URL
102-26	Role of highest governance body in setting purpose, values and strategies	<p>The guiding principles, strategic goals and guidelines are developed and set by the Board of Managing Directors of Union Asset Management Holding together with the managers. With regard to the company's sustainability focus, continuation of its CSR strategy up to and including 2018 was passed and fully implemented.</p> <p>An updated sustainability code for the Union Investment Group was adopted in December 2015, and after completion, continuation of the sustainability programme in 2019 will be resolved by the UHM Board of Managing Directors. The report on the 2018 financial year will be submitted to the Supervisory Board in the first quarter of 2019.</p>
102-27	Collective knowledge of highest governance body	<p>As the highest governance body, the UHM Board of Managing Directors addresses sustainability issues in its regular reporting and as part of its responsibility for CSR activities. In December 2018, the current status of development of the sustainability strategy in the core business was presented to the Board of Managing Directors and development prospects were discussed. The continuation of the strategy for sustainable investments was explicitly confirmed in the context of the new regulatory requirements</p>
102-28	Evaluating the highest governance body's performance	<p>The regularity of the Board of Managing Directors' management is assessed annually by the external auditors. The Supervisory Board is notified of the auditors' findings. Insofar as subsidiaries of Union Asset Management Holding AG are subject to supervision by Germany's Federal Financial Supervisory Authority (BaFin), the findings of the annual audit are also submitted to BaFin. BaFin generally conducts supervisory talks at least once a year with the management of the group companies which it supervises. BaFin occasionally also orders special audits. The Board of Managing Directors' management is also continuously monitored by the Supervisory Board. Please refer to the written report of the Supervisory Board in the annual report. The Supervisory Board assesses the performance of the Board of Managing Directors once a year on the basis of agreed ex-ante performance targets. Sustainability issues are a component of the Board of Managing Directors' target agreement and performance assessment.</p> <p>Decisions regarding the formal approval of the actions of the Supervisory Board and Board of Managing Directors of Union Asset Management Holding AG are made annually by the shareholders at the Annual General Meeting.</p>

GRI standard	Detail	Page / contents / URL
102-29	Identifying and managing economic, environmental and social impacts	<p>All aspects of the sustainability strategy resolved in January 2018 were examined and confirmed by the UMH Board of Managing Directors in December 2018. The Supervisory Board is regularly informed of the status of sustainability initiatives at the first meeting following the year-end. The resultant sustainability programme measures are audited by the Board of Managing Directors annually and, in the event of deviations, corrective measures are implemented. Key CSR projects such as the climate strategy and our CSR policy are implemented with the involvement of the relevant stake-holders, such as NGOs and key investors, so as to incorporate different perspectives into the procedures.</p> <p>Development of the Union Investment CSR strategy is based on the framework guidelines agreed upon within the DZ BANK Group.</p>
102-30	Effectiveness of risk management processes	<p>The UIG's business and risk strategy is presented to the UHM's Supervisory Board once a year for approval. The written quarterly report submitted to the UHM's Supervisory Board likewise always includes information regarding the risk situation. For the 2015 financial year, a report on sustainability performance was specifically included in Supervisory Board reporting for the first time. In 2016, in addition a risk appetite statement was included in Supervisory Board reporting for the first time.</p>
102-31	Review of economic, environmental and social topics	<p>At least once a year</p>
102-32	Highest governance body's role in sustainability reporting	<p>The CEO of Union Asset Management Holding is the highest formal position to approve the sustainability and annual reports.</p>
102-33	Communicating critical concerns	<p>The company's critical concerns are addressed by means of the regular risk report and the quarterly reporting of all the operating segments to the UMH's Board of Managing Directors. If necessary, especially critical issues are subject to separate audits and, upon being audited, are resubmitted to be passed by a resolution.</p>
102-34	Nature and total number of critical concerns	<p>In the previous-year reporting period, the Supervisory Board was informed on the key strategic challenges and any resulting measures to be derived.</p>

GRI standard	Detail	Page / contents / URL
102-35	Remuneration policy	<p>The aim of the remuneration systems is to recognise the employees' achievements accordingly and to offer them effective performance incentives. The remuneration system for employees in the collectively negotiated wage sector in Germany is based on the wage agreements for the private banking industry and for public banks. In Luxembourg, it is based on the collective bargaining system applicable there.</p> <p>The agreed salaries comprise the monthly salaries and bonus payments.</p> <p>The remuneration structure for employees not in the collectively negotiated wage sector comprises a function-based monthly basic salary and a short-term performance-based component. The performance-based component comprises not only quantitative targets – qualitative and sustainable targets can also be agreed individually. A results-oriented bonus and a growth-oriented long-term incentive plan (LTIP) may be offered as voluntary special benefits. An LTIP offers an incentive for sustainable business success and for long-term staff retention, and also reflects the company's risk position.</p> <p>The remuneration structure for employees whose activities have a significant influence on the risk profile of the asset management company or the managed investment fund (risk functions) and for employees with a control function comprises basic remuneration a variable risk premium for risk functions. This variable remuneration entails a multi-year assessment period and delayed payment. The aim is to reduce the risk appetite of the risk functions by incorporating lengthy periods of assessment and payment into both the past and future. The remuneration system is also compatible with and beneficial to a sound and effective risk management system. Depending on the relevant for the individual functions, environmental and social targets are part of the incentive structure and performance assessment.</p> <p>In addition to basic remuneration, the board members of Union Asset Management Holding AG are paid on the basis of a target bonus system. The bonus components are broken down into group company and individual targets. 40 % of these are paid in the form of a deferred bonus as a sustainable component. The remuneration of the members of the Supervisory Board of Union Asset Management Holding AG as determined by the Annual General Meeting is fixed remuneration which is intentionally granted independently of the organisation's performance.</p>

GRI standard	Detail	Page / contents / URL	
102-36	Process for determining remuneration	Union Investment's remuneration system is based on an analytical job evaluation process, drawing on external remuneration benchmarks. Independent external advisory services are used both in internal and annual market analysis. The remuneration system is also audited and analysed annually by an independent, internal remuneration committee.	
102-37	Stakeholders' involvement in remuneration	Resolution recommendations are usually addressed to the Supervisory Board via the Board of Managing Directors. Nonetheless, shareholders and employees may, at any time, address recommendations or instructions not only to the Board of Managing Directors but also directly to the Supervisory Board. No specific mechanism has been put in place for this.	
102-39	Percentage increase in annual total compensation ratio	The percentage increases for these two employee groups are comparable. Any deviations from the average may be due to HR policy influences but are in no way statistically representative.	
Stakeholder engagement			
GRI 102: General disclosures 2016	102-40	List of stakeholder groups	See page 140 (GRI standards 102-40 + 102-42 Determining the key stakeholders)
	102-41	Collective bargaining agreements	30.80%
	102-42	Identifying and selecting stakeholders	See page 140 (GRI standards 102-40 + 102-42 Determining the key stakeholders)
	102-43	Approach to stakeholder engagement	See page 140 (GRI Standards 102-43 + 102-44 Stakeholder engagement)
	102-44	Key topics and concerns raised	See page 140 (GRI Standards 102-43 + 102-44 Stakeholder engagement)
	102-45	Entities included in the consolidated financial statements	a. Reference to page in the annual report b. The report covers all companies of the Union Investment Group that fulfil the following aspects: materiality, influencing capability, sufficient capacity and integration in segment organisation. The following companies are not included on account of these criteria: Quoniam Asset Management, Visual Vest, Union Investment TFI (Poland), BEA Union Investment Management Limited (Hong Kong), VR Consultingpartner Union Investment Real Estate France.
	102-46	Defining report content and topic boundaries	See page 141 GRI Standards 102-43 + 102-46 + 103-1 Determining, prioritising and validating the key topics

GRI standard	Detail		Page / contents / URL
	102-47	List of material topics	See page 142 (GRI standard 102-47 Identified material topics)
	102-48	Restatements of information	None
	102-49	Changes in reporting	None
	102-50	Reporting period	See page 140 (GRI standard 102-50 Reporting period)
	102-51	Date of most recent report	May 2018
	102-52	Reporting cycle	Annually
	102-53	Contact point for questions regarding the report	In the 2013 reporting season, the CSR report was integrated into the annual report for the first time, and is available on the Union Investment website. The relevant contacts are stated on the Union Investment Group web presence at www.union-investment.de
	102-54	Claims of reporting in accordance with the GRI standards	See page 140 (Standards 102-48 + 102-49 + 102-52 + 102-54 Transparency and comparability of reporting)
	102-55	GRI content index	Starts on page 177
	102-56	External assurance	The report was not audited externally.
Organisational profile			
GRI 103: Management approach in 2016	103-1	Explanation of the material topic and its boundary	See page 143 (Management approaches – GRI standards 103-1 + 103-2 + 103-3)
	103-2	The management approach and its components	See page 143 (Management approaches – GRI standards 103-1 + 103-2 + 103-3)
	103-3	Evaluation of the management approach	See page 143 (Management approaches – GRI standards 103-1 + 103-2 + 103-3)

GRI standard	Detail		Page / contents / URL
Economy			
GRI 201: Economic performance 2016	201-1	Direct economic value generated and distributed	See page 46 (Consolidated income statement for the financial year from 1 January to 31 December 2018)
	201-2	Financial implications and other risks and opportunities due to climate change	The '2° sind machbar' (Two degrees are achievable) climate strategy was adopted in 2015 to achieve the political target of two degrees and measure the results. The planned measures were implemented in 2016 and 2017 as expected. However, with regard to investor behaviour it has been observed that consideration of climate aspects in the portfolios calls for a lengthy preparatory period and intensive investor consultation. In view of the current regulatory changes the management mechanisms for climate risks in line with the Task Force on Climate-related Financial Disclosures requirements are being examined and it is planned to implement them in operating processes in the near future.
	201-3	Defined-benefit plan obligations and other retirement plans	Union Investment provides several company pension schemes that differ in terms of contributions and implementation method. The resultant liabilities are mostly funded via plan assets. No separate fund has been created specifically for our pension obligations. All permanent employees are in at least one pension scheme. See page 86 of the 2018 annual report for the amount of Union Investment's company pension liabilities.
	201-4	Financial assistance received from government	None
GRI 203: Indirect economic impacts 2016	203-1	Infrastructure investments and services supported	A contribution to reducing CO ₂ emissions is made by investing in wind farms and solar farms in the UniInstitutional Infrastruktur SICAV-SIF Erneuerbare Energien fund. The portfolio data is published quarterly.
GRI 204: Procurement practices 2016	204-1	Proportion of spending on local suppliers	a. Approx. 97 % Our suppliers are mostly located in Germany (85 %) and the EU (97 %). 3 % of suppliers are based outside the EU. This mainly relates to market data and software products with foreign headquarters of the manufacturers. b. "Local" is defined as procurement within the Federal Republic of Germany. c. The figures relate to the parts of the group in Germany, Luxembourg and Austria.

GRI standard	Detail		Page / contents / URL
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	All nine business locations included in the scope of the report have been audited.
	205-2	Communication and training about anti-corruption policies and procedures	All employees and managers are informed of and trained on anti-corruption strategies and measures. These are internal guidelines and processes. They are not communicated externally.
	205-3	Confirmed incidents of corruption and actions taken	The money laundering officer was not made aware of any incidences of corruption in the 2018 reporting period which would have resulted in judicial sentencing or an employee dismissal. This equally applies to any contracts with business partners founded on such a matter. The money laundering officer is likewise not aware of any public lawsuits levelled at the group in relation to its operations.
GRI 206: Anti-competitive behaviour 2016	206-1	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	None
Environment			
GRI 301: Materialien 2016	301-1	Materials used by weight or volume	<ul style="list-style-type: none"> • Specific paper consumption: 2017: 322 kg / employee – 2018: 277 kg / employee • Paper consumption reduced by 23.2 % compared with the reference year (2014) • Reduction in paper consumption per client compared with the reference year (2014): 34.7 % • Photocopying paper consumption totalled 62,955 kg in 2018 (95,044 kg in 2014) This equates to consumption of 21.6 kg per employee in 2018. See also table on page 186
	301-2	Recycled input materials used	See table on page 186

GRI standard	Detail		Page / contents / URL
GRI 302: Energy 2016	302-1	Energy consumption within the organisation	<ul style="list-style-type: none"> • Energy consumption reduced by 11.0 % compared with the reference year (2014) • Energy consumption reduced by 10.2 % per employee compared with the reference year (2014) See table on page 186
	302-2	Energy consumption outside of the organisation	Unfortunately, our suppliers are not able to report on their product-related or service-related energy consumption or CO ₂ footprint. However, we aim to make progress here in the context of supplier development. With regard to the CO ₂ footprint, we already report very extensively on Scope 3 emissions wherever possible.
	302-3	Energy intensity	See table on page 186
	302-4	Reduction of energy consumption	Ongoing reduction of emission ceilings for new cars; use of energy-efficient buildings; optimisation of room climate; implementation of supplier talks and audits. The KPIs on resource efficiency (CO ₂ footprint, energy consumption, etc.) can be found in the CSR report. The KPIs are determined annually in the sustainability platform Sofi on the basis of consumption, bills and reports from suppliers. If no KPIs are available, they are extrapolated on the basis of previous years or levels at other locations. For some KPIs (e.g. commuter emissions or event emissions), it is necessary to make assumptions that are usually derived from current recommendations (e.g. of the Environment Ministry, NGOs) or determined in internal workshops on the basis of experience. The assumptions are also documented in the recording tool.
GRI 303: Water 2016	303-1	Water withdrawal by source	See table on page 188
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	See table on page 187
	305-2	Energy indirect (Scope 2) GHG emissions	See table on page 187
	305-3	Other indirect (Scope 3) GHG emissions	See table on page 187
	305-4	GHG emissions intensity	See table on page 187

GRI standard	Detail		Page / contents / URL
	305-5	Reduction of GHG emissions	There is a climate strategy with extensive measures. These can be found in the sustainability programme. The extent of reduction of GHG emissions is set out on page 187.
GRI 306: Effluents and waste 2016	306-1	Water discharge by quality and destination	Union Investment discharges waste into the communal drainage systems. See also table on page 188
	306-2	Waste by type and disposal method	Volumes of waste are calculated on the basis of reports or disposal certificates via the waste register. In the rare cases where waste data is not available, e.g. where collection containers are shared with other tenants, the data is extrapolated on the basis of the number of employees at the respective location. Our waste disposal companies are responsible for selecting the disposal method. Toner waste is returned to the service provider of our printing service provider. See table on page 187
GRI 307: Environmental compliance 2016	307-1	Non-compliance with environmental laws and regulations	None in 2018 reporting year.
GRI 308: Supplier environmental assessment 2016	308-1	New suppliers that were screened using environmental criteria	100 %
	308-2	Negative environmental impacts in the supply chain and actions taken	<p>In the reporting period, 500 suppliers were assessed in terms of environmental impact, of which 30 were identified with significant actual and potential negative environmental impacts. Ecological environmental impacts measured on the basis of CO₂ footprint arise in the following product groups:</p> <ul style="list-style-type: none"> – Outsourcing: Electricity consumption of data-centre service providers – Facility management: Waste, water supply, district heating, natural gas, electricity consumption – Marketing: Paper consumption – Events (conferences / events/trade fairs) – Logistics: Packages, mail deliveries – Travel management: Business trips, hotel stays – Operating and office equipment: Toner consumption – Vehicle fleet: Fuel consumption <p>Consequently, we maintain close dialogue with our suppliers and have devised a development pathway with them.</p> <p>Further development of the suppliers identified as relevant is subject to monitoring through establishment in a policy for ongoing supplier development. The specific development pathway of the supplier is tracked by means of the audits required as part of this.</p>

301-1 + 301-2 Paper consumption¹⁾ and use of recycled paper [comparison with reference year 2014 (kg)]

Paper consumption	2014	2018	2018 share in %
Recycled paper	131,785	165,743	20.6
FSC-certified paper	495,880	640,155	79.4
PEFC-certified paper	372,058	0	0.0
Non-certified paper	49,476	0	0.0
Total paper consumption	1,049,199	805,898	100.0
Paper consumption per customer [g]	256.1	180.4	

¹⁾ Paper consumption includes the following types of consumption: customer mail, photocopying paper, customer information (magazines, flyers, product brochures), reports, office supplies (stationery, business cards, letterheads) and hygienic tissue paper. All print jobs and paper orders are recorded in the company's procurement portal. This forms the basis for calculating paper quantities. Reports from the cleaning service provider are applied for hygienic tissue paper consumption.

302-1 + 302-3 Direct energy consumption¹⁾ (fuels) by source [comparison with reference year 2014²⁾ (MJ)]

Type of energy	2014	2018		
	Consumption in MJ	Consumption in MJ	Reduction versus reference year in MJ	Emissions per employee [kg/FTE ³⁾
Petrol	522,885.27	186,709.45	336,175.8	64.1
Diesel	18,106,047.03	21,343,447.19	-3,237,400.2	7,332.0
Natural gas	16,544,795.62	13,338,586.80	3,206,208.8	4,582.1
District heating	7,316,299.87	11,208,983.00	-3,892,683.1	3,850.6
Electricity	31,030,810.02	35,520,014.81	-4,489,204.8	12,202.0
Total	73,520,837.81	81,597,741.25	-8,076,903.44	28,030.83

¹⁾ The KPIs are calculated on the basis of the utility bills and the report on the vehicle fleet. Missing data for individual locations is extrapolated on the basis of employee development. Direct energy consumption relates to non-renewable sources. Apart from a small proportion of shared electricity, only green electricity is purchased. Emissions for natural gas are compensated by the energy supplier via a Gold Standard-certified climate-protection project. The energy intensity ratio is based on energy consumption within the organisation. Details on energy consumption for the reference year (2014) have been adjusted in relation to the previous year's report. When determining key figures, the quantities actually billed were applied.

²⁾ The reference year 2014 was selected on account of the target agreement in the sustainability programme.

³⁾ FTE = Full-time equivalent.

305-1 + 305-2 + 305-3 + 305-4 + 305-5 Total direct, indirect and other greenhouse gas emissions (GHG emissions) by weight (t CO₂ equivalents)¹⁾, reduction compared with reference year 2009 and GHG emissions intensity

Source of GHG emissions	2009		2018		Reduction versus reference year	
	CO ₂ in tonnes		Percentage [%]	Emissions per employee [kg/FTE]	CO ₂ in tonnes	Reduction [%]
Vehicle fleet (fuel consumption)	2,992.2	2,780.8	18.2	955.3	211.4	7.1
Natural gas	1,605.2	275.9	1.8	94.8	1,329.3	82.8
Coolant losses	0.0	140.6	0.9	48.3	-140.6	-
District heating	148.6	503.5	3.3	173.0	-354.9	-238.8
Electricity consumption	6,929.8	504.9	3.3	173.4	6,424.9	92.7
Paper consumption	1,385.1	876.3	5.7	301.0	508.8	36.7
Business travel (rail, rental cars, aircraft, private cars)	3,621.3	3,950.8	25.9	1,357.2	-329.5	-9.1
Water supply	19.4	26.7	0.2	9.2	-7.2	-37.2
Hotel accommodation	68.4	181.6	1.2	62.4	-113.2	-165.4
Commuter traffic	2,138.9	2,219.1	14.6	762.3	-80.2	-3.8
Letters	621.7	6.1	0.0	2.1	615.6	99.0
Parcels	116.4	0.0	0.0	0.0	116.4	100.0
Waste	115.6	151.4	1.0	52.0	-35.9	-31.0
Events	3,567.1	3,590.8	23.6	1,233.5	-23.7	-0.7
Toner consumption	50.7	36.2	0.2	12.4	14.5	28.6
Total	23,380.6	15,244.8	100.0	5,236.9	8,135.8	34.8

¹⁾ For all GHG emission sources, the carbon footprint also contains the upstream and downstream Scope 3 emissions (CDP standard; GHG market-based method). 2009 was applied as the reference year because this was the year in which the environmental management system was introduced, meaning it provides the best possible transparency with regard to the measures already implemented. The carbon footprint is calculated on the basis of utility bills and reports from service providers. Manufacturer information was applied for the emission factors where possible. Where this information was not available, the factors published by the Vfu were applied. We take the RFI factor 2.7 into account when determining business-travel emissions for aircraft.

305-1 + 305-2 + 305-3 Comparative value: Scope 2 emissions based on the energy mix in Germany¹⁾

Source of GHG emissions	2009	2018		Reduction versus reference year		
	CO ₂ in tonnes		Percentage [%]	Emissions per employee [kg/FTE]	CO ₂ in tonnes	Reduction [%]
Electricity consumption	6,929.85	5,778.31	-	1,985.0	1,151.5	16.6
Total¹⁾	23,380.60	20,518.16	-	7,048.5	2,862.43	12.2

¹⁾ Shows the emissions from electricity consumption (GHG location-based method) where this was not purchased as renewable energy.

306-2 Total weight of waste by type and disposal method¹⁾

Type of waste	2014	2015	2016	2017	2018
Paper waste (t)	270.9	346.4	188.2	187.4	363.0
Mixed packaging (t)	46.0	9.9	9.6	0.8	7.6
Biological waste (t)	-	-	-	-	3.6
Glass waste (t)	-	-	-	-	3.0
Residual waste (t)	76.7	160.0	167.8	162.5	148.9
Other					
Lighting (kg)	56.6	9.0	14.5	42.0	77.0
Old batteries (kg)	15.5	6.0	24.0	21.0	522.0
Commercial waste (t)	14.9	179.5	17.8	19.6	4.9
Data carriers (kg)	120.5	197.0	218.0	377.0	252.0
Electrical waste (kg)	75.0	5,155.0	274.0	5,564.0	1,047.5
Toner waste (kg)	3,357.4	3,519.4	3,531.0	2,526.0	1,050.0

¹⁾ Volumes of waste are calculated on the basis of reports or disposal certificates via the waste register. In the rare cases where waste data is not available, e.g. where collection containers are shared with other tenants, the data is extrapolated on the basis of the number of employees at the respective location. Our waste disposal companies are responsible for selecting the disposal method. Toner waste is returned to the service provider of our printing service provider.

303-1 + 306-1 Total water withdrawal and water discharge by source¹⁾ (m³)

	2014	2015	2016	2017	2018
Water withdrawal ²⁾	26,259	35,786	34,795	41,325	40,226
Water discharge	25,273	35,194	34,795	41,325	40,226
Water withdrawal per employee	10.6	14.0	13.1	14.6	13.8

¹⁾ Union Investment uses drinking water exclusively from the communal water supply in its buildings and hence discharges waste water into the communal drainage systems. Water and waste water volumes are based on the utility bills. If these are not available for the current reporting year, they are extrapolated on the basis of employee development.

²⁾ The increase in water withdrawal from 2017 is due to: a) Extra need for air-conditioning in the Maintor Porta building due to weather, b) Addition of the Vienna location.

308-2 Environmental impacts of transport – business trips and logistics

Means of transport [km] ¹⁾	2014	2015	2016	2017	2018
Flight	9,198,611	10,359,354	10,978,285	11,090,031	10,955,000
Cars	1,037,779	1,237,541	1,022,976	1,140,039	1,055,674
Rail	3,736,968	3,558,851	3,860,916	4,401,118	4,796,371
Total distance	13,973,358	15,155,746	15,862,177	16,631,188	16,807,045
Distance per employee	5,648	5,934	5,961	5,877	5,774

Deliveries ²⁾	2014	2015	2016	2017	2018
Letters sent within Germany (quantity)	21,265,816	20,174,110	19,311,032	27,922,741	26,266,705
Letters sent within Europe / world (quantity)	285,274	235,343	279,350	153,374	211,219
Parcels sent (quantity)	116,354	104,750	125,362	71,359	81,781

¹⁾ The KPIs are calculated on the basis of the travel expense report and reports from service providers. The figures do not include the distances travelled using company cars as these are also used privately and already considered extensively in 301-2.

²⁾ The delivery quantities are taken from reports from service providers. Delivery is made if the service provider offers it as a climate-neutral service.

GRI standard	Detail	Page / contents / URL	
Social			
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	See table on page 190
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	No distinction is made between full-time and part-time employees when it comes to benefits.
GRI 403: Occupational Health and Safety 2016	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Falls in the office and on the way to work, bruises on office equipment Injury rate female employees: 0.37 % Injury rate male employees: 0.65 % Lost workday rate female employees: 0.03 % Lost workday rate male employees: 0.06 %
	403-3	Workers with high incidence or high risk of diseases related to their occupation	There are no occupations with a particularly high disease or health risk within the company.
GRI 404: Training and education 2016	404-1	Average hours of training per year per employee	See table on page 191

GRI standard	Detail	Page / contents / URL
	404-2 Programs for upgrading employee skills and transition assistance programs	a. HR development is based on a multidimensional approach at Union Investment: 1. Needs-driven development (adjusting or upgrading for direct workplace requirements) 2. Potential development (qualification for future requirements or taking on further functions) 3. Promoting internal employability (grasp of processes and connections with regard to diverse employability) Various target group-specific programmes and instruments are used. Knowledge management systems are used in various organisational units. b. Union Investment does not offer any transitional aid programmes designed to facilitate further employability or to handle a career exit due to retirement or termination of employment.
	404-3 Percentage of employees receiving regular performance and career development reviews	All employees and managers regularly receive performance and career development reviews.
Diversity and equal opportunity 2016	405-1 Diversity of governance bodies and employees	See table on page 191
	405-2 Ratio of basic salary and remuneration of women to men	The different pay systems for collective bargaining and non-collective bargaining are the same for all employee groups at all locations, regardless of age, gender or other diversifications. There can be slight differences in the basic salary of men and women depending on employee group, but some salaries are at the same level. There is no discernible significant difference between the sexes in terms of basic salaries or annual pay adjustments.
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	None

GRI standard	Detail	Page / contents / URL
GRI 407: Freedom of association and collective bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	There is no danger to the right of collective bargaining.
GRI 414: Supplier social assessment 2016	414-1 New suppliers that were screened using social criteria	100 %
	414-2 Negative social impacts in the supply chain and actions taken	The specific characteristics of our industry combined with the aforementioned focus of the purchased goods and services means that, apart from catering, cleaning and security services, we do not use any services/suppliers with material connections to the low-wage sector or with a connection to ethically or socially controversial goods or practices. All suppliers with locations in Germany or the EU are subject to local occupational safety regulations. On the basis of the sustainability obligation and self-disclosure, suppliers confirm in writing that they comply with the corresponding regulations when signing any contract. Suppliers in the product subgroups catering, cleaning and security are based in Germany. Consequently, no goods or services are purchased from suppliers that pose a significant risk of negative working practices, and there is no collaboration with any such suppliers. d. 0 % e. 0 %: No infringements with significant actual and potential negative impacts on working practices were identified in the reporting period. Therefore, no business relationships were terminated on these grounds.
GRI 415: Public policy 2016	415-1 Political contributions	The Union Investment Group supports the political work of parties by means of non-cash and monetary benefits (for instance in the form of sponsorship actions). Total monetary value in 2018 see www.finanzagenda.de
GRI 416: Customer health and safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	No cases of non-compliance with regulations or voluntary codes of conduct relating to the impacts of products and services on health and safety were identified for 2018.

GRI standard	Detail	Page / contents / URL
GRI 417: Marketing and labelling 2016	417-1	Requirements for product and service information and labelling In addition to the statutory requirements, our product information and labelling complies with the code of conduct of the German Investment Funds Association (BVI).
	417-2	Incidents of non-compliance concerning product and service information and labelling No cases of non-compliance with regulations or voluntary codes of conduct relating to information on and labelling of products and services were identified for 2018.
	417-3	Incidents of non-compliance concerning marketing and communications None
GRI 418: Customer privacy 2016	418-1	Substantiated complaints regarding breaches of customer privacy and losses of customer data There was one complaint regarding customer privacy in the reporting period.
GRI 419: Socioeconomic compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area 401-1 Number of employees who left the company in 2018 by age group and gender

401-1 Total turnover¹⁾ by age group and gender

	< 30	30–50	> 50	Total
Male	59	100	11	170
Female	57	64	5	126
Total	116	164	16	296

¹⁾ New hires relate only to those joining Union Investment for the first time.

401-1 Turnover rate 2018 by age group and gender

	< 30	30–50	> 50	Total
Male	43.7 %	8.1 %	2.6 %	9.5 %
Female	35.8 %	6.5 %	2.2 %	9.1 %
Total	39.5 %	7.4 %	2.5 %	9.3 %

401-1 Number of resignations 2018 by age group and gender

	< 30	30–50	> 50	Total
Male	8	29	2	39
Female	8	25	1	34
Total	16	54	3	73

401-1 Total fluctuation rate 2018 by age group and gender

	< 30	30–50	> 50	Total
Male	5.9 %	2.3 %	0.5 %	2.2 %
Female	5.0 %	2.5 %	0.4 %	2.5 %
Total	5.4 %	2.4 %	0.5 %	2.3 %

404-1 Average hours of training per year per employee

Training and education	Hours/year
Training of heads of division	47.2
Training of heads of department	42.4
Training of group managers	35.2
Training of employees	20.8

405-1 Employee diversity

	< 30	30–50	> 50	Total	Percentage
Male	135	1243	420	1,798	56.6 %
Female	159	989	231	1,379	43.4 %
Total	294	2,232	651	3,177	100 %

405-1 Management diversity

	< 30	30–50	> 50	Male	Female
Percentage	0.5 %	68.5%	31.0%	84.1%	15.9%

GRI standard	Detail	Page / contents / URL	
Industry-related disclosures (G4-FS and G4-CRE)			
Product portfolio	G4-DMA (FS1)	Policies with specific environmental and social components applied to business lines	See page 144 (Management approach to the product range – We invest responsibly)
	G4-DMA (FS2)	Procedures for assessing and screening environmental and social risks in business lines	The relevant ESG criteria are embedded in corporate governance in the balanced scorecard and in risk management. Environmental risks are also regularly analysed and managed using the environmental management system certified in accordance with ISO 14001. With regard to employees as a factor which is crucial to service companies, social issues are addressed via the regular external auditing programme “Germany’s Top Employers”. Deficiencies that arise or room for improvement are included in future company planning and target planning for the persons responsible within the company subject to a resolution by the Board of Managing Directors.
	G4-DMA (FS4)	Process(es) for improving staff competency to implement the environmental and social policies and procedures as applied to business lines	Union Investment strengthens the sustainability expertise of our portfolio managers through training courses at our in-house ESG Academy. This systematically strengthens and broadens the sustainability expertise in securities portfolio management.
	G4-DMA (FS5)	Interactions with clients / investees / business partners regarding environmental and social risks and opportunities	There is regular constructive company dialogue with our investment properties’ decision makers regarding environmental and social risks and opportunities. We regularly discuss with our clients how we can increasingly incorporate ESG aspects into our asset investments. Union Investment holds an annual sustainability conference on different topics each time in order to raise awareness of the importance of sustainability in investment decisions. Each year, we examine the attitude of German major investors to sustainable investment and summarise the results in a sentiment index. In addition, we regularly have current sustainability issues scientifically assessed by various academics and internally within Portfolio Management.

GRI standard	Detail		Page / contents / URL
Audit	G4-DMA (FS9)	Coverage and frequency of audits to assess implementation of environmental and social policies and risk assessment procedures.	Yes Environmental management involves regular internal and external certification in accordance with ISO 14001. There is annual external auditing of our HR activities through the "Germany's Top Employers" programme.
Active ownership	G4-FS10	Percentage and number of companies held in the institution's portfolio with which the reporting organisation has interacted on environmental or social issues.	In 2018, Union Investment discussed environmental and social issues in 403 company dialogues in the context of CSR dialogues.
	G4-FS11	Percentage of assets subject to positive and negative environmental or social screening.	100 %
	G4-FS12	Voting policy(ies) applied to environmental or social issues for shares over which the reporting organisation holds the right to vote or advises on voting.	See Proxy Voting policy

GRI standard	Detail		Page / contents / URL
Local communities	G4-FS13	Access areas in low-populated or economically disadvantaged areas by type	Union Investment does not engage directly in activities in economically weak or sparsely populated regions. However, our products are available through the local cooperative banks.
	G4-FS14	Initiatives to improve access to financial services for disadvantaged people	In addition to being accessible through local cooperative banks via a number of communication channels, Union Investment can be reached via its own customer service department and offers people with all sorts of physical and mental disabilities flexible and smooth contact options.
Product and service labelling	G4-DMA (FS15)	Policies for the fair design and sale of financial products and services	The Union Investment Group is committed to abiding by the code of conduct of the German Investment Funds Association (BVI). It therefore also respects the standards of the code when reporting on the performance of its funds.
Energy	G4-CRE1	Building energy intensity	See page 164 (The method is explained on page 165)
Water	G4-CRE2	Building water intensity	See page 164 (The method is explained on page 165)
Emissions	G4-CRE3	Greenhouse gas emissions intensity from buildings	See page 164 (The method is explained on page 165)
Product and service labelling	G4-CRE8	Type and number of sustainability certifications, rating and labelling schemes for new construction, management, occupation and redevelopment	See page 155

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