2022
Annual Report

DWS

Content

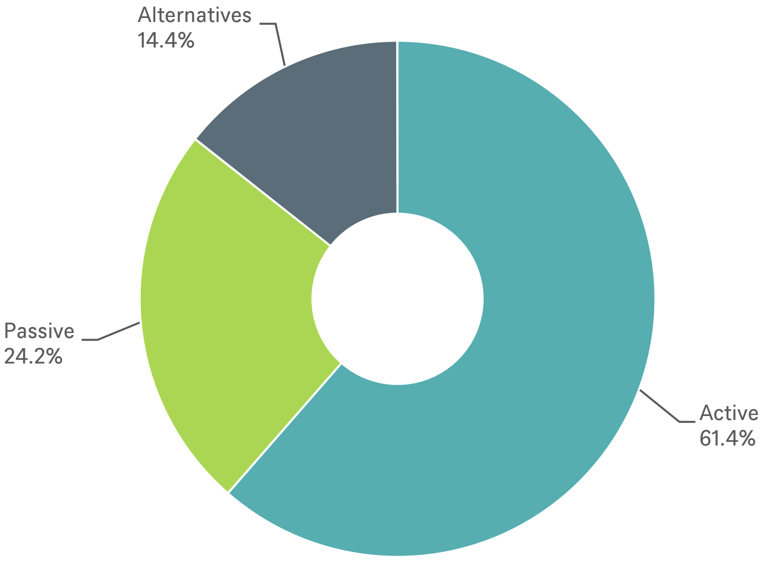
DWS | Investors for a new now

	2021	2022
Assets under Management	€ 928 bn.	€ 821 bn.
Net Flows	€ 48 bn.	€ (20) bn.
Adjusted Profit before Tax	€ 1,140 m.	€ 1,057 m.
CDP Rating	B	A-
Adjusted Cost-Income Ratio	58.1%	60.6%
Earnings per Share	€ 3.90	€ 2.97
Dividend per Share (for the financial year)	€ 2.00	€ 2.05 [*]

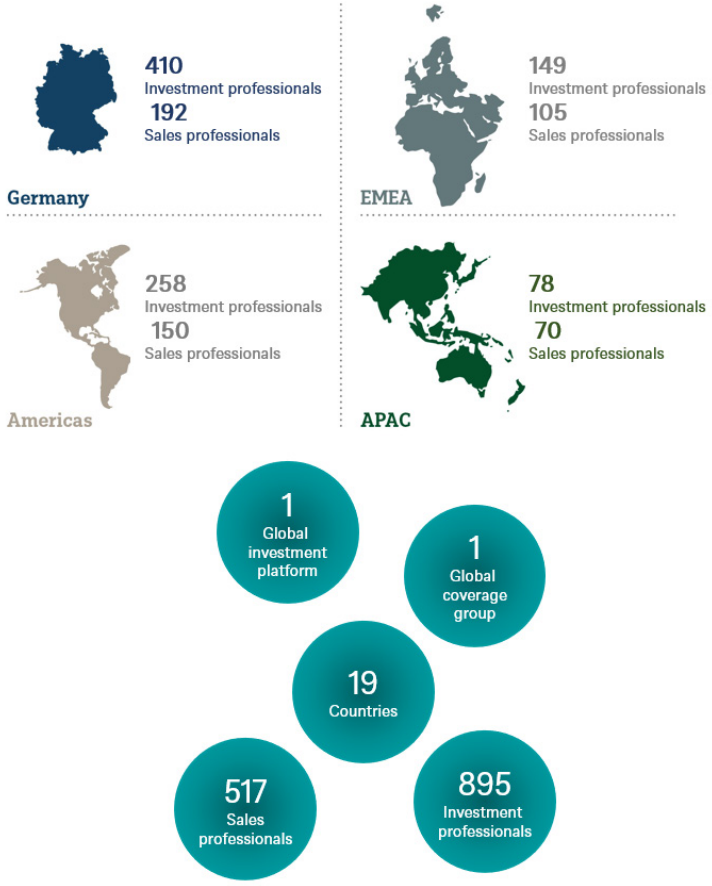
[*] The Executive Board and Supervisory Board will propose a dividend payment of € 2.05 per share for the financial year 2022 at the Annual General Meeting on 15 June 2023.

DWS - At a Glance

Assets under Management by asset classes (in %)



European origin with a global perspective



(as per 31 December 2022)

Letter of the Chairman of the Executive Board

GRI 102-14

Frankfurt/Main, March 2023

Dear Shareholders,

I am very pleased to present you on behalf of the DWS Executive Board with our Annual Report 2022. Let me start by thanking you for remaining loyal to DWS during a year that was not easy for our company and the entire industry.

The asset management industry as a whole had to contend with the fact that prices worldwide and across all asset classes came under pressure in the course of the year. This was due not least to Russia's invasion of Ukraine, which caused dislocations in energy markets and strained global supply chains. The invasion amplified already existing inflationary tendencies in Europe and the US, leading central banks to hike interest rates significantly, first in the US and later in the year in Europe. All this led to increased pressure on almost all asset classes and weighed on the development of customer portfolios. In addition, particularly in Germany concerns emerged regarding the resilience of the German industry against the backdrop of potential shortages in gas and energy supplies.

DWS also faced its own challenges: At the end of May 2022 our Frankfurt headquarters were searched by the Frankfurt public prosecutor's office. On 9 June, our previous Chief Executive Officer, Asoka Woehrmann, resigned from his position. We continued to deal with the accusations of so-called greenwashing that have been publicly discussed since summer 2021. Let me be clear: DWS has been cooperating actively, openly and transparently with the authorities since the investigations began. Clarifying the allegations and resolving external investigations remain top priorities for our management. While it is not yet possible for us to speak about potential outcomes or timeframes of the external investigations, we can state with regard to our nearly completed internal reviews that we continue to stand by our financial disclosures as well as the prospectuses of our funds. In addition, we have learned from the ongoing changing regulatory environment and our own findings and continue to improve our ESG governance, processes and controls. We publicly reported on related organizational changes in the autumn of 2022.

Against the backdrop of these industry-wide – as well as DWS-specific – challenges, our company ended the year with solid results: Adjusted revenues amounted to € 2,683 million, essentially flat compared to the extremely successful previous year. This result was driven primarily by increased management fees, reflecting net inflows into high-margin alternative investments as well as multi-asset and ESG products. Total assets under management decreased to € 821 billion mainly due to market developments. Adjusted costs increased only slightly despite inflationary pressures and investments in growth initiatives thanks to continued strict cost management. The adjusted cost-income ratio was 60.6%, in line with our guidance. Due to various one-off items, both adjusted pre-tax profit and profit after tax were significantly lower than in the previous year.

Based on these results, we are pleased to be able to propose to the Annual General Meeting a further increase in the dividend to € 2.05 per share.

We see the annual result as a signal that DWS is stable and back on track – one of the main reasons being our employees, who have worked with highest commitment and a strong sense of responsibility as fiduciaries for our customers' assets. On behalf of my colleagues on the DWS Executive Board, I would like to express my sincere gratitude to them.

Since summer 2022, we have further transformed DWS in various ways and informed the capital market and the public in December about our refined strategy, including new financial targets. With this strategy, we want to maintain our leading position in Germany and further exploit the potential in Europe. In addition, we intend to further expand our Passive and Alternatives business in the USA. In Asia Pacific, we will focus on our strong strategic partnerships. You will find an explanation of our strategy in the section ‘Summarized Management Report – Our Strategy and our Market’ of this Annual Report.

We have set ourselves the target of achieving earnings per share of € 4.50 in 2025. The adjusted cost-income ratio should then be below 59%. We want to increase assets under management in Passive including Xtrackers by an average of more than 12% per year and in Alternatives by an average of more than 10% per year over the next three years. The payout ratio is expected to be 65% starting in 2025. In addition, and subject to capital commitment to organic and inorganic growth initiatives, we expect to propose an extraordinary dividend of up to € 1 billion in 2024.

For 2023, we expect the adjusted cost-income ratio to increase, but to remain below 65%. In addition, adjusted earnings should remain essentially unchanged compared to 2022. We also expect net flows to return to positive territory, driven by the Passive and Alternatives growth areas.

In 2023, our management team will do everything in our power to present DWS to the public and the capital market with positive developments again. We look forward to updating you on DWS's current year progress at our Annual General Meeting on 15 June.

Sincerely yours,

Dr Stefan Hoops
Chief Executive Officer

Managing Directors of the General Partner DWS Management GmbH (collectively referred to as the Executive Board)

Dr Stefan Hoops, * 1980
Chief Executive Officer and Head of Executive Division (since 10 June 2022)
and Head of Investment Division (since 1 January 2023)

Manfred Bauer, * 1969
Head of Product Division (since 1 July 2020)

Dirk Goergen, * 1981
Head of Client Coverage Division (since 1 December 2018)

Dr Karen Kuder, * 1973
Chief Administrative Officer and Head of CAO Division (since 1 November 2022)

Angela Maragkopoulou, * 1976
Chief Operating Officer and Head of COO Division (since 1 January 2023)

Claire Peel, * 1974
Chief Financial Officer and Head of CFO Division (since 1 March 2018)

Executive Board in the reporting year:

Dr Stefan Hoops, * 1980
Chief Executive Officer and Head of Executive Division (since 10 June 2022)

Manfred Bauer, * 1969
Head of Product Division (since 1 July 2020)

Mark Cullen, * 1955
Chief Operating Officer and Head of COO Division (until 31 December 2022)

Dirk Goergen, * 1981
Head of Client Coverage Division (since 1 December 2018)

Stefan Kreuzkamp, * 1966
Chief Investment Officer and Head of Investment Division (until 31 December 2022)

Dr Karen Kuder, * 1973
Chief Administrative Officer and Head of CAO Division (since 1 November 2022)

Claire Peel, * 1974
Chief Financial Officer and Head of CFO Division (since 1 March 2018)

Dr Asoka Woehrmann, * 1965
Chief Executive Officer and Head of Executive Division (until 9 June 2022)

Report of the Supervisory Board

Dear shareholders,

the past financial year was not an easy year for DWS. After almost three years in light of the global COVID-19 pandemic, 2022 was characterised by an unfavourable environment for the entire industry: the conflict in the Ukraine, high inflation and interest rate hikes by the most important central banks put pressure on almost all asset classes. And the ongoing investigations regarding the so-called greenwashing allegations and the change of the CEO were also a challenge for DWS. Nevertheless, DWS demonstrated again sustainable operational stability and resilience and delivered a solid financial result. Thanks to its diversified business model and its expertise, DWS has achieved net flows in high-margin alternative investments as well as in Multi Asset and in ESG products. Nevertheless, DWS could not completely withstand the industry-wide trend of net outflows.

There were several changes in the Executive Board of DWS in the past financial year. With effect from 10 June, Dr Stefan Hoops became the new Chairman of the Executive Board and Chief Executive Officer (CEO) by resolution of the shareholders' meeting of the General Partner. He thus succeeded Dr Asoka Woehrmann, who had decided to resign his mandate in agreement with the company by the end of the Annual General Meeting on 9 June. There were further changes in the fourth quarter of 2022 and in January 2023: Dr Karen Kuder has been appointed to the Executive Board as Chief Administrative Officer (CAO) and Angela Maragkopoulou as Chief Operating Officer (COO). They took over the tasks of Mark Cullen, who left the Executive Board at the end of 2022 by mutual agreement. In addition, Stefan Kreuzkamp also left by mutual agreement at the end of 2022; his duties are assigned to Dr Stefan Hoops.

In its regular meetings and a two-day strategy meeting, the Supervisory Board intensively accompanied the review of the future strategic direction of the company, which usually occurs in the course of a CEO change, and fully supports the strategy and financial targets of DWS. DWS's approach to transform and grow to be among the market leaders remains valid. This still includes the flexibility to potentially pursue inorganic growth opportunities while continuing the focus on organic growth. This applies wherever appropriate opportunities arise for us to achieve economies of scale, expand our product expertise or extend our presence in growth regions. In the same way, we maintain our focus on Environmental, Social and Governance (ESG) topics. This is a topic that will continue to shape the industry.

And we also continue to support DWS's strategy to position itself as an independent listed company with its own processes, structures and systems tailored to an asset manager. At the same time, Dr Stefan Hoops reviewed the strategy with the entire Executive Board and as part of this review set a new emphasis. Following this process, DWS presented its further refined strategy, including its new financial targets, as part of a capital market day at the beginning of December. With this strategy, DWS aims to maintain its leading position in Germany, and to further address upside potential in Europe, Americas and Asia-Pacific. Furthermore, the multi-year transformation project to replace the existing complex IT infrastructure has executed the first successful technical migrations as part of the ongoing implementation phase. DWS is therefore still on track to build a standalone, state-of-the-art, scalable and efficient operating platform that meets the requirements of its fiduciary business.

New technologies have also helped DWS to successfully navigate the ongoing challenges posed by the COVID-19 pandemic. Driven by an enhanced understanding of alternative ways of work shaped by the pandemic, the Group has quickly adopted a modern work model for its employees. In addition, thanks to sophisticated formats such as digital conferences, virtual roundtables, live streaming and video on demand, DWS now interacts more flexibly than ever before with its clients and employees. These new digital capabilities were also used to make our third virtual Annual General Meeting as interactive and shareholder friendly as possible.

With respect to ESG, we as the Supervisory Board have dealt extensively with the regularly changing disclosure standards for the reporting of our products. Here we focused on the dynamic environment of regulatory framework conditions and customer requirements. In addition to these business ESG topics, we still had to deal in the meetings of our plenum and the Adhoc Committee – formed for this purpose already in 2021 – continually with the allegations regarding the Group's ESG disclosures made in 2021 by a former employee. When the Supervisory Board first became aware of this matter in March 2021, we immediately initiated, as a first step, an external, independent analysis and plausibility check of the allegations by a third-party company to prepare an adequate basis for our further evaluation. This analysis did not identify any misconduct on the part of the Executive Board or the employees of the company. The search of DWS´s offices by the Frankfurt public prosecutor's office at the end of May 2022 once again increased the public attention to the matter. The task of the Adhoc Committee is to ensure ongoing and efficient monitoring of the handling of the ESG matter by the Executive Board, in particular with regard to the requests for information from US and German authorities. The Adhoc Committee received regular and, if necessary, occasional reports from the Executive Board and the legal advisors appointed. To date, this has not resulted in any circumstances that would have required a separate examination or measures by the Supervisory Board that went beyond the investigations carried out.

As already reported last year, in February 2022 the Supervisory Board extended the mandate of the Adhoc Committee to include an examination with regard to the use of electronic communication systems by the Executive Board and assigned an investigation by an external legal advisor. This investigation was overseen by the Supervisory Board member Bernd Leukert in the Adhoc Committee and did not reveal any indications of breaches of duties by members of the Executive Board that go beyond the use of private electronic communication systems for business purposes contrary to company policies.

The Supervisory Board performed regularly and properly the tasks assigned to it by law, regulatory requirements, the company's Articles of Association and the Supervisory Board's Terms of Reference. In fulfilling our supervisory tasks, we monitored the General Partner and advised the Executive Board. Besides the monitoring of the ongoing business operations and our strategic consultations, our deliberations primarily centred on business events and transactions with significant relevance for the company and on key personnel-related matters.

In addition, we dealt with important questions relating to corporate management and organization as well as compliance and control matters and the governance standards implemented by DWS. The Executive Board regularly reported to us both in writing and verbally on significant matters relating to the company. Moreover, during 2022 there was a regular exchange of information between the Chairman of the Supervisory Board, the chairpersons of its committees and the Executive Board. Thus, we were continuously, comprehensively and without delay informed on business developments and the company's strategy, its corporate, financial and personnel planning, its profitability, the control framework and its environment, including the company's compliance and its risk, liquidity and capital management activities.

There was a total of 20 meetings of the Supervisory Board and its standing committees. Due to the COVID-19 pandemic, most of the meetings were held as video conferences. The average meeting participation rate in 2022 was above 96%.

Information on meeting participation for each member on the Supervisory Board is laid out in the following section. When necessary, resolutions were passed by circular procedure between the meetings.

Meetings of the Supervisory Board in Plenum

The Supervisory Board held ten meetings in 2022, in which we dealt with all matters of significant relevance to the company.

At our first meeting on 18 January 2022, we reviewed the 2021 full year financial performance and discussed plan deviations, current business developments, existing projections and agreed objectives. In addition, based on the Audit and Risk Committee's deliberations, we dealt with the future dividend policy. Furthermore, the Adhoc Committee provided us with comprehensive insights regarding the ongoing ESG matter, the respective status and the planned further course of action. With the support of the Nomination Committee, we dealt with the results of the Supervisory Board's self-assessment conducted with the assistance of an independent advisor and defined our priorities, measures and focus areas for the fiscal year 2022. In deep dive sessions, we also addressed the status of selected internal projects and deliberated on underlying risks and regulatory requirements. In addition, the Executive Board reported on the year-end process, various strategic initiatives, the DWS ESG Framework, the Executive Board Scorecard as well as developments in the Investment and Product Division, among other things.

At our extraordinary meeting on 18 February 2022, we discussed the conceptual design recommended by the Adhoc Committee regarding our accompaniment of the ongoing investigation concerning the use of electronic communication systems by the Executive Board. This conceptual design was resolved as recommended, and it was decided that the Adhoc Committee will deal with this matter in an ongoing way with the support of an external advisor. Additionally, the Adhoc Committee provided us with updates on further relevant matters regarding its work.

On 4 March 2022, we held another extraordinary meeting to review the 2021 Annual Financial Statements and Consolidated Financial Statements as well as the integrated Non-Financial Statement for 2021 and the Dependency Report as prepared by the Executive Board. A special focus in this regard was on ESG-related aspects. Based on the recommendation of the Audit and Risk Committee and following an in-depth discussion with representatives of the statutory auditor KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin (KPMG), we unanimously approved the Annual Financial Statements as well as the Consolidated Financial Statements. The review of the dependency report and the audit report of the auditor did not lead to any objections. In addition, we concurred with the Executive Board's proposal for the appropriation of distributable profit and approved the Report of the Supervisory Board. Furthermore, we discussed the 2022 Annual General Meeting format and resolved that this event will be conducted virtually due to the COVID-19 pandemic.

At our meeting on 21 April 2022, we dealt in particular with the preparation of the Annual General Meeting, which was conducted on 9 June 2022, and approved the proposals for the agenda, including the submission of the Compensation Report to the Annual General Meeting for approval. We also dealt in depth with ongoing investigations based on a detailed overview provided by the Adhoc Committee. In deep dive sessions, we further addressed internal projects as well as potential impacts of the Ukraine conflict on our business. Furthermore, the Executive Board reported on overall business development, strategic initiatives and the implementation status of the ESG Framework.

At our extraordinary meeting on 1 June 2022, the Supervisory Board discussed personnel changes at the Executive Board level. Effective from 10 June 2022, Dr Stefan Hoops became – by resolution of the shareholders' meeting of the General Partner – the new Chairman of the Executive Board as well as Chief Executive Officer (CEO). He thus succeeded Dr Asoka Woehrmann, who had decided to resign his mandate in agreement with the company by the end of the Annual General Meeting on 9 June 2022. A corresponding ad-hoc announcement was published in accordance with legal requirements.

At our extraordinary meeting on 27 June 2022, the Adhoc Committee and the Supervisory Board's legal advisor provided a detailed overview of the status of the ESG allegations and the ongoing requests for information from US and German authorities. In addition, we received a detailed update on the Supervisory Board's ongoing investigation regarding the Executive Board's use of electronic communication systems.

On 20 July 2022, we dealt with a debrief on the course and main topics of the Annual General Meeting. The review of the Interim Report 2022 was another part of our meeting and we dealt with business development and the firm's outlook for the second half of the year. In deep dive sessions, we also took a detailed look at ongoing investigations and internal projects. Additionally, we dealt with the DWS share price development. Furthermore, Dr Stefan Hoops gave his introductory presentation in his new role as CEO. He reported on his first weeks and presented his objectives and priorities. The Executive Board also informed about the strategy for further dealing with ESG matters. This includes the establishment of an ESG Task Force as a link between the parties involved to ensure a more consistent coordination and communication as well as a clearer split between strategy setting, implementation and control. Furthermore, we dealt intensively with personnel changes within the Executive Board, including the establishment of a separate Chief Administrative Officer (CAO) and a Chief Operating Officer (COO) role. In due course, Dr Karen Kuder as CAO and Angela Maragkopoulou as COO have been appointed to the Board by resolution of the responsible shareholders' meeting of the General Partner. They took over the duties of Mark Cullen, who left the Executive Board by mutual agreement on 31 December 2022.

On 29 and 30 September 2022, we held our annual strategy offsite with the participation of the Executive Board as well as representatives of the extended leadership team. Under the leadership of Dr Stefan Hoops, the Executive Board had reviewed the company's strategic alignment after the CEO change and we discussed jointly the reviewed and refocused strategy including its new financial targets, which have been presented at a Capital Markets Day at the beginning of December. We reviewed achieved strategic milestones and analyzed priorities for forward-looking strategic initiatives that address the challenges of the dynamic market and regulatory environment. In this regard, we discussed trends, risks and opportunities as well as financial and non-financial objectives in detail. Together with the Executive Board, we identified focus topics to help DWS realize and accelerate its transformation to a growth company. At our intensive workshop, we agreed on nine follow-up actions, which are since being implemented by the Executive Board. We are kept regularly updated on the status of implementation.

At our meeting on 20 October 2022, the Adhoc Committee reported comprehensively on the status of the ESG allegations. Additionally, we dealt with the debriefing on a major internal project that was in its final phase and discussed the future-oriented accompanying of the corresponding processes, among other things. Furthermore, the Executive Board presented the planned strategy for the Capital Markets Day taking place at the beginning of 2022. The Executive Board further reported on the overall business development, status updates of strategic and transformational initiatives, the classification of funds in accordance with the Sustainable Finance Disclosure Regulation (SFDR) as well as organizational changes within the Investment Division with the objective of achieving a more efficient, more flexible and more scalable investment platform.

At our extraordinary meeting on 24 November 2022, the Supervisory Board discussed further personnel changes at Executive Board level. We discussed the departure of Stefan Kreuzkamp, who had decided to resign his mandate in agreement with the company as of 31 December 2022 and whose duties on the Executive Board have been taken over by Dr Stefan Hoops.

At our last meeting of the year on 8 December 2022, we dealt with the Adhoc Committee's report on ongoing investigations. We further dealt with the outcome of the Capital Markets Day 2022 and the very positive feedback DWS received in this regard. In addition, the Executive Board reported on business development, the status of strategic initiatives and transformational projects, inorganic growth possibilities as well as opportunities and risks of digital assets. We also received an introductory presentation from the newly established CAO Division, including an overview of the organizational structure and priorities set. Furthermore, we addressed the Group's Financial Plan and approved the Declaration of Conformity in accordance with to Section 161 of the German Stock Corporation Act (AktG).

The Committees of the Supervisory Board

Audit and Risk Committee

The Audit and Risk Committee held seven meetings in 2022.

It supported the Supervisory Board in monitoring the accounting process and intensively addressed the Annual Financial Statements and Consolidated Financial Statements, as well as the Interim Report and the audit and review reports issued by the independent auditor. A particular focus of the committee's work was on dealing with ESG-related content as well as its representation within the reporting.

Within the context of financial reporting and accounting practices, the committee reviewed the valuation of goodwill and other intangible assets as well as the impairment testing of certain intangible assets. Further, the committee addressed service fees charged by Deutsche Bank AG and its subsidiaries and related governance processes.

The Audit and Risk Committee monitored the effectiveness of the Group's risk management system, in particular with regard to the internal control system and internal audit, while also taking into account the (potential) impacts of the COVID-19 pandemic, the conflict in the Ukraine, and DWS's transformation programs. It also reviewed the continuous improvement of the internal risk warning systems.

Further, the committee dealt with the Group's risk appetite statement and the overarching risk strategy, embedded in the Risk Management Framework. This also included dealing with the integration of sustainability risks into the framework. The committee regularly received reports on key risk and control metrics and compared DWS's risk exposure to the pre-defined thresholds. In addition, the committee dealt with the effects of the geopolitical and macroeconomic situation on the Group.

Separately, the committee dealt with the Annual Internal Audit Report and was regularly informed about the work of internal audit, the audit plan and its findings. It also reviewed the measures taken by the Executive Board to remediate deficiencies identified by the internal control functions and the statutory auditor and received regular updates on the status and progress made in this regard. Moreover, the committee dealt with the Annual Compliance Report and compliance matters, including anti financial crime matters (particularly anti money laundering), were discussed on a regular basis. Furthermore, the committee received regular updates on ongoing investigations.

The Audit and Risk Committee further monitored the internal procedures to meet the requirements to identify, approve and disclose material related party transactions pursuant to Section 111b of the German Stock Corporation Act (AktG). As the committee has been appointed by the Supervisory Board to resolve on reserved matters in relation to material related party transactions, it requested regular reports on the activities of the Related Party Transaction Council set up for support in this regard. In 2022, there were no material related party transactions for approval and disclosure under this provision.

The committee also dealt with the Group's ongoing implementation of the Investment Firm Regulation and Investment Firm Directive. Another focus of the committee's work was the continuous preoccupation with ESG-related regulatory initiatives (especially CSRD, SFDR and ESEF). Furthermore, the committee dealt with dividend development as well as the future dividend policy.

For 2022, the Audit and Risk Committee recommended a renewal of the audit engagement of KPMG. The deliberations took into account the results of the review of the statutory auditor's independence, which did not identify indications for any risk to independence. Additionally, it was considered that a renewal of the KPMG audit engagement is in line with applicable PIE regulation as well as with the DWS Corporate Governance and Proxy Voting Policy. Following KPMG's appointment by the Annual General Meeting, the Supervisory Board issued the mandate to the independent auditor and, with the support of the Audit and Risk Committee, set the amount of the auditor's remuneration. The audit engagement further comprised the Remuneration Report, the Dependency Report and a review to obtain limited assurance of the integrated non-financial group statement within the Summarized Management Report.

The Audit and Risk Committee dealt with the measures to prepare for the audit of the Annual Financial Statements and Consolidated Financial Statements for 2022, defined own areas of focus for the audit and approved a list of permissible non-audit services. The committee received regular reports on the engagement of accounting firms, including the statutory auditor, for non-audit-related services. In this context, the committee also monitored the compliance with the non-audit fee cap. In addition, KPMG regularly reported on the audit strategy as well as its status and the committee determined audit quality indicators to assess the quality of the audit.

Representatives of the independent auditor as well as the Chief Executive Officer (except for one meeting), the Chief Financial Officer, the Chief Administrative Officer (since November

2022), the Chief Operating Officer (except for one meeting), the Head of Internal Audit, the Group Controller and the Chief Risk Officer attended all ordinary meetings of the Audit and Risk Committee. When the statutory auditor was called in as an expert, the committee decided on the Executive Board's attendance. In one instance, the committee consulted with the statutory auditor without the Executive Board's participation.

Remuneration Committee

The Remuneration Committee held two meetings in 2022.

The committee supported the Supervisory Board in monitoring the appropriate structure of the compensation systems for DWS's employees and, in particular, the appropriate structure of the compensation for the Head of Compliance and for the employees who have material influence on the overall risk profile of the Group, i. e., Material Risk Takers. In this regard, the committee reviewed the DWS Compensation Policy and addressed changes to the compensation system. During the course of the year, the committee dealt with the Group's implementation of its new single compensation framework, specifically tailored for the DWS employees. Further, the committee continuously monitored the Group's cultural change program. With regard to corporate culture, the committee also dealt comprehensively with the results of respective employee surveys.

Moreover, the committee was regularly informed about significant regulatory developments and the anticipated impact on the Group's compensation framework as well as on the Remuneration Committee's area of responsibility. In this regard, the committee received regular reports on the status of the regulatory-driven implementation of and the Group's compliance with supervisory regulations.

Finally, the committee monitored the preparation for the 2022 year-end process as well as the governance regarding compensation decisions and received reports on how these are carried out in line with Group policies.

Nomination Committee

The Nomination Committee held one meeting in 2022 and supported the Supervisory Board's self-assessment. Specifically, the committee evaluated the results of this assessment, identified priorities and made recommendations on potential action items.

Adhoc Committee

The Adhoc Committee, established already in 2021, held 25 meetings in 2022. The Committee regularly and thoroughly covered the handling of the ESG matter by the Executive Board, in particular with regard to the requests for information from US and German authorities. The Adhoc Committee received regular and, if necessary, occasional reports from the Executive Board and the legal advisors appointed. In addition, the Adhoc Committee dealt with the Supervisory Board's investigation regarding the Executive Board's use of electronic communication systems.

Participation in Meetings

Participation in meetings of the Supervisory Board and its standing committees was as follows:

	Meetings Supervisory Board (# attendance / total #)	Meetings Audit and Risk Committee (# attendance / total #)	Meetings Remuneration Committee (# attendance / total #)	Meetings Nomination Committee (# attendance / total #)	Meetings overall (# attendance / total #)
Number of meetings	**10**	**7**	**2**	**1**	**20**
Thereof: virtual	5	5	2	1	13
Participation:					
Karl von Rohr (Chair)[1]	10/10 (100%)	–	–	1/1 (100%)	11/11 (100%)
Ute Wolf (Deputy Chair)[1, 2]	9/10 (90%)	7/7 (100%)	–	–	16/17 (94%)
Stephan Accorsini	9/10 (90%)	7/7 (100%)	–	–	16/17 (94%)
Annabelle Bexiga[1, 2]	8/10 (80%)	–	2/2 (100%)	–	10/12 (83%)
Aldo Cardoso[1, 2]	8/10 (80%)	7/7 (100%)	2/2 (100%)	–	17/19 (89%)
Minoru Kimura[1, 2]	10/10 (100%)	–	–	–	10/10 (100%)
Bernd Leukert[1]	10/10 (100%)	–	–	–	10/10 (100%)
Angela Meurer	10/10 (100%)	–	–	–	10/10 (100%)
Richard I. Morris, Jr.[1, 2]	10/10 (100%)	7/7 (100%)	–	1/1 (100%)	18/18 (100%)
Erwin Stengele	10/10 (100%)	–	2/2 (100%)	–	12/12 (100%)
Margret Suckale[1, 2]	10/10 (100%)	–	2/2 (100%)	1/1 (100%)	13/13 (100%)
Said Zanjani	10/10 (100%)	–	–	1/1 (100%)	11/11 (100%)

[1] Shareholders' representatives considered independent from the company and the Executive Board.
[2] Shareholders' representatives considered independent from the controlling shareholder.

Corporate Governance

The composition of the Supervisory Board and its committees is in accordance with good corporate governance standards and meets regulatory requirements. The work in the bodies was characterized by an open and intensive exchange and a trustful cooperation. The Chairman of the Supervisory Board and the chairpersons of its committees coordinated their work and consulted each other regularly and – as required – also on an ad-hoc basis to ensure the exchange of information required to perform the tasks assigned to the Supervisory Board and its committees by law, administrative regulations, the Articles of Association and the respective Terms of Reference.

At the meetings of the Supervisory Board, the committee chairpersons reported regularly on the work of the committees. From time to time the employees' representatives and the shareholders' representatives conducted separate preliminary discussions before the meetings of the Supervisory Board. At the beginning or end of the meeting of the Supervisory Board or its committees, discussions were regularly held without the participation of the Executive Board. In accordance with the Terms of Reference of the Audit and Risk Committee the Supervisory Board determined that Ms Ute Wolf, the Chairperson, and the committee members Mr Aldo Cardoso and Mr Richard I. Morris, Jr. fulfil the requirements of Section 100 (5) of the German Stock Corporation Act (AktG). The Chairwoman and all other shareholders' representatives on the Audit and Risk Committee have the required expertise in both financial accounting and in auditing.

Furthermore, the Supervisory Board determined that it has what it considers to be an adequate number of independent shareholders' representatives.

The Declaration of Conformity pursuant to Section 161 of the German Stock Corporation Act (AktG), was approved by the Supervisory Board on 8 December 2022. The text of the Declaration of Conformity can be found in section 'Corporate Governance Statement – Compliance with the German Corporate Governance Code'.

Training and Further Education Measures

In 2022, continuous training measures were conducted with the Supervisory Board in plenum and its committees to maintain and expand the required specialized knowledge of DWS as an organization and the impact of its regulatory environment and competitive situation. Further, the members of the Supervisory Board continued to build and enhance the required expertise to foster good corporate governance. Education measures took place both in form of introductory presentations prior to the deliberations of the Supervisory Board during its ordinary meetings and in separate dedicated training sessions.

Conflicts of Interest and Their Management

In the reporting year, no conflicts of interest were reported or otherwise apparent which would have to be reported to the General Meeting.

Annual Financial Statements, Consolidated Financial Statements, Integrated Non-Financial Group Statement and Dependency Report

KPMG has audited the Annual Financial Statements and the Consolidated Financial Statements, including the Accounting and the Summarized Management Report for the Annual and Consolidated Financial Statements for the 2022 financial year and the Dependency Report and issued in each case an unqualified audit opinion on 13 March 2023. The Auditor's Reports were signed by the Auditors Mr Fox and Mr Anders. Mr Fox was the Auditor responsible for the engagement.

Furthermore, KPMG performed a review to obtain a limited assurance in the context of the integrated non-financial group statement in the Combined Management Report and issued an unqualified opinion. For the Compensation Report KPMG issued a separate unqualified opinion.

The Audit and Risk Committee examined the documents for the Annual Financial Statements and Consolidated Financial Statements for 2022 as well as the Summarized Management Report including the integrated non-financial group statement and the Dependency Report at its meeting on 10 March 2023. The representatives of KPMG provided the final report on the audit results. The Chairperson of the Audit and Risk Committee reported on this at the meeting of the Supervisory Board on 13 March 2023. Based on the recommendation of the Audit and Risk Committee and after inspecting the Annual and Consolidated Financial Statements and the Summarized Management Report including the integrated non-financial group statement, the Supervisory Board agreed to the results of the audits following an extensive discussion at the Supervisory Board and with representatives of KPMG. The Supervisory Board determined that, also based on the final results of its inspections, there are no objections to be raised.

On 13 March 2023, the Supervisory Board approved the Annual Financial Statements and Consolidated Financial Statements presented by the Executive Board. The Supervisory Board concurred with the Executive Board's proposal for the appropriation of distributable profit.

DB Beteiligungs-Holding GmbH, a wholly owned subsidiary of Deutsche Bank AG, holds a 79.49% stake in DWS KGaA. As there is no control and/or profit and loss-pooling agreement between these two companies, the Executive Board prepared a report on the company's relations with affiliates (Dependency Report) for the period from 1 January 2022 to 31 December 2022, in accordance with Section 312 of the German Stock Corporation Act (AktG). The Dependency Report was audited by KPMG, the independent auditor appointed by the company. The independent auditor did not raise any objections and issued the following statement in accordance with Section 313 of the German Stock Corporation Act (AktG): "According to the results of our audit there are no objections to be made pursuant to Section 313 (4) of the German Stock Corporation Act (AktG) against the report of the Executive Board on relations with affiliated companies. We hereby issue the following unqualified audit certification in accordance with Section 313 (3) of the German Stock Corporation Act (AktG) on the report of the Executive Board on relations of DWS Group GmbH & Co. KGaA, Frankfurt am Main, with affiliated companies for the financial year 2022: To DWS Group GmbH & Co. KGaA, Frankfurt am Main: Based on our dutiful audit and assessment, we confirm that 1) the statements actually made in the report are correct, 2) the company's consideration for the legal transactions mentioned in the report was not unduly high, 3) the measures mentioned in the report do not speak in favour of an assessment that differs from that of the Executive Board." The dependency report and the audit report of the auditor were made available to the Audit and Risk Committee and the Supervisory Board. The review did not lead to any objections. Likewise, the Supervisory Board did not raise any objections against the declarations of the Executive Board concerning the relations to affiliates.

Personnel Developments

There were no changes in the Supervisory Board composition in 2022.

We would like to thank the Executive Board and DWS's employees for their continued strong commitment in an enduringly difficult environment and their contribution to a notwithstanding successful financial year.

Frankfurt am Main, 13 March 2023

For the Supervisory Board

Karl von Rohr
Chairman

Supervisory Board

Karl von Rohr
- Chairman of the Supervisory Board
since 3 March 2018
Frankfurt am Main

Ute Wolf
- Deputy Chairperson of the Supervisory Board
since 22 March 2018
Düsseldorf

Stephan Accorsini *
since 29 May 2018
Frankfurt am Main

Annabelle Bexiga
since 5 June 2019
Wellesley

Aldo Cardoso
since 22 March 2018
Paris

Minoru Kimura
since 10 August 2020
New York

Bernd Leukert
since 21 July 2020
Karlsruhe

Angela Meurer *
since 29 May 2018
Frankfurt am Main

Richard I. Morris, Jr.
since 18 October 2018
London

Erwin Stengele *
since 29 May 2018
Oberursel

Margret Suckale
since 22 March 2018
Tegernsee

Said Zanjani *
since 29 May 2018
Langgöns

* Employee representative

Standing Committees of the Supervisory Board

Audit and Risk Committee

Ute Wolf
- Chairperson

Stephan Accorsini *

Aldo Cardoso

Richard I. Morris, Jr.

Nomination Committee

Karl von Rohr
- Chairperson

Richard I. Morris, Jr.

Margret Suckale

Said Zanjani *

Remuneration Committee

Margret Suckale
- Chairperson

Annabelle Bexiga

Aldo Cardoso

Erwin Stengele *

* Employee representative

Report of the Joint Committee

Pursuant to Section 15 of the Articles of Association of DWS Group GmbH & Co. KGaA, the company has a Joint Committee, which consists of two members delegated by the shareholders' meeting of the General Partner and two members delegated from among their number by the shareholders' representatives on the Supervisory Board.

For the shareholders' meeting of the General Partner, Karl von Rohr and James von Moltke are appointed to the Joint Committee. Mr von Rohr is also appointed as the Chairman of the Joint Committee. For the shareholders' representatives on the Supervisory Board, two independent members, Ute Wolf and Minoru Kimura, are appointed to the Joint Committee.

The Joint Committee resolves in particular on the approval of certain transactions and management measures undertaken by the General Partner (e. g. group reorganizations and related contracts; acquisition and disposal of real estate or participations if the transaction value exceeds a certain threshold). In addition, the Joint Committee possesses a right of proposal with respect to the ratification of acts of management and with respect to the determination of the variable compensation of the Managing Directors of the General Partner (hereafter referred to as the members of the Executive Board). Further, the Joint Committee ratifies, with the support of the company's Audit and Risk Committee, the Performance Conditions relevant for the vesting and release of deferred DWS compensation awards granted to the members of the Executive Board.

In the past fiscal year, the Joint Committee convened three times and all members of the Joint Committee have participated in the deliberations and the proposals adopted in the meetings. Hereinafter the Joint Committee reports, pursuant to Section 19 (2) of the Articles of Association of the company, to the Annual General Meeting on its work:

At its first meeting of the year on 1 February 2022, the Joint Committee prepared the proposal for the variable compensation of the members of the Executive Board for the fiscal year 2021. The determination of the variable compensation is subject to the resolution of the shareholders´ meeting. Following a comprehensive evaluation and discussion of the target achievement in 2021 and the deferral structure of the compensation as well as the performance conditions for 2020 and 2021 awards, the Joint Committee unanimously agreed on the proposal for the variable compensation and conveyed its proposal to the shareholders' meeting of the General Partner where it was subsequently approved.

Focus topics of the meeting on 28 March 2022 were the 2022 objectives for the members of the Executive Board. The Joint Committee's deliberations addressed all compensation components and the corresponding reference levels, objectives, weighting as well as key measures and assessment criteria. After a detailed review, the Joint Committee unanimously agreed on the individual objectives 2022 and conveyed its proposal to the shareholders' meeting of the General Partner. The latter approved the proposal as presented.

At its third meeting on 14 July 2022, the Joint Committee dealt with the Supervisory Board's investigation regarding the use of electronic communication systems by the Executive Board. In addition, the implications in connection with a potential settlement of Deutsche Bank and DWS with the US Securities and Exchange Commission regarding the use of text-messaging were discussed.

Frankfurt am Main, 13 March 2023

For the Joint Committee of DWS Group GmbH & Co. KGaA

Karl von Rohr
Chairman

Joint Committee

Karl von Rohr
since 7 May 2018

Minoru Kimura
since 10 August 2020

James von Moltke
since 7 May 2018

Ute Wolf
since 23 April 2018

Our Shares

IFR Article 49 (1) (b)

DWS shares are listed in the Prime Standard on the Frankfurt Stock Exchange, which has the most stringent transparency and disclosure requirements of any exchange in Germany. The shares are also a component of the German SDAX, a market index composed of 70 small and medium-sized companies in Germany in terms of order book volume and market capitalisation. The index represents the 91st-160th largest publicly traded companies in Germany based on order book volume and market capitalisation.

The highest Xetra closing price for DWS shares in 2022 was € 38.92 reached on 14 January 2022 while the lowest closing price was on 12 October 2022 at € 23.30. During 2022, the share price posted a cumulative shareholder return of (8.2)% compared to a (27.3)% decrease in the SDAX. Based on the 200 million outstanding bearer shares, the market capitalisation of DWS KGaA was approximately € 6.1 billion on 31 December 2022.

Cumulative shareholder return in % in 2022

Investor Relations Activity

2022 was another eventful year for Investor Relations because of geopolitical developments, economic headwinds as well as DWS specific challenges.. To discuss and explain the progress made on our business strategy, we continued to actively engage with analysts, institutional and private investors.

Together with management, we again participated in several industry conferences and roadshows. In addition, we maintained regular contact with sell-side analysts, shareholders and investors.

Whereas the first half of 2022 consisted pre-dominantly of virtual investor meetings and Investor Relations specific events, we were able to attend investor conferences in person in the second half of 2022. During these meetings, a range of topics was covered such as the Group's strategic priorities, our M&A ambitions, financial targets and product innovation, particularly around ESG products. Implications of geopolitical events and our macroeconomic expectations as well as the financial outlook were frequently of interest.

On 7 December 2022, DWS KGaA hosted it’s Capital Markets Day in a hybrid format and presented its refined strategy and new financial targets for 2025 to analysts and investors. The presentations were followed by a live Question and Answer session.

Each quarter, we hosted a conference call to present our financial results to analysts, investors and other interested parties with relevant documents provided on our website (https://group.dws.com/ir/).

Research Coverage

At the end of 2022, a total of 21 brokers covered DWS shares, publishing regular commentary about the company. As of 31 December 2022, 11 brokers recommend to buy DWS's shares while 10 brokers recommend to hold the shares.

The average target share price was € 36.70 as of 31 December 2022.

Target price and rating as of 31 December 2022

Rank	Broker	Target Price (in €)	Rating
1	Santander	57.00	Buy
2	Morningstar	56.00	Buy
3	Kepler Cheuvreux	44.00	Buy
4	AlphaValue	42.80	Buy
5	ING	41.00	Buy
6	Keefe, Bruyette & Woods	39.00	Buy
7	Exane BNP Paribas	37.00	Buy
	Average	**36.70**	
8	Oddo BHF	36.00	Buy
9	Royal Bank of Canada	36.00	Buy
10	JP Morgan	34.30	Hold
11	Morgan Stanley	34.20	Hold
12	Barclays	34.00	Hold
13	Metzler	34.00	Buy
14	CIC Market Solutions	34.00	Buy
15	Societe Generale	33.50	Hold
16	Citi	32.50	Hold
17	Bank of America ML	32.00	Hold
18	Credit Suisse	32.00	Hold
19	Goldman Sachs	29.00	Hold
20	Jefferies	28.00	Hold
21	UBS	28.00	Hold

Annual General Meeting

DWS KGaA hosted its virtual Annual General Meeting on 9 June 2022. Holding the Annual General meeting again in a virtual format enabled us to protect the health of our shareholders, employees and service providers.

The Executive Board and Supervisory Board recommended a dividend payment of € 2.00 per share for the financial year 2021, which was approved at the above mentioned Annual General Meeting.

Financial Calendar 2023

Date	Event
2 February 2023	Preliminary results for the 2022 financial year with Investor and Analyst Conference Call
17 March 2023	Annual Report 2022
27 April 2023	First quarter 2023 results with Investor and Analyst Conference Call
15 June 2023	Annual General Meeting
26 July 2023	Interim Report 2023 with Investor and Analyst Conference Call
26 October 2023	Third quarter 2023 results with Investor and Analyst Conference Call

Shareholder Structure

GRI 102-5

DB Beteiligungs-Holding GmbH, which has its registered seat in Frankfurt am Main, Germany and is registered with the commercial register of the local court of Frankfurt am Main, Germany, under HRB 87504, is the largest shareholder of DWS KGaA. On 20 April 2018 DB Beteiligungs-Holding GmbH held 158,981,872 units or a 79.49% share in DWS KGaA. DB Beteiligungs-Holding GmbH is a wholly owned subsidiary of Deutsche Bank AG.

The second largest shareholder is Nippon Life Insurance Company with a 5% stake as notified to us in the voting rights announcement dated 22 March 2018.

We have not been made aware of any changes in this ownership as at 31 December 2022. DWS KGaA's free float amounts to 15.51%.

Share Liquidity and Key Data

IFR Article 49(1)(b)

The average daily trading volume of DWS shares was approximately 123,000 daily traded shares in 2022, with the highest level in June at approximately 256,000 daily traded shares on average.

Average daily trading volume in 2022

January	169,126	April	123,945	July	138,108	October	80,138
February	152,254	May	113,819	August	61,429	November	68,201
March	167,677	June	255,862	September	70,356	December	81,350

Source: Bloomberg, including German stock exchanges Xetra, Frankfurt, Stuttgart, Berlin, Düsseldorf and Munich.

Key data

Securities identification Number (WKN)	DWS100
Issuer	DWS Group GmbH & Co KGaA
International Securities Identification Number (ISIN)	DE000DWS1007
Public or private placement	Public
Governing law(s) of the instrument	German law
Ticker symbol	DWS
Trading segment	Regulated market (Prime Standard)
Indices	SDAX
Class of shares	No par-value ordinary bearer shares
Initial listing	23 March 2018
Initial issue price in €	32.50
Perpetual or dated	Perpetual
Original maturity date	No maturity
Issuer call subject to prior supervisory approval	No
Fixed or floating dividend/coupon	Floating
Existence of a dividend stopper	No
Convertible or non-convertible	Non-convertible
Write-down features	No
Number of shares as of 30 December 2022	200,000,000
Market capitalization as of 30 December 2022 (in € bn.)	6.1
Share price in € as of 30 December 2022	30.36
Cumulative Shareholder Return (since 30 December 2021) in %	(8.20)
Period high (1 January - 30 December 2022) in €[1]	38.92
Period low (1 January - 30 December 2022) in €[1]	23.30
Amount recognised in regulatory capital (in € million, as of most recent reporting date)	200
Accounting classification	Shareholder Equity
Link to the full term and conditions of the instrument (signposting)	https://group.dws.com/link/19af41867a3549429f3abce93f6b0424.aspx

[1] Xetra Closing Price.

Summarized Management Report

Summarized Management Report

About this Report

Content and Structure

GRI 102-45; 102-46; 102-49; 102-54; 102-55

Our Annual Report combines the financial and non-financial information necessary to thoroughly evaluate our performance and, as we are a German-listed asset manager, the content is primarily guided by the legal requirements of the German Commercial Code.

Since 2020, we have taken into consideration the recommendations of the International Integrated Reporting Framework. This framework focuses on both financial and non-financial value creation and promotes an holistic approach to corporate reporting.

KPMG AG Wirtschaftsprüfungsgesellschaft (KPMG AG) has audited our consolidated financial statements and summarized management report and has provided an unqualified audit opinion. In addition, KPMG AG has performed an independent limited assurance engagement on the sections in [square brackets].

Financial Information

The presentation of financial information and performance of the DWS KGaA and its subsidiaries complies with the requirements of International Financial Reporting Standards and, where applicable, the German Commercial Code, German Accounting Standards and the guidelines on alternative performance measures from the European Securities and Markets Authority.

With Regulation (EU) 2019/2033 (Investment Firm Regulation – IFR) and Directive (EU) 2019/2034 (Investment Firm Directive – IFD), which have been implemented in Germany's national law with the Investment Firm Act, a separate regulatory regime has applied to investment firms since 26 June 2021. Information in the text referring to specific IFR/IFD standards is marked with a reference to the respective IFR/IFD standard. This relates, in particular, to the information required to be disclosed by investment firms under Part Six of the IFR.

[Integrated non-financial Information]

To position the Group as an independent asset manager with a focus on sustainability we do not make use of the option of exemption by virtue of the non-financial report of Deutsche Bank according to Section 315b (2) German Commercial Code and will report under the Article 8 of Regulation (EU) No 2020/852 as an asset manager.

The integrated non-financial group statement is comprised of the non-financial information in this Annual Report and satisfies the requirements of Section 340i (5) in conjunction with Sections 315b, 315c and 289c to 289e of the German Commercial Code.

With regards to the applied reporting frameworks under Section 289d of the German Commercial Code, the reporting contents are oriented towards the Sustainability Reporting Standards of the Global Reporting Initiative and consider the United Nation's Sustainable Development Goals. Information in the text referring to specific GRI standards is marked with a reference to the respective GRI standard and summarized in the 'Supplementary Information – GRI Index'.

For details on our materiality assessment matrix please refer to the section 'Materiality Assessment' which will form the focus point of the integrated non-financial group statement and defines the limits of this statement.

In addition to the integrated non-financial group statement, we have published our separate Climate Report 2022 describing our climate-related ambitions and providing transparent disclosures on our climate action through our fiduciary and corporate activity. Our Climate Report 2022 follows the recommendations of the Taskforce on Climate-related Financial Disclosures.

[Materiality Assessment]

GRI 102-15; 102-29; 102-31; 102-44; 102-46; 102-47, 203-2

Our materiality assessment is primarily guided by the regulatory requirements of the German HGB. We considered those matters which were of high and very high business relevance to us and our potential impact on those topics.

Compared to previous years we conducted desk research to assess external sources and the activities of our peers. This year we used an artificial intelligence-automated ESG analytics platform to support our materiality assessment preparations. The automated ESG analytics platform monitors the ESG risk landscape and identifies relevant material ESG risks and opportunities to an organization from a double materiality as well as stakeholder perspective. We used a long list of potential material topics for financial institutions that was generated by the automated platform. This long list was first reviewed internally before parameters based on peer reports, news items and regulatory topics were added. Internal priorities, based on our 2021 material topics, were also applied. This resulted in the generation of a medium list comprising 31 topics. This medium list formed the basis of materiality assessment workshops that took place with key internal stakeholders and sustainability subject matter experts.

During these workshops, the participants were presented with the 31 topics and asked to assess their level of materiality based on business relevance to us and the potential impact we could have on those topics.The results of the workshops indicated that 17 out of 31 proposed topics were material for us in 2022.

This year, the three highest scoring material topics were client satisfaction, data privacy management and anti-financial crime (compared to sustainable finance and responsible investing, corporate and board governance and company performance last year). Only one topic, sustainability governance structure, was deemed new to this year´s list of material topics. There were two topics from last year that did not make this year´s material topic list, stakeholder management and human rights. Stakeholder management was not identified as material by the automated ESG analytics platform. Human rights was included on the medium list but was not considered as we do not have our own supply chain and instead are leveraging the procurement services of Deutsche Bank Group. However, the topic remains addressed from an investment standpoint within this Annual Report (refer to [Our Responsibility] - Our Investment Approach). The materiality assessment results were presented in internal meetings including to the GSC.

Board effectiveness was identified as material for financial and non-financial related topics. In our corporate engagements we seek to address such topics with investee companies. Similarly, we seek to ensure good corporate governance at the Group with the goal of ensuring accountability, fairness, and transparency for all stakeholders. To better meet the evolving requirements on asset managers in the sustainability transformation, we announced changes to our sustainability governance and structure. These changes include:

- Transformation of the GSC into a Committee of the Executive Board (Group Sustainability Committee) from January 2023
- Establishment of a Sustainability Oversight Office which aims to ensure effective sustainability governance throughout the organization and to support the Group Sustainability Committee
- Establishment of a Sustainability Strategy Team to support the CEO in the development of our sustainability strategy and to ensure that it is embedded within our corporate strategy

For additional information, the corporate governance processes are described in section 'Corporate Governance Statement' of the Annual Report.

In the table below we have mapped the material topics we identified in 2022 against the United Nations Sustainable Development Goals (SDGs). The identified SDGs on which we might have an impact are SDG 8: "Decent Work and Economic Growth", SDG 9: "Industry, Innovation and Infrastructure", SDG 10: "Reducing Inequality" and SDG 13: "Climate Action". The SDGs 8, 10 and 13 were selected during a workshop in 2019 with the time horizon 2030 as prescribed by the UN. In 2022, we held a workshop to reconfirm these SDGs and agreed that SDG 9 would be added to the previously recognised top three SDGs following the strategic announcements at the Capital Markets Day in December 2022.

Materiality table 2022

No.	Material topic[1]	Business relevance for DWS[2]	Impact of DWS impact materiality[2]	Relevant SDGs	Sustainability KPIs 2022[3]	Level of assurance[4]	Relevant sections in the Annual Report
1	Anti-Financial Crime	■■■■	■■■	8, 10			Compliance and Control - Anti-Financial Crime – Preventing Fraud, Bribery and Corruption
2	Attractive Employer	■■■	■■■	8, 10	Volunteer hours per employee Proportion of women – first management level Proportion of women – second management level	L L L	Our Responsibility - Entrepreneurial Spirit
3	Board Effectiveness	■■■	■■■	8, 10, 13			Our Strategy and our Market - Our Strategy Our Responsibility - Sustainable Action
4	Business Continuity	■■■	■■■	8			Risk Report - Non-Financial Risk
5	Business Ethics	■■■	■■■	8, 10			Compliance and Control - Business Ethics
6	Client Satisfaction	■■■■	■■■	8			Our Responsibility - Client Commitment
7	Climate Change	■■■	■■■	13	ESG AuM and ESG net flows Sustainability Rating – CDP Operational emissions (Scope 1, 2 and 3) Corporate engagements	R L L L	Our Responsibility - Sustainable Action
8	Company Performance	■■■	■■■	8, 9	ESG AuM and ESG net flows	R	Our Performance Indicators - Our Financial Performance Our Responsibility - Sustainable Action
9	Compliance Management	■■■	■■■■	8, 10, 13			Risk Report - Financial Risk Compliance and Control
10	Corporate Reputation	■■■	■■■	–			Risk Report - Non-Financial Risk
11	Cyber Security and Information Security	■■■	■■■	8			Compliance and Control - Data Privacy Management and Information Security
12	Data Privacy Management	■■■■	■■■	8			Compliance and Control - Data Privacy Management and Information Security
13	Diversity and Equal Opportunities	■■■	■■■	10	Proportion of women – first management level Proportion of women – second management level	L L	Our Responsibility - Entrepreneurial Spirit
14	Grievance Mechanisms and Remediation	■■■	■■■	8			Our Responsibility - Entrepreneurial Spirit Our Responsibility - Client Commitment
15	Responsible Investing and Financing	■■■	■■■■	8, 9, 10, 13	ESG AuM and ESG net flows Sustainability Rating – CDP Corporate engagements	R L L	Our Responsibility - Sustainable Action
16	Responsible Tax Practices	■■■	■■■■	10			Compliance and Control - Responsible Tax Practices
17	Sustainability Governance Structure	■■■	■■■■	8	Sustainability Rating – CDP Corporate engagements	L L	Our Responsibility - Sustainable Action

1 A detailed definition of the material topics can be found in the 'Supplementary Information – Materiality Assessment – Definition of Material Topics' section of this Annual Report.
2 Scoring (values are rounded): ■■■■■ – highest relevance / impact, ■■■■ – very high relevance / impact, ■■■ – high relevance / impact, ■■ – limited relevance / impact, ■ – low relevance / impact.
3 A detailed description of the sustainability KPIs can be found in the 'Our Responsibility – Sustainable Action' section of this Annual Report.
4 R – audit procedures to obtain independent reasonable assurance / L – audit procedures to obtain independent limited assurance.

Non-financial risks are monitored through dedicated risk frameworks and processes. A more detailed description of our risk management process can be found in the 'Risk Report'. After application of the net method to determine risks subject to disclosure according to HGB, there are no net risks that are highly probable and which result or will result in severe adverse impacts on the reported aspects. Reportable relations to the amounts of the Consolidated Financial Statements have not been determined.

Corporate Governance Statement pursuant to Sections 289f and 315d of the German Commercial Code

In the declaration on corporate governance we follow the transparency requirements of the German Corporate Governance Code.

The Group's Corporate Governance Statement according to Sections 289f and 315d of the German Commercial Code is available in section 'Corporate Governance Statement' of this Annual Report, which is available at https://group.dws.com/corporate-governance/corporate-governance-report/ as PDF.

Compensation Report pursuant to Section 162 of the Stock Corporation Act

The Compensation Report for the reporting period and the auditor's report pursuant to Section 162 of the Stock Corporation Act (Aktiengesetz – AktG), the applicable compensation system pursuant to Section 87a of the Stock Corporation Act and the resolution pursuant to Section 113 (3) of the Stock Corporation Act on the compensation of the Supervisory Board, is available in the section 'Compensation Report' of this Annual Report, which is available at https://group.dws.com/ir/reports-and-events/annual-report/ as PDF.

Data and Presentation

GRI 102-45; 102-46; 102-50; 102-52

All information and bases for calculation in this Annual Report are based on national or international standards for financial and non-financial reporting. Internal control mechanisms are designed to ensure the reliability of the information presented in this Annual Report.

The reporting period is the 2022 business year, covering the period from 1 January 2022 to 31 December 2022.

On 10 March 2023, the Executive Board prepared the consolidated financial statements, submitted them to the Supervisory Board for review and approval, and released them for publication.

The Annual Report is published each year in English and German and the German version is the binding and prevailing version.

Our scope of consolidation comprises DWS KGaA, with its headquarters in Frankfurt am Main, Germany, and all of its fully consolidated subsidiaries. Shares in joint ventures and associated companies are accounted for, if material, using the Equity method in our consolidated financial statements and are thus not included in the scope of consolidation. DWS KGaA does not have any branches of its own but has established 24 active branches within five of its subsidiaries. These branches mainly provide distribution and supporting services.

Our accompanying consolidated financial statements are stated in Euro (EUR) the presentation currency of the Group except when otherwise indicated and are rounded to the nearest million. Due to rounding, numbers presented throughout this Annual Report may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures. "N/A" means not applicable.

With the exception of the Cash Flow Statement, we apply to all numbers the "positive as normal" convention, with all numbers being considered positive. The "direction of flow" is determined by the label and inflow numbers will include labels such as fee and interest income. Outflow line items will have labels such as fee expense, compensation and benefits or expenses.

We have considered the war in Ukraine and the sanctions on Russia and their impact on our financial and integrated non-financial information. Further details on the related risks, the estimated and expected impact on the financial and the non-financial information are contained in the 'Risk Report' and notes '02 – Significant Accounting Policies and Critical Accounting Estimates' and '09 – Financial Instruments'.

For an explanation of the abbreviations and technical terms used in this Annual Report, please refer to the section 'Supplementary Information – Glossary'. In addition, and throughout the Annual Report, gender-specific terms may be used to ease the text and reading flow. Whenever a gender-specific term is used, it should be understood as referring to all genders and does not contain any judgment.

External Audit and Evaluation

GRI 102-56

KPMG AG has audited our consolidated financial statements and summarized management report and has provided an unqualified audit opinion. The audit of our consolidated financial statements, including the notes, is based on the similarly audited financial statements of our companies. In addition, KPMG AG has performed an independent limited assurance engagement on the sections in [square brackets].

The Independent Practitioner's Reports can be found in the 'Consolidated Financial Statements – Independent Auditor's Report'.

Information referred to as additional information, as well as references to DWS and external websites and the references to the respective GRI or IFR/IFD standard, are not part of the information audited by KPMG AG.

Forward-looking Statements

This Annual Report contains forward-looking statements. Forward-looking statements are statements that are not historical facts; they include statements about our beliefs and expectations and the assumptions underlying them. These statements are based on plans, estimates and projections as they are currently available to the management of DWS Group GmbH & Co. KGaA. Forward-looking statements therefore speak only as of the date they are made, and we undertake no obligation to update any of them in light of new information or future events.

By their very nature, forward-looking statements involve risks and uncertainties. A number of important factors could therefore cause actual results to differ materially from those contained in any forward-looking statement. Such factors include the conditions in the financial markets in Germany, in Europe, in the United States and elsewhere from which we derive a substantial portion of our revenues and in which we hold a substantial portion of our assets, the development of asset prices and market volatility, the implementation of our strategic initiatives, the reliability of our risk management policies, procedures and methods, and other risks.

Who We Are

GRI 102-2; 102-4; 102-6; 102-7; 102-9; 102-16

We aspire to be one of the world's leading asset managers with € 821 billion of assets under management (as of 31 December 2022). We are headquartered in Germany with approximately 3,800 employees globally and we provide our clients worldwide access to liquid and illiquid asset classes and a range of active, passive and alternative investment capabilities.

We serve a diverse client base of retail and institutional investors globally and we have a strong presence in our home market in Germany. These clients include large government institutions, corporations and foundations as well as individual investors. As a regulated asset manager, we act as a fiduciary for our clients, and we are conscious of our societal impact. Responsible investing has been a key part of our actions for more than twenty years, because it serves the best interests of those who entrust us to manage their assets.

We offer individuals and institutions access to our investment capabilities across all major asset classes in active equity, fixed income, cash, multi asset and systematic and quantitative investments as well as passive investments including our Xtrackers range and alternative investments. Our alternative investments include real estate, infrastructure, liquid real assets and sustainable investments. In addition, our solution strategies are targeted to client needs that cannot be addressed by traditional asset classes alone. Such services include insurance and pension solutions, asset-liability management, portfolio management solutions and asset allocation advisory.

Our product offerings are distributed across EMEA, the Americas and APAC through our global distribution network. We also leverage third-party distribution channels, including Deutsche Bank.

Our Strategy and our Market

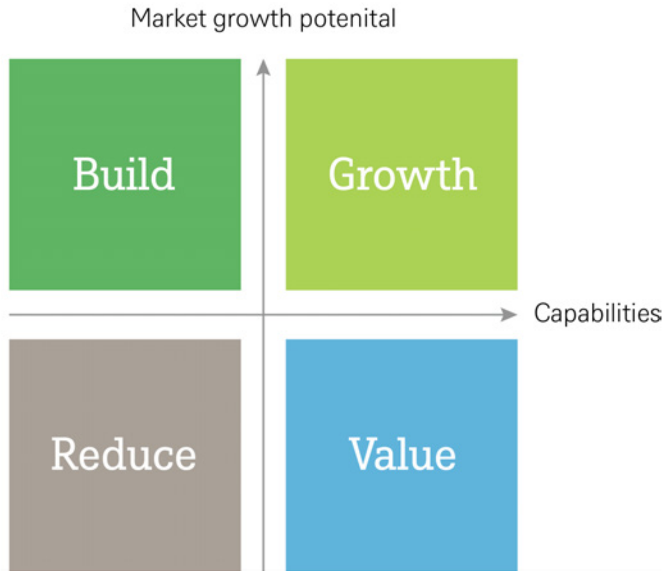
Our Strategy

GRI 102-15; 102-16; 102-20

With the market environment becoming increasingly uncertain and client expectations evolving, we refined our strategy with the goal of growing long-term shareholder value. We aim to maintain our leading position in Germany and to further capture upside potential in Europe by building additional partnerships, growing our Passive business that includes our Xtrackers brand and leveraging our Alternatives capabilities to participate in the European transformation. In the Americas, we aim to expand our Passive and Alternatives business, and in Asia Pacific, we want to focus on strategic partnerships. Investments into growth areas will be self-funded by re-allocation of resources. Within our strategy, we remain committed to sustainability with a focus on climate and stakeholder engagement.

We also continuously evaluate opportunities in the individual business areas on group level. These opportunities are assessed as part of our strategic review and the budgeting process. This resulted in assigning our lines of business into four key strategic clusters categorised by the differentiation of our capabilities and market growth potential: Growth, Value, Build and Reduce. For a wider assessment of business outlook, opportunities and risks, please refer to 'Outlook – DWS Group'.

Disciplined portfolio optimisation



Growth

We see our strength and growth potential in Passive and Alternatives.

Our Passives business – built around the Xtrackers brand – continues to point to long-term growth prospects and profitability, provided sufficient scale is in place for a given product segment. Building on our franchise and European business, we decided to invest in a US growth plan including sustainability, thematic and active ETFs. Further, we see a strong demand for mandates in APAC. Therefore, we want to expand tailor-made solutions in our mandates business. In addition to regional growth, we see opportunities for bespoke Passive solutions to outperform broad index replication.

We see further growth potential in Alternatives driven by increased demand from retail investors and higher supply by asset managers increasingly replacing bank lending in select areas of the market. In particular, we aim to facilitate the European transformation by bridging the gap between capital demand and supply with investment solutions that include transition to net zero, re-organisation of supply chains and digital business models.

Examples of Progress

Xtrackers has been successful in improved time-to-market and capacity for new product launches. In 2022, we succeeded in growing the number of annual UCITS fund launches and fund repositionings. We continued to increase the number of our US 1940 Act fund launches and further expanded our mandates business.

In Alternatives we focused on our real estate and infrastructure capabilities. In the United States, we launched a new real estate fund, and in Europe, we launched a new sustainable infrastructure growth fund.

Value

Under Value we include Equity, Multi-Asset and Fixed Income.

In Equity, we have capabilities in Equity Income, Global Equity and Small Mid Cap, giving us a platform for growing Thematic Equity and making progress on our ESG funds. In Multi-Asset, we want to build on our total return unconstrained strategies and solutions capabilities, aiming to develop a modular investment approach to achieve more scale. In Fixed Income we observe a rising interest rate environment, resulting in increased demand. In particular, we focus on corporate credit, Asian bonds and Short Duration, where we are well-positioned to pursue further growth.

Examples of Progress

We have delivered on our priority to achieve good investment outcomes. To this end, a large share of products in our Active portfolio is outperforming their respective benchmarks over a five-year period – what we refer to as “alpha” in Active portfolio management.

Furthermore, we continued to optimise our product portfolio by merging or closing several funds to deploy our resources more efficiently.

Build

To leverage digital trends, we aim to further build out our digital capabilities. Therefore, we established a new team in the Product Division to work across the firm and translate digital trends into new digital products and solutions. The team will focus on two topics: Asset Management-as-a-Service and Digital Assets.

Our strategy on Asset Management-as-a-Service or integrated asset management solutions is based on our belief that investment funds will be distributed by digital means. We intend to improve the integration of our services into the offerings of our distribution partners. Embedded finance has already been established for several other financial services and we see embedded asset management as the next step in this evolution. We will need to build a modular Asset-Management-as-a-Service offering which can be scalable and integrated via Application Programming Interfaces.

Our Digital Assets strategy is based on the conviction that our economy will become increasingly tokenised. The resulting changes in market structure should enable asset managers to utilize a new blockchain infrastructure, build new products, and reach new clients. In particular, we are exploring how to bring traditional asset management products on-chain, how to address the market need for a Euro stablecoin, how to provide access to cryptocurrencies, and how to become a tokenisation provider in the new token economy through organic investments and partnerships.

Reduce

To fund our investments into Growth areas, we intend to reallocate financial resources from other parts of the business. We identified several cost-levers to create run rate efficiencies without impacting our business including removal of management layers, divesting from sub-scale businesses, and business optimisation.

Examples of Progress

One example is our strategic partnership with BlackFin Capital Partners enabling us to continue to benefit more efficiently from what we anticipate will be growth opportunities in the platform market.

Key Enablers

We identified five key enablers supporting the execution of our strategic objectives:

Partnerships	Expand distribution partnerships
Deutsche Bank	Standalone Operating and Corporate Governance Model while Leveraging Divisional Capabilities
Technology	Enable business by migrating to cloud and streamlining data management
High Performance Culture	Create diverse culture to drive strong performance for our clients
Management Team	Build on diversified management team with focus on execution

Partnerships

We rely on a trusted partner network, with long-standing partnerships both in our German home market and in other regions. Distribution partners are essential if we are to expand our global reach and achieve a higher-margin wholesale segment.

As one example, in 2022, we formed a strategic alliance with KB Asset Management Co., Ltd, the asset management arm of Korea's largest financial group KB Financial Group to jointly identify and develop business opportunities in Korea's asset management industry.

Deutsche Bank

We aim to continue to leverage our collaboration with Deutsche Bank to benefit from their access to corporate clients and their strong retail distribution network. Deutsche Bank can also provide access to structuring capabilities and private market transactions.

Technology

Our technology advancements should improve efficiencies by reducing cost and offering our businesses more flexibility. We have a multi-year data platform improvement plan which will include implementing cloud-ready services. This should also simplify the storage and distribution of data, making it more accessible to our internal stakeholders as well as making it more consistent and easily accessible by all relevant systems. We would expect that these initiatives improve our use of data and reduce the costs of collection, reconciliation and storage.

High Performance Culture

We are fully committed to strengthening our positive performance culture by seeking to attract, develop, and retain top talent. For further details, please reference to 'Our Responsibility – Entrepreneurial Spirit'.

Management Team

The Executive Board manages DWS KGaA and oversees the Group's strategy. For further details on our Executive Board and corporate governance, please refer to the section 'Corporate Governance Statement'.

Internal Management System

In December 2022 and as part of the refined strategy, we announced new medium-term financial targets that we aim to deliver over the next three years:

- We remain committed to creating shareholder value, reflected in the introduction of an earnings per share target.
- We remain disciplined on cost which is why we keep measuring and controlling our adjusted cost-income ratio.
- Our AuM growth strategy will focus on Passive and Alternatives.

Financial key performance indicators (medium-term to 2025)

Earnings per share
€4.50 in 2025

Adjusted CIR
<59% in 2025

Passive AuM growth[1]
>12% (CAGR 2022-2025)

Alternatives AuM growth
>10% (CAGR 2022-2025)

Targets assuming stable market conditions.
[1] Including our Xtrackers brand

Earnings per share are computed by dividing net income (loss) attributable to our shareholders by the average number of common shares outstanding during the year. The average number of common shares outstanding is defined as the average number of common shares issued.

Adjusted CIR is based on adjusted costs and adjusted revenues. Adjusted costs is an expense measure adjusted for litigation, restructuring, severance costs, impairment of goodwill and other intangible assets as well as for transformational charges and other material non-recurring expenses that are clearly identifiable one-off items. Adjusted revenues present net interest and non-interest income excluding non-recurring items that are clearly identifiable one-off items, such as disposal gains.

AuM growth is defined as the CAGR over the period 31 December 2022 to 31 December 2025.

In addition, we guided on further financial measures. These included a targeted payout ratio of 65 percent from 2025 onwards and subject to capital commitment to organic and inorganic growth initiatives, we expect to propose an extraordinary dividend of up to € 1 billion in 2024.

For 2022, our financial performance is measured and discussed based on our Internal Management System as disclosed in our DWS Annual Report 2021. As financial key performance indicators we targeted an adjusted CIR of 60% and net flows of more than 4% (as % of beginning of period AuM on average in the medium term) in the medium term to 2024. The way in which adjusted CIR and net flows are calculated and the respective results for 2022 are presented in 'Our Performance Indicators – Our Financial Performance'.

Sustainability

We are further refining our approach regarding sustainability to better meet the evolving needs of our stakeholders - most importantly our clients. In this context, we remain committed to sustainability with a focus on climate and stakeholder engagement.

To mitigate climate change, transformational change is required across all parts of the real economy. Reflecting on our responsibilities as an asset manager in this transformation, we are committed to supporting our clients in managing this change by providing our expertise and bespoke investment solutions. Further information is provided in section 'Our Responsibility – Sustainable Action – Our Impact on Climate Change'.

As an integral part of our overarching business strategy, our sustainability strategy is anchored around four strategic priorities:

Corporate Transformation

We continue seeking to increase the level of sustainability associated with our activities throughout our organisation.

ESG in the Investment Process

While having already built-up strong capabilities, we seek to further embed ESG considerations into our investment process, that are designed to improve the assessment of the future expected risk and return of a security.

Innovative and Sustainable Investment Solutions

We seek to launch new and innovative ESG products and solutions across asset classes to meet the requirements of our clients. At the same time, we acknowledge a more differentiated client demand as well as further regulatory clarifications and, therefore, we intend to launch both ESG and non-ESG new products.

Stakeholder Engagement

GRI 102-42; 102-43

We seek to take a holistic and systematic approach to engagement as we consider engagement with key stakeholders across the entire investment value-chain e.g., clients, investees, index providers and policy makers as the key driver for transformation.

For further information please refer to the sections 'Our Responsibility – Sustainable Action' and 'Corporate Governance Statement – Sustainability Governance'.

[Sustainability KPIs]

Our sustainability strategy is underlined through the following sustainability KPIs which we will track in 2023.

Sustainability key performance indicators from 2023

KPI	Ambition from 2023
ESG AuM[1]	Continue to grow our ESG AuM through a combination of flows into existing products, flows into new products and supporting the transfer by existing clients of their assets from non-ESG products into ESG products
Scope 1 and 2 operational emissions reduction	Achieve a 46% reduction of in-scope operational emissions by 2030 compared to base year 2019 (aligned to NZAM commitment)
Scope 3 operational emissions reduction (travel)	
Scope 3 portfolio emissions reduction	Achieve a 50% reduction in WACI adj. related to Scope 1 and 2 portfolio emissions by 2030 compared to base year 2019 (aligned to NZAM commitment)
Sustainability rating	Achieve a CDP (Climate Change) B rating or better by 2024
Proportion of women	Achieve 32% of positions at the first management level below the Executive Board held by female executives and 33% at the second management level below the Executive Board by 2024
Volunteer hours per employee	Perform 1.5 hours of volunteering on average per employee by 2024
Corporate engagements	Participate in 475 or more corporate engagements per annum by 2024

[1] For details on ESG product classification, please refer to 'Our Responsibility – Our Product Suite'.

Our sustainability KPIs have changed compared to 2022. ESG Net Flows will no longer be reported to align our sustainability KPIs with the AuM focus of our medium-term financial KPIs. Our commitment to net zero has been reflected in an adjustment to our operational emissions KPIs and the introduction of a new KPI for portfolio emissions aligned to our 2030 interim net zero targets.

For an overview of our 2022 sustainability KPI results please refer to 'Our Responsibility – Sustainable Action'.

Economic and Competitive Environment

Global Economy

The global economy recovered further from the pandemic shock in 2022 but also encountered significant new challenges. By far the most prominent was the Russian invasion of Ukraine, which significantly increased economic and geopolitical uncertainty. Energy prices soared, putting upward pressure on inflation in most industrialized countries. Higher inflation reduced growth expectations around the globe. The COVID-19 pandemic also continued to have a negative impact. China's zero-COVID-19 strategy became another obstacle to global growth.

In particular, Europe's high dependence on Russian energy came to the fore. Many observers feared a severe recession in Europe. However, EU members managed to break away from Russia and its energy supplies much faster than most had expected. Due to massive government support measures, private consumption held up despite record high inflation.

The increase in energy and food prices was particularly strong and underlying inflationary pressures broadened over the course of the year, taking the core inflation rate in the Eurozone up to 5.2% year-on-year in December. The rise in inflation caused the European Central Bank to abandon its very expansionary monetary policy in 2022. With inflation rising fast, net asset purchases funded by quantitative easing were stopped. This was followed by a first interest rate increase in July. By the end of the year, the ECB had raised key interest rates by 250 basis points, taking the deposit rate up to 2.0% in December 2022.

In the US the first half of 2022 was marked by declining economic growth as special factors such as the running down of high inventories, elevated imports and a decline in residential investments outpaced very robust private demand which was still fuelled by the previous year's extremely generous pandemic support payments. This strong demand further stoked inflationary pressures. A major factor behind the resilience of private demand appeared to be very tight labour markets; the demand for labour significantly outstripping supply, keeping wage growth at multi-decade highs. The Fed reacted to these inflationary pressures by aggressively increasing interest rates from the first quarter of 2022 by 4.25% during the year.

The Japanese economy recorded a moderate upward trend over the course of the year 2022, mainly driven by a recovery in private consumption. After price increases accelerated over the course of the year, the Japanese central bank scaled back its measures to fix the long-term yield curve at the end of the year.

Emerging Markets Asia (excluding China) saw a strong recovery in growth in 2022, mostly because of post COVID-19 normalization. Inflation rose almost everywhere in the region due to energy and/or food price pressures, but the absence of strong demand pressure from wages or fiscal expansion meant that core inflation rates remained moderate. For the same reason there was no need for marked central bank tightening.

Most Asian countries also felt the negative effects from China's economic slowdown in 2022. There were various reasons for that slowdown such as severe policy-induced downward adjustment in specific parts of the real estate sector, the COVID-19 policy that weighed heavily on growth and uncertainty over the future path of Chinese politics after the Communist Party congress in October. In December 2022, the surprisingly bold and rapid turnaround in COVID-19 policy in China, from the previous strict restrictions towards full-scale easing, improved sentiment and the outlook for the country. However, with substantial uncertainty and voluntary social distancing due to health risks after the liberalization of COVID-19 policy, this has continued to weigh strongly on the service sector during December.

Asset Management Industry

In 2021 the asset management industry reported record growth in assets under management on the back of buoyant markets. In contrast, the asset management industry in 2022 was challenged by volatile markets, impacted by: Russia's invasion of the Ukraine, economic uncertainty, rising inflation, and the continuing spectre of COVID-19. Assets under management declined over the year and in the funds market, inflows turned to outflows in many asset classes as investor confidence faded and uncertainty increased. ESG investments remained a growth area (source: Broadridge GMI, 31 December 2022) with institutional allocations and fund inflows into ESG categories being recorded, despite the general market decline. However, while the mainstreaming of ESG continued, the industry was beset by concerns of greenwashing as asset managers and investors struggle with divergent terminology, new regulation, and data limitations.

Investors have looked to gain market access via cost-effective liquid ETFs and higher returns and diversification from alternative and private market strategies.

New technology has continued to be pivotal to product innovation and greater customisation as well as being an important lever for asset managers looking to reduce costs and increase efficiency in the current less favourable investment environment.

DWS Group

As a global asset manager with diverse investment capabilities that span traditional active and passive strategies, as well as alternatives and bespoke solutions, we were well positioned to address the aforementioned industry challenges and to capture market opportunities. By anticipating and responding to investor needs, we aspired to be the investment partner of choice and to create sustainable value for our global client base.

As markets continued to be challenging, we were able to offer clients a comprehensive range of investment solutions from our global investment platform covering all major asset classes and investment styles.

With a dynamic range of alternative investments including real estate, infrastructure, liquid real assets, and sustainable investments, we provided products to our clients with higher return expectations in line with their long-term investments objectives.

Given the global presence of our passive investment platform, we were well positioned to take advantage of the continuing shift to passive investments, offering passive mutual funds, mandates and Exchange Traded Funds (ETFs). Our Xtrackers platform displayed a solid European market share as provider of ETFs and other Exchange Traded Products being within the Top 3 European ETF provider (ETFGI, 31 December 2022).

We recognized growing investor demand for wider integration of ESG as well as impact investment strategies, particularly as investors increasingly focused on issues such as climate change. We believe that our expertise and long experience in sustainable investing along with our increased range of products assisted us to further protect and grow our clients’ assets.

Our Performance Indicators

Our Financial Performance

GRI 201-1

Despite ongoing market uncertainties, we reported essentially flat revenues in 2022. Profit before tax was lower than in the prior year mainly due to an impairment of an intangible asset and the expected increase of investment into our transformation. These changes resulted in an adjusted cost-income ratio of 60.6%. Due to our diversified business, we were able to achieve positive net flows in some of our asset classes, however overall net flows were € (20) billion in 2022.

Alternative Performance Measures

Alternative performance measures

	2022	2021
Assets under management (in € bn.)	**821**	**928**
Thereof: ESG AuM (in € bn.)	117	115
Net flows (in € bn.)	**(20)**	**48**
Thereof: ESG net flows (in € bn.)	1	19
Management fee margin (in basis points (bps))	28.1	27.8
Adjusted revenues (in € m.)	2,683	2,720
Adjusted costs (in € m.)	1,625	1,580
Cost-income ratio (in %)	68.1	60.1
Adjusted cost-income ratio (in %)	**60.6**	**58.1**
Adjusted profit before tax (in € m.)	**1,057**	**1,140**

The alternative performance measures are used to judge the Group's historical or future performance and financial position but are not recognised under generally accepted accounting principles. These include assets under management and net flows, which are important key performance indicators to evaluate revenue potential and business development. In addition, non-recurring items are excluded from net revenues or total non-interest expenses in order to be able to review the revenue and cost development over longer periods.

Our management uses APM as supplemental information to develop a fuller understanding of the development of our business and the ability to generate profit. These APM should only be considered in addition to net income or profit before tax as measures of our profitability. Similar APM are used by our peers within the asset management industry, but these may be calculated differently and may not be comparable to the APM we use, even if the names of such APM suggest that they are similar.

Assets under management (AuM) means assets (a) we manage on a discretionary or non-discretionary advisory basis; and including where we are management company and portfolio management is outsourced to a third party (b) a third party holds or manages and on which we provide, on the basis of contract, advice of an ongoing nature including regular or periodic assessment, monitoring and / or review. AuM represent both, collective investments (including mutual funds and exchange-traded funds) and separate client mandates. AuM are measured at current market value based on the local regulatory rules for asset managers at each reporting date, which might differ from the fair value rules applicable under IFRS. Measurable levels are available daily for most retail products but may only update monthly, quarterly or even yearly for some products. While AuM do not include our investment in Harvest Fund Management Co., Ltd, they do include seed capital and any committed capital on which we earn management fees.

Net flows represent assets acquired or withdrawn by clients within a specified period, as well as the difference in the amount of assets on which we provide advice over the period. It is one of the major drivers of changes in AuM.

Management fee margin is calculated by taking the management fees and other recurring revenues for a period, divided by average AuM for the same period. Annual average AuM are generally calculated using AuM at the beginning of the year and the end of each calendar month (i. e. 13 reference points for a full year).

Adjusted revenues present net interest and non-interest income excluding material non-recurring income items that are clearly identifiable one-off items, such as disposal gains. We use this metric to show revenues on a continuing operating basis, in order to enhance comparability against other periods.

Reconciliation of adjusted revenues to total net interest and non-interest income

in € m.	2022	2021
Net interest and non-interest income	**2,712**	**2,720**
Non-recurring disposal gains	(30)	0
Adjusted revenues	**2,683**	**2,720**

Adjusted costs are an expense measure we use to better distinguish between total costs (non-interest expenses) and our ongoing operating costs. It is adjusted for litigation, restructuring, severance costs, impairment of goodwill and other intangible assets as well as for transformational charges and other material non-recurring expenses that are clearly identifiable one-off items.

Reconciliation of adjusted costs to total non-interest expenses

in € m.	2022	2021
Non-interest expenses	**1,847**	**1,635**
Litigation	(26)	(1)
Restructuring activities	0	(2)
Severance costs	(37)	(21)
Impairment of goodwill and other intangible assets	(68)	0
Transformational charges	(58)	(30)
Other material non-recurring expenses	(32)	0
Adjusted costs	**1,625**	**1,580**

Cost-income ratio is the ratio of our non-interest expenses to our net interest and non-interest income.

Adjusted cost-income ratio is the ratio of our adjusted costs to our adjusted revenues.

Adjusted profit before tax is calculated by adjusting the profit before tax to account for the impact of the revenue and cost adjustment items as explained above.

Results of Operations

			Change from 2021	
in € m. (unless stated otherwise)	2022	2021	in € m.	in %
Management fees income	3,719	3,590	129	4
Management fees expense	1,263	1,219	44	4
Net management fees	**2,456**	**2,371**	**85**	**4**
Performance and transaction fee income	134	229	(95)	(42)
Performance and transaction fee expense	8	17	(9)	(52)
Net performance and transaction fees	**125**	**212**	**(86)**	**(41)**
Net commissions and fees from asset management	**2,582**	**2,583**	**(1)**	**(0)**
Interest and similar income	39	27	12	44
Interest expense	18	20	(2)	(11)
Net interest income	**21**	**7**	**14**	**N/M**
Net gains (losses) on financial assets/liabilities at fair value through profit or loss[1]	(185)	253	(439)	N/M
Net income (loss) from equity method investments	66	81	(15)	(19)
Provision for credit losses	(1)	5	(6)	N/M
Other income (loss)[1]	228	(198)	426	N/M
Total net interest and non-interest income	**2,712**	**2,720**	**(8)**	**(0)**
Compensation and benefits[2]	846	799	47	6
General and administrative expenses	933	836	97	12
Impairment of goodwill and other intangible assets	68	0	68	N/M
Total non-interest expenses	**1,847**	**1,635**	**212**	**13**
Profit (loss) before tax	**866**	**1,086**	**(220)**	**(20)**
Income tax expense	271	304	(33)	(11)
Net income (loss)	**595**	**782**	**(187)**	**(24)**
Attributable to:				
Non-controlling interests	1	2	(1)	(61)
DWS shareholders	594	780	(186)	(24)

[1] Valuation impacts of trading assets held by guaranteed funds of € (186) million for 2022 (€ 208 million for 2021) are included in net gains (losses) on financial assets/liabilities at fair value through profit or loss that are offset in other income (loss) as part of valuation impacts of other liabilities held by guaranteed funds. The Group has no stake in these funds.
[2] Includes restructuring costs of € 2 million for 2021.

In 2022, we reported a profit before tax of € 866 million, a decrease of € 220 million, or 20% compared to prior year. Net interest and non-interest income were essentially flat compared to 2021, with slightly higher management fees, offset by significantly lower performance and transaction fees. Non-interest expenses were higher than in 2021.

Total net interest and non-interest income was € 2,712 million, essentially flat compared to 2021. Revenues from management fees were slightly higher, due to higher AuM in our illiquid asset classes and FX movements, which more than offset the negative market developments in the active and passive asset classes. Performance and transaction fees were significantly lower by € 86 million, or 41% mainly due to an exceptional multi asset performance fee recognised in the prior year. Remaining revenues amounted to € 131 million, a decrease of € 7 million compared to 2021, primarily driven by lower contribution from our investment in Harvest Fund Management Co., Ltd. and lower investment income for illiquid products, partly offset by a gain on disposal.

Non-interest expenses of € 1,847 million were € 212 million or 13% higher compared to 2021. Slightly higher compensation and benefits costs were mainly driven by an increase in the size of the workforce. General and administrative expenses increased mainly due to an expected increase of transformation costs, as well as higher costs associated with increased AuM over the period and exceptional legal expenses. In addition, the non-interest expenses include an impairment of intangible asset of € 68 million.

Assets under management is a key factor affecting the results of operations as a significant percentage of management fees is charged as a proportion of AuM. Assuming management fee margins remain unchanged, an increase in the level of average AuM will generally lead to an increase in revenues.

Assets under management were € 821 billion, a decrease of € 106 billion compared to 31 December 2021. The decrease was driven by a negative market impact of € 108 billion and net flows of € (20) billion, partly offset by positive foreign exchange impact of € 22 billion.

In 2022 **net flows** of € (20) billion were predominately driven by net outflows in Active Fixed Income, Active Cash and Passive, partly offset by net inflows in Active Multi Asset.

FX impact represents the currency movement of products denominated in local currencies against the Euro. It is calculated by applying the change in FX rate to the ending period assets and is calculated monthly.

Market impact primarily represents the underlying performance of the AuM, which is driven by market effects (equity indices, interest rates, foreign exchange rates) as well as fund performance. The market impact in the period led to a decrease in AuM of € 108 billion particularly in our active equity and passive products.

Other includes the impact of acquisitions and divestment as well as reclassifications of asset classes.

AuM development in 2022

in € bn.	31 Dec 2021 AuM	Net flows	FX impact	Performance	2022 Other	31 Dec 2022 AuM
Product:						
Active Equity	116	(1)	2	(18)	0	99
Active Multi Asset	70	6	0	(8)	0	68
Active Systematic and quantitative investments	77	0	0	(13)	0	64
Active Fixed Income	227	(12)	7	(28)	1	194
Active Cash	84	(6)	2	0	0	80
Passive	238	(7)	7	(38)	(1)	199
Alternatives	115	1	4	(2)	0	118
Total	**928**	**(20)**	**22**	**(108)**	**0**	**821**

Our Financial Position

Liquidity

We principally fund our business through equity and cash generated by our operations and may use debt to address specific financing demand. To ensure that the Group can always fulfil its payment obligations in all currencies, we operate a liquidity risk management framework that includes stress-testing of our current and forecasted liquidity position. During the annual strategic planning process, we project the development of key liquidity and funding metrics based on the underlying business plans to ensure the plan complies with our risk appetite. As of 31 December 2022 we held cash and bank balances, money market funds, government, sub-sovereign and corporate bonds and other debt instruments totalling € 3,577 million (€ 3,535 million as of 31 December 2021). To further diversify our funding capabilities, we have a € 500 million revolving credit facility in place, under which there were no drawings as of 31 December 2022.

Capital Management

IFR Article 50(a)

We maintain a forward-looking capital plan to assess the development of capital supply and demand and the projected capitalization of the Group from an accounting, regulatory and economic perspective. The economic perspective considers all relevant risks quantified by economic capital models using internal definitions and quantification methods. Capital planning is embedded into the Group's overall strategic planning process to ensure an integrated financial and risk planning approach and considers appropriate risk appetite thresholds. Results of the planning process will inform and enable management decisions relating to the strategic direction of the Group and profitable business growth or investment opportunities.

Capital Expenditures

During 2022, the Group made no material capital expenditures in intangible assets and property and equipment. Contingent liabilities decreased by € 9 million from € 120 million as of 31 December 2021 to € 111 million as of 31 December 2022 mainly driven by drawdowns of commitments for co-investments.

Net Assets

Selected items within our financial position

			Change from 2021	
in € m. (unless stated otherwise)	31 Dec 2022	31 Dec 2021	in € m.	in %
Assets:				
Cash and bank balances	1,979	2,191	(212)	(10)
Financial assets at fair value through profit or loss	3,959	3,838	120	3
Goodwill and other intangible assets	3,749	3,652	97	3
Remaining assets[1]	1,725	1,929	(204)	(11)
Total assets	**11,412**	**11,611**	**(200)**	**(2)**

[1] Sum of financial assets at fair value through other comprehensive income, equity method investments, loans, property and equipment, right-of-use assets, assets held for sale, other assets, assets for current tax, and deferred tax assets.

			Change from 2021	
in € m. (unless stated otherwise)	31 Dec 2022	31 Dec 2021	in € m.	in %
Liabilities and equity:				
Financial liabilities at fair value through profit or loss	634	750	(115)	(15)
Remaining liabilities[2]	2,950	3,416	(467)	(14)
Total liabilities	**3,584**	**4,166**	**(582)**	**(14)**
Equity	**7,828**	**7,445**	**382**	**5**
Total liabilities and equity	**11,412**	**11,611**	**(200)**	**(2)**

[2] Sum of other short-term borrowings, lease liabilities, liabilities held for sale, other liabilities, provisions, liabilities for current tax and deferred tax and long-term debt.

As of 31 December 2022, total assets decreased by € 200 million (2%) compared to year-end 2021. Cash and bank balances decreased by € 212 million (10%) driven by dividend payment of € 400 million and net tax paid of € 348 million partially offset by net cash received of € 536 million. The increase in financial assets at fair value through profit or loss of € 120 million (3%) was mainly driven by net investments in liquidity positions of € 328 million, partly offset by decreased assets in consolidated funds, co-investments, seed investments and investment contract assets of € 208 million. Further, goodwill and other intangible assets increased by € 97 million (3%) mainly driven by positive foreign exchange effects of € 163 million offset by an impairment of €68 million on unamortized intangible assets. Remaining assets decreased by € 204 million (11%) driven by the reduction of assets held for sale due to closing of the transaction in the amount of € 324 million and a net increase in other receivables and other items of € 120 million.

As of 31 December 2022, total liabilities decreased by € 582 million (14%) compared to year-end 2021. Investment contract liabilities presented under financial liabilities at fair value through profit or loss decreased by € 93 million.The remaining liabilities decrease was mainly driven by liabilities held for sale due to closure of a transaction of € 252 million and other liabilities held by consolidated funds of € 239 million.

Equity

Total equity as of 31 December 2022 was € 7,828 million compared to € 7,445 million as of 31 December 2021. The increase of € 382 million was mainly driven by net income after tax of € 594 million and positive impact from foreign exchange rate movements on capital denominated in non-Euro currencies of € 195 million partly offset by a dividend payment of € 400 million.

Regulatory Own Funds

IFR Articles 49(1)(c), 50(c), 50(d)

Our regulatory own funds and own funds requirements are based on the Regulation (EU) 2019/2033 on the prudential requirements of investment firms (IFR), the Directive (EU) 2019/2034 on the prudential supervision of investment firms (IFD), and the Investment Firm Act. We are an investment firm group under IFR.

Our regulatory own funds increased by € 436 million to € 3,041 million as of 31 December 2022. The increase was mainly driven by recognition of profits and the positive impact from foreign exchange rate movements on capital denominated in non-Euro currencies partly offset by higher own funds deductions for goodwill and intangible assets overall. Our own funds consist of Common Equity Tier 1 capital (CET1). There are no additional Tier 1 or Tier 2 instruments issued. The CET1 as of 31 December 2022 included € 670 million own funds deduction for investments in financial sector entities and deferred tax assets (31 December 2021 € 603 million).

The own funds requirement based on K-factors according to IFR was € 587 million as of 31 December 2022, an increase by € 27 million compared to € 560 million as of 31 December 2021. The increase was due to higher net position risk from foreign exchange rate movements and higher AuM on average. The own funds excess over K-factor requirements was € 2,455 million as of 31 December 2022, compared with € 2,045 million as of 31 December 2021, as shown in the table below. The fixed overheads requirement as of 31 December 2022 was € 377 million compared to € 358 million as of 31 December 2021. With that we comply with the overall regulatory capital requirements according to IFR article 11.

We applied the IFR and related regulatory technical standards where available. Where individual technical standards are still pending, we aligned our approach to the Regulation (EU) No 575/2013, that applied to us until the introduction of the IFR. There might be changes to our regulatory own funds and requirements with final publication of such regulatory technical standards.

Regulatory own funds and requirements[1]

in € m. (unless stated otherwise)	31 Dec 2022	31 Dec 2021
Regulatory own funds:		
Common Equity Tier 1 capital	3,041	2,605
Tier 1 capital (CET1 + AT1)	3,041	2,605
Tier 2 capital	0	0
Total regulatory own funds	**3,041**	**2,605**
K-factor requirement:		
K-AuM (assets under management)	177	164
K-ASA (assets safeguarded and administered)	49	49
K-COH (client orders handled)	0	0
K-NPR (net position risk)	361	347
Total own funds requirement based on k-factors	**587**	**560**
Own funds excess (shortfall)	**2,455**	**2,045**

1 Scope and methods of consolidation in line with Capital Requirement Regulation.

Reconciliation of IFRS equity to regulatory own funds

in € m.	31 Dec 2022	31 Dec 2021
Shareholders' equity, as defined by IFRS, regulatory basis of consolidation	7,799	7,398[1]
Elimination of net income, net of profit recognition	459	668
Deduction of:		
Goodwill and other intangible assets (net of related deferred tax liabilities)	3,542	3,448
Deferred tax assets	157	163
Financial sector entities	513	440
Other[2]	86	75
Regulatory own funds	**3,041**	**2,605**

1 2021 considers prudentially unrecognized retained earnings of € 23 million.
2 Synthetic holdings of own CET1 instruments, prudent valuation, defined benefit pension plan assets, minimum value commitments.

Supplementary Information on DWS Group GmbH & Co. KGaA according to German Commercial Code

We chose the option of publishing a summarized management report in accordance with Section 315 (5) in conjunction with Section 298 (2) of the German Commercial Code. Supplementary to our Group reporting, this section provides details on the performance of DWS KGaA.

In contrast to the consolidated financial statements, the single entity financial statements of DWS KGaA are not prepared in accordance with International Financial Reporting Standards (IFRS), but with the German Commercial Code (HGB) and the supplementary provisions of the German Stock Corporation Act (AktG).

Results of Operations of DWS KGaA

			Change from 2021	
in € m. (unless stated otherwise)	2022	2021	in € m.	in %
Income from profit pooling agreements	540	753	(214)	(28)
Income from participating interests	222	85	136	159
Impairment on financial assets and on securities held as current assets	71	17	53	N/M
Other income	144	74	70	95
Staff expenses	35	29	6	22
Other operating expenses	250	127	122	96
Other interest and similar income	2	2	1	41
Interest and similar expenses	5	2	3	159
Income taxes	135	207	(72)	(35)
Net income	**412**	**532**	**(120)**	**(23)**
Profit carried forward from the previous year	220	88	132	150
Distributable profit	**632**	**620**	**12**	**2**

The business purpose of DWS KGaA as parent company of the Group is the holding of participations in and the management and support of a group of financial services providers. DWS KGaA itself is not active in the operating asset management business.

Significant financial income components of DWS KGaA are from profit pooling agreements and participating interests. Earnings therefore largely depend on the performance of our subsidiaries.

Income from profit pooling agreements with German subsidiaries decreased by € 214 million to € 540 million in 2022, mainly due to lower profit transferred from DWS Beteiligungs GmbH.

Income from participating interests amounted to € 222 million in 2022 and mainly included dividends from DWS Investments Singapore Limited, DWS USA Corporation, DWS Investments UK Limited and DWS Alternatives Global Limited.

Impairment on financial assets and securities held as current assets amounted to € 71 million compared to € 17 million in the previous year and mainly related to our investments in DWS Alternatives Global Limited, DB Vita S.A. and Arabesque AI Ltd.

Other income was € 144 million compared to € 74 million in 2021. The increase mainly related to higher income from recharging service and infrastructure expenses including transformational charges to our subsidiaries and higher gains from short-term derivatives we entered to manage the profit and loss volatility associated with our share price-linked, equity-based compensation.

Staff expenses increased by € 6 million to € 35 million mainly due to higher expenses for pensions.

Other operating expenses increased by € 122 million to € 250 million, mainly due to higher expenses from service and infrastructure areas, transformational IT costs and expenses for professional services as well as higher charges for management services from DWS Management GmbH, the General Partner. The service and infrastructure charges including transformational charges were mostly recharged to our subsidiaries (via other income). Losses from derivatives on our share price-linked equity- based compensation also contributed to the increase.

Income tax expense of € 135 million consisted of € 180 million current tax expense less a deferred tax benefit of € 45 million. Income tax expense decreased by € 72 million mainly driven by decreased income from profit pooling agreements with German subsidiaries in 2022.

Net income decreased by € 120 million to € 412 million in 2022.

The distributable profit amounted to € 632 million as of 31 December 2022. At the Annual General Meeting the Executive Board and Supervisory Board will propose to appropriate this distributable profit for a dividend payment of € 2.05 per share and to carry forward the remaining distributable profit.

Financial Position of DWS KGaA

in € m. (unless stated otherwise)	31 Dec 2022	31 Dec 2021	Change from 2021 in € m.	Change from 2021 in %
Assets:				
Intangible assets – internally developed software	18	7	11	171
Financial assets – investments in affiliated companies	7,277	7,343	(67)	(1)
Financial assets – participating interests	53	4	49	N/M
Financial assets – long-term investment securities	14	11	3	32
Total fixed assets	**7,362**	**7,365**	**(3)**	**0**
Receivables from affiliated companies	899	1,106	(206)	(19)
Other assets	37	38	(1)	(2)
Securities	274	120	155	129
Bank balances	170	119	51	43
Total current assets	**1,380**	**1,382**	**(1)**	**0**
Prepaid expenses	**8**	**0**	**7**	**N/M**
Deferred tax assets	**150**	**104**	**45**	**43**
Excess of plan assets over pension liabilities	**0**	**4**	**(4)**	**N/M**
Total assets	**8,900**	**8,856**	**44**	**0**

in € m. (unless stated otherwise)	31 Dec 2022	31 Dec 2021	Change from 2021 in € m.	Change from 2021 in %
Liabilities and shareholders' equity:				
Subscribed capital	200	200	0	0
Capital reserve	7,458	7,458	0	0
Revenue reserves	20	20	0	0
Distributable profit	632	620	12	2
Total capital and reserves	**8,310**	**8,298**	**12**	**0**
Provisions for pensions and similar obligations	4	0	4	N/M
Provisions for taxes	0	74	(74)	N/M
Other provisions	125	58	67	114
Total provisions	**129**	**132**	**(3)**	**(3)**
Accounts payable for goods and services	1	4	(4)	(85)
Liabilities to affiliated companies	451	403	48	12
Other liabilities	9	19	(10)	(51)
Total liabilities	**461**	**426**	**35**	**8**
Total liabilities and shareholders' equity	**8,900**	**8,856**	**44**	**0**

Movements in Assets

As of 31 December 2022, total assets amounted to € 8,900 million, an increase of € 44 million compared to year-end 2021.

Fixed assets were essentially unchanged. Investments in affiliated companies decreased by € 67 million mainly due to a capital repatriation by DWS Investments UK Limited and impairments of € 68 million, partly offset by capital increases into WEPLA Beteiligungs GmbH and DB Vita S.A. In 2022, participating interests increased mainly due to the take on of a 30% stake in MorgenFund GmbH in connection with the transfer of the digital investment platform into this company.

Receivables from affiliated companies decreased by € 206 million to € 899 million mainly due to lower receivables from profit pooling agreements with German entities.

Securities increased by € 155 million due to higher investments in money market funds as part of liquidity management.

Bank balances increased by € 51 million. The increase was mainly related to the settlement of profit pooling agreements for 2021 and dividends received of € 975 million, partly offset by the dividend payment for 2021 of € 400 million, net tax payments of € 263 million, additional investments in money market funds of € 155 million and other net outflows of € 106 million.

Equity

The capital and reserves of DWS KGaA as of 31 December 2022 were € 8,310 million, split into subscribed capital of € 200 million, reserves of € 7,478 million and a distributable profit of € 632 million. The increase of € 12 million compared to 31 December 2021 related to the net income of the current year partially offset by the dividend paid.

Movements in Provisions and Liabilities

As of 31 December 2022, there were no provisions for taxes (€ 74 million as of 31 December 2021). Other provisions increased by € 67 million to € 125 million mainly due to higher provisions in connection with services provided by DWS Management GmbH and higher provisions for infrastructure and professional services.

Total liabilities increased by € 35 million to € 461 million, mainly due to higher borrowings from subsidiaries.

Liquidity

The Capital and Liquidity Management function is mandated to manage the overall liquidity and funding position of DWS KGaA. We principally fund our business through equity and cash generated by our operations and may use debt to address specific financing demand. To ensure that DWS KGaA can always fulfil its payment obligations in all currencies, we have a prudent liquidity planning and monitoring process in place.

As DWS KGaA is a holding company the upcoming cash in- and outflows can be reliably forecast. Cash inflows are largely generated by income from profit pooling agreements and from participating interests as well as DWS Group internal intermediate financing. Cash outflows mainly consist of the dividend payment to our shareholders, acquisitions, operational expenses and tax payments for the German tax group.

During the annual strategic planning process, we project the development of the key liquidity and funding metrics based on the underlying business plans to ensure the plan complies with our risk appetite. As of 31 December 2022 we held bank balances of € 170 million (€ 119 million as of 31 December 2021) and liquid money market funds of € 274 million (€ 120 million as of 31 December 2021). To further secure our funding capabilities, we have a € 500 million revolving credit facility in place, under which there were no drawings as of 31 December 2022.

Risks and Opportunities of DWS KGaA

The business performance of DWS KGaA is largely subject to the same risks and opportunities as the performance of the Group presented in the consolidated financial statements.

DWS KGaA generally participates in the risks of its shareholdings and subsidiaries in accordance with its respective percentage interest held. DWS KGaA is integrated in the risk management system and internal control system of the Group. Further information is provided in the ‘Risk Report’ and in the section ‘Outlook – DWS Group – Opportunities and Risks’ of this report.

Outlook for DWS KGaA

The outlook for DWS KGaA is essentially subject to the same influences as the outlook for the Group presented in the ‘Outlook’ section of this report.

Final Statement of the Executive Board on Section 312 German Stock Corporation Act

As DWS KGaA and its subsidiaries are part of Deutsche Bank Group, the Executive Board of DWS KGaA is obliged to prepare a dependency report pursuant to Section 312 German Stock Corporation Act.

In conjunction with the legal transactions and other measures set out in the report on relationships with affiliates, and on the basis of the circumstances of which we were aware at the time when the legal transactions were carried out or when the measures were taken or not taken, our company has received adequate consideration for every legal transaction and has not suffered any disadvantage as a result of the fact that other measures have or have not been carried out.

Outlook

Economic and Competitive Outlook

Global Economic Outlook

There are many indications that inflation rates will be lower in 2023 in the euro area. The gas price brake in Germany and price caps on energy in other countries are likely to have a dampening effect. On the other hand, wage increases are expected and many companies may continue to try to pass on higher energy costs to consumers. We therefore expect an average inflation rate of 6% in the Eurozone in 2023, far above the ECB's 2% inflation target. Further rate increases are possible for 2023. The ECB has already announced that it will leave key interest rates higher for a long period to achieve the inflation target of 2% in the medium-term.

We continue to believe there will be a mild recession in the US, most likely in the first half of 2023. This mild downturn in economic activity is likely to support the Fed's efforts to regain control over inflation. The development of the labour markets will likely be a key element for monetary policy in 2023. Despite our expectation that there will be a mild recession, we do not expect unemployment to rise substantially. We expect corporations to hold on to their experienced workers as structural forces, such as demographics and reduced migration, keep labour supply limited. Despite the favourable outlook for labour markets, we expect growth to remain subdued as the recovery from a probable recession in the first half of 2023 is unlikely to be strong.

The moderate upward trend of the Japanese economy should continue in 2023. Further steps to fix the long-term yield curve by the Japanese central bank are probable due to the improved economic and inflation picture, but they are likely to be cautious.

The 2023 outlook for Emerging Markets Asia's economies is for growth outperformance while inflation rates are likely to fall. In China, following the end of the zero-COVID-19 policy, the pandemic cycle could move ahead more quickly. The subsequent recovery might also come sooner and could pick up speed as from the second quarter. The opening-up of the economy may trigger catch-up demand but the inflationary effects should be limited because demand overall may be held back by a labour market that is recovering from weak levels, and by the absence of large-scale direct financial aid to consumers. Broad-based policy support is expected to trigger stabilization of the ailing real estate sector, but it is unlikely to contribute to growth in 2023. Since China's recovery is likely mainly to be driven by consumer demand and a service sector turnaround, the impact on the rest of Emerging Markets Asia should be seen particularly through lower tourist inflows from China. The Association of Southeast Asia Nations countries should also benefit from their strong China trade relationship and high direct investment inflows from China. However, South Korea and Taiwan may suffer in 2023 from their strong exposure to demand in developed markets, which is likely to be depressed. The outlook for India is positive for structural reasons, such as its robust consumer base, as well as reforms that are fuelling competitiveness.

Asset Management Industry

We expect several major trends will continue to provide opportunities for, but also challenge, the asset management industry.

ESG: ESG strategies have become increasingly central to the asset management industry, as well as being important in the wider context of achieving the Paris Agreement target of limiting global warming to 1.5°C. However, despite high levels of demand from retail and institutional investors significant challenges remain due to the absence of standardised terminology, concerns about greenwashing, the rising volume of regulation and access to comprehensive data. While climate change continues to be a major theme, diversity and inclusion has gained prominence following the pandemic and there is heightened interest in protecting biodiversity.

Digitalisation: The adoption of new technology including artificial intelligence and blockchain is driving wholesale change to back-office operations, distribution and product choice. Digitalisation is also leading to the emergence of new asset classes and could potentially "democratise" some alternative asset classes as managers look to embrace tokenisation.

Customised solutions: Growing investor sophistication and new technology is enabling asset managers to offer bespoke solutions such as direct indexing to individuals, previously only available to institutional investors. In the alternative space, "retailisation" has seen managers developing products specifically for retail investors. In the retirement market, there is continued demand for pension solutions, driven by the shift from defined benefit to defined contribution.

Geographic wealth shift: Emerging countries, primarily in Asia, should continue to be key drivers of future industry growth, offering new opportunities for asset managers as local investors expand their investment horizons globally and look for investment solutions.

Market consolidation: Scale and the ability to offer diverse investment capabilities are increasingly central to managers ability to compete successfully in the marketplace. Industry consolidation is likely to continue with bolt-on deals, largely in alternative investments, ESG and technology.

Margin erosion: Pressure on fees and costs is likely to persist, driven by higher regulatory and compliance costs, heightened market competition and the continuing shift by investors towards large scale lower fee passive products.

While markets are likely to experience turbulence in the near-term, due to economic and geopolitical headwinds, the longer-term outlook for the industry remains positive. We believe that the asset management industry will continue to adapt and grow to provide crucial investment solutions for both individuals and institutional investors.

DWS Group

Given our current macroeconomic outlook and the asset management industry's challenges, DWS Group intends to focus on innovative products and services where we can differentiate and best serve clients, while also maintaining a disciplined cost approach as we invest in growth and transformation. We further continue to expect our diversified asset base to provide us with some protection against current challenges.

We refined our medium-term financial targets at the Capital Markets Day in December 2022. Details can be found in the section 'Our Strategy and our Market'.

Despite our cautious macroeconomic outlook, we expect our AuM to be higher at the end of 2023 as we expect net inflows into growth areas like Passive including Xtrackers and Alternatives. This should be further enhanced by strategic partnerships and product innovations, including further ESG offerings. As a result of the spill-over effect from lower market levels at the end of 2022 as well as continued margin pressure, management fees are assumed to be slightly lower in 2023. But we expect total adjusted revenues to be essentially flat compared to 2022.

2023 will be a transitional year as expenses for our transformation program reach their peak and we operate on a dual platform while we continue to establish our own capabilities. As a result, we assume our adjusted cost base to be higher in 2023 compared to 2022. Consequently, the adjusted profit before tax is expected to be lower in 2023. The adjusted CIR is expected to increase slightly, however, it is expected to stay below 65%.

Opportunities and Risks

GRI 102-15

Macroeconomic, Geopolitical and Market Environment

Opportunities

Our strategy has evolved along with the changing asset management industry, contributing, directly and indirectly, to anticipated growth rates and favourably to our medium-term net flow target.

Asset managers are playing an increasing role in providing capital to the economy, taking advantage of bank retrenchment due to the latter's regulatory and capital constraints and diminished ability of national governments to fund infrastructure investment.

Our strategy includes the deployment of capital to achieve both organic and inorganic growth. Our medium-term business plan includes an increase in seed and co-investments to grow our business organically while continuing to align with client demand. We also believe the trend of consolidation in the asset management industry will continue. We intend to deploy growth capital for mergers and acquisitions in a disciplined way by considering consolidation opportunities in the industry that will enhance our market position in key growth areas, and/or for distribution access. Any merger and acquisition activity, in addition to meeting strategic objectives, would focus on the prioritization of shareholder value creation and be measured against financial criteria such as attractive return on investment earnings accretion and contribution to our medium-term targets for net flows and adjusted CIR.

Risks

The world economy has faced higher inflation since the first half of last year. As a result, major central banks are raising interest rates. Global financial conditions have tightened and the economic outlook has deteriorated materially. Key risks pertain to persistent inflationary pressures weighing on global demand, supply chain disruptions on the back of Russia's invasion of Ukraine, US-China export restrictions on high-tech goods, and China's spike in infections while easing COVID-19 measures. Consequently, the likelihood of a pronounced global recession has increased considerably.

Financial stability risks have also increased. Low real interest rates boosted valuation levels in the past, first by lowering the discount rate applied to future cash flows, and second by promoting debt financing of risky assets. The reaction of Japanese central bank and investors is another source of uncertainty, if a reversal of their very long-held low interest rate policy occurs.

Debt sustainability becomes a greater concern in a lower growth and higher interest rate environment, given debt burdens rose to record levels after the pandemic and fiscal policy will become more constrained as, among other things, defence spending will be increased materially in many countries because of geopolitical risk. Emerging Market countries which have significant foreign currency debt are vulnerable to higher global interest rates and may see capital outflows and rising default rates.

A deterioration of the economic environment and heightened uncertainty could mean continued higher volatility and further downside potential for financial markets. Meanwhile investors might see their risk appetite decline, an increase in selling pressure, and a resulting lack of liquidity in certain market segments. These effects could lead to lower assets under management and reduced fee income in the respective markets. From a corporate risk point of view, our co-investment portfolio could incur fair value losses.

Political uncertainty and geopolitical risk remain high and may become more serious, particularly concerning increasing trade restrictions and a greater focus on national interests. The experience of supply chain disruptions during the COVID-19 pandemic has prompted companies and states to pursue greater self-reliance. Security concerns and competition for technological leadership have promoted public policies that include sanctions, export constraints and subsidies in areas such as semiconductors and artificial intelligence. These developments increase the risk of fragmentation of the global economy into trading blocs and reduce economic efficiency and growth, contributing to higher inflation. In addition, the decline of multilateralism increases the chance of escalation of political conflicts.

A further escalation of the Russian invasion in Ukraine would foster instability, uncertainty, destruction and potentially more sanctions with globally adverse implications. For example, further advances of the Russian army in Ukraine and increased threats to or even attacks on NATO border states could raise European risk premium, weigh on economic confidence and raise commodity prices such as for oil, gas and grain. A refugee crisis could unfold on a markedly larger scale creating higher uncertainty and challenging Western European countries' finances, economies and political stability. Russian cyber-attacks on European infrastructure also remain a danger.

Other examples of political uncertainty and geopolitical risk are events in regional hotspots such as the threat of nuclear attack by North Korea and political tensions in Iran.

All the above risks could contribute to high or rising market volatility and risk aversion. They could adversely affect assets exposed to macroeconomic risks, conflicts, sanctions or sources of uncertainty; leading to negative performance and potentially outflows. There could be negative effects on the results of operations, our business with or in the countries concerned as well as our strategic plans.

Digitalisation

Opportunities

Asset managers are developing new digital distribution capabilities as a way of accessing retail/direct-to-consumer channels, such as robo-advisory and Neo-Brokers.

Digitalisation offers new and existing competitors market entry opportunities and challenges existing business models. Examples include decentralised finance, Crypto-Trading, robo-advice and digital currency. These offerings and underlying technologies have had the potential to create new products, attract additional client segments, and open alternative distribution channels.

Digitalisation has remained a key factor determining competitive strength in the industry including quality and speed of information processing, cost efficiency, IT security as well as "time-to-market".

Digital technologies enable us to make our existing business more efficient. Moreover, completely new opportunities may emerge that expand the traditional asset management business model. We expect more regulation for digital topics such as digital asset regulation in the future, providing regulatory clarity which is necessary for established players like DWS to realize digital opportunities. Our existing technology, risk and control functions may be an advantage in adapting these new rules to us more quickly than new providers.

Risks

The asset management industry is undergoing a lasting transformation driven by fundamental changes and trends in customer behaviours as well as by new digital technologies. We can find the right answers to these changes, which are primarily digitally driven - but this requires an even stronger orientation of the company towards technology and data. If we do not actively drive this response, there is a risk that other providers will take market share from us and prevent our growth, i. e. younger customer more often invest via Neo-Brokers or via wallet-based providers instead of traditional channels and are focusing a lot on saving plans.

The regulatory and legal implications of digitalisation remain uncertain, for instance concerning customer protection, financial stability as well as the financial supervision of existing and new market participants.

With increasing levels of digitalisation, cyber-attacks could lead to technology failures, security breaches, unauthorized access, loss or destruction of data or unavailability of services.

We expect our businesses to have an increased need for investment in digital infrastructure, product and process resources to mitigate the risk of a potential loss of market share. This risk may adversely impact our medium-term targets.

Any of these events could involve litigation or cause us to suffer financial loss, disruption of our business activities, liability to our customers, government and/or regulatory intervention or sanction, or damage to our reputation.

Sustainability

Opportunities

Despite 2022 market volatility, investors have continued to allocate capital into ESG and sustainable funds, which have shown relative resilience against overall net outflows of the industry.

This continued high client demand for ESG investment solutions represents an opportunity for asset managers. As investors become more aware of sustainability risks and opportunities as well as the adverse environmental and social impacts associated with their investments, asset managers are increasingly being asked to incorporate sustainability factors into their product design, investment processes and to provide enhanced transparency on the resulting implications, both from a financial and non-financial materiality perspective.

In addition, as sustainability is an area where data, methods, and disclosure standards are still evolving, participating in relevant industry initiatives provides us with the ability to contribute to the development of such new standards.

Risks

Sustainability Risks are inherent to our business activities and ESG strategy. Sustainability risks result from the need to develop our product suite and the corresponding investment processes that are subject to increased public attention and influenced by changes in client demand.

Furthermore, the ESG regulatory landscape continues to be ever evolving as regulators, governments, and other bodies including non-governmental organizations around the globe continue to take steps to protect investors through demanding transparency, consistency, and comparability. The Russian invasion into the Ukraine has highlighted the importance of social and governance factors but is also impacting the view of clients and policy makers on the interaction between environmental factors and geopolitical risks. To meet those evolving regulatory and client expectations, there is a need to continuously develop ESG related policy, data, methodology and processes. In addition, regional regulatory variations and differing market standards create an increased regulatory risk and increased costs in addressing regulatory inquiries and requirements for enhanced disclosures. The above-mentioned ESG related impacts may have implications on various traditional risk types, including but not limited to Strategic as well as Non-Financial Risks.

If we are perceived to mislead stakeholders on our business activities or if we fail to achieve our stated net-zero ambitions, we could face greenwashing risk resulting in significant reputational damage, impacting our medium-term AuM growth targets and revenue generating ability.

Regulation and Supervision

Opportunities

Regulatory change can encourage us to further differentiate us from competitors by developing ESG related policies, data, methodology and processes to enhance the services provided to our clients.

DWS welcomes the European Commission’s review of the current retail investor protection framework as it provides an important opportunity to address the issue of existing barriers to retail investor participation in the capital market, increase retail investor participation, and enhance the attractiveness and competitiveness of EU capital markets. DWS also believes it has the right product capabilities to adapt in a changing retail investment product landscape, if new inducement restrictions or transparency requirements should be introduced in the EU.

Risks

Regulatory reforms, together with increased regulatory scrutiny more generally, including ESG reforms, and others,have had and continue to have a significant impact on us and may adversely affect our business and ability to execute our strategic plans.

These may result in increased planning uncertainty, a higher cost base or higher capital demands, and hence may significantly affect our business model, financial condition and results of operations as well as the competitive environment generally. This risk may adversely impact our medium-term targets.

Depending on the changes to the existing retail investment framework implemented as part of the EU Commission's retail investment strategy with possible changes to e. g. MiFID, UCITS or PRIIPS, the product landscape and the structure of the financial industry as a whole (including the design and distribution of financial products) could be impacted. In particular, a full inducement ban may significantly affect the financial sector in the EU, including asset managers like DWS. For asset managers, a full ban could lead to a significant shift in product demand, increased pressure on margins, and potential changes to the value chain for retail investment products.

Other Risks

Unforeseen and unidentified risks could lead to significant losses as our risk management policies, procedures and methods cannot guarantee they will be fully mitigated.

Litigation, Regulatory Enforcement Matters and Investigations

Deutsche Bank, our major shareholder, and ourselves operate in a highly regulated and litigious environment, potentially exposing us to liability and other costs, the amounts of which may be substantial and difficult to estimate, as well as to legal and regulatory sanctions and reputational harm.

Among other matters:

- Deutsche Bank has entered into deferred prosecution agreements with the US Department of Justice. If Deutsche Bank or any member of the Deutsche Bank Group (including us) violates the deferred prosecution agreements, the terms of the deferred prosecution agreements could be extended, or Deutsche Bank could be subject to criminal prosecution or other actions.
- On 27 September 2022, the US Securities and Exchange Commissions announced settlements with multiple financial institutions, including a US subsidiary of Deutsche Bank, Deutsche Bank Securities Inc. and two of our US subsidiaries DWS Investment Management Americas, Inc. and DWS Distributors Inc. regarding compliance with record retention requirements applicable to US registered broker-dealers and asset managers, in relation to the use of unapproved electronic communications channels. Under the terms of the settlement, we are subject to several post-settlement compliance obligations which could have adverse consequences for us if violated.
- We have received requests for information from regulatory and law enforcement authorities concerning certain allegations made by a former employee in relation to ESG matters, as well as concerning the use of off-platform communications channels by DWS employees. We continue to cooperate fully with the authorities. These investigations are ongoing, and the outcome is still to be determined, for further information please refer to note '17 – Provisions' within the 'Consolidated Financial Statements'.
- On 31 May 2022, the Public Prosecutor's office in Frankfurt implemented a search of DWS's Frankfurt offices after it had launched an investigation into ESG related topics. We are fully cooperating in connection with this investigation, the outcome of which is yet also still to be determined, for further information please refer to note '17 – Provisions' within the 'Consolidated Financial Statements'.
- Scrutiny by EU regulators and courts on the protection of retail customers has increased in particular regarding the validity and transparency of terms in standard form contracts and compensation for alleged damages.

Should any of the legal proceedings be resolved against us, or any investigations result in a finding that we have failed to comply with applicable law, we could be exposed to material damages, fines, limitations on business, remedial undertakings, criminal prosecution or other material adverse effects on our financial condition, as well as risk to our reputation and potential loss of business. Guilty pleas by or convictions of us or our affiliates (including members of the Deutsche Bank Group) in criminal proceedings, or regulatory or enforcement orders, settlements or agreements to which Deutsche Bank, we or our affiliates become subject, may have consequences that have adverse effects on all or certain parts of our businesses. Moreover, if these matters are resolved on terms that are more adverse to us than we expect, in terms of their costs or necessary changes to our businesses, or if related negative perceptions concerning our business and prospects and related business impacts increase, we may not be able to achieve our strategic objectives or we may be required to change them. For example, because of certain of Deutsche Bank's past criminal convictions, we had been required to seek an individual exemption to avoid disqualification from relying on the Qualified Professional Asset Manager exemption under the US Employee Retirement Income Security Act. In April 2021, the US Department of Labor extended our exemption, which is now scheduled to expire on 17 April 2024, but which may terminate earlier if, among other things, we or our affiliates were to be convicted of crimes in other matters. As this disqualification period extends until 17 April 2027, we will need to obtain a further exemption by 18 April 2024, to avoid a loss of QPAM status at the end of the current exemption period. Further on 28 February 2022, following a finding by the Department of Justice that Deutsche Bank violated a deferred prosecution agreement based on untimely reporting by Deutsche Bank of the allegations made by a former employee of the Group in relation to ESG matters, Deutsche Bank agreed with the Department of Justice to extend an existing monitorship and abide by the terms of a prior deferred prosecution agreement until February 2023 to allow the monitor to certify to Deutsche Bank's implementation of the related internal controls. We understand that the US Department of Justice has reserved all rights to take further action regarding the deferred prosecution agreements if it deems necessary, which may impact us. Deutsche Bank is also engaged in ongoing regulatory discussions to resolve matters concerning adherence to prior orders and settlements related to sanctions and embargoes and Anti-money laundering compliance, and remedial agreements and obligations related to risk management issues which may impact us.

Overall Assessment

We believe that the asset management industry will continue to grow over the longer term and managers able to offer a wide range of active, passive, public and private strategies will be able to benefit from opportunities in the market.

We further regard our business as well positioned to capture market opportunities and address asset management industry challenges. As illustrated above, changing market conditions and investor needs have created significant opportunities for us and the asset management industry, yet also require us to continuously monitor risks and run stress test scenarios.

[Our Responsibility]

Sustainable Action

GRI 102-11; 203-2

IFR Article 52

2022 has shown that investors, asset managers, regulators and other key stakeholders continue to pay high attention to ESG issues.

Our goal is to deliver responsible investment solutions tailored to individual clients' needs. In doing so, we aim to share our global investment expertise and engagement strategy with our investees, other capital markets institutions (such as index providers and credit rating agencies) and ESG initiatives.

While our sustainability strategy is global in nature, we recognise that we must take account of regional and local regulatory requirements in incorporating ESG into our operations and products. Therefore, we describe in this section how the extent of ESG incorporation differs in accordance with such requirements and depending on the nature of the product. In certain product areas and regions, ESG regulation and ESG market standards might be more advanced. Depending on region and product, ESG filters can be applied and portfolio managers might therefore be required to follow certain criteria in line with the ESG filter. Our ESG filters are defined in the section 'Our Product Suite'.

More details regarding our sustainability strategy can be found in the section 'Our Strategy and our Market'.

Our Sustainability KPIs

We made good progress in 2022 against our sustainability KPIs and remain confident of meeting our medium-term ambitions.

As at 31 December 2022 we had € 117 billion in ESG AuM and achieved ESG net flows of € 1.0 billion in 2022, despite a challenging market environment. Please refer to our APM on ESG shown in the section 'Our Performance Indicators – Our Financial Performance'.

Our operational emissions from business travel continue to be significantly lower than our 2019 baseline, primarily driven by the residual impact from COVID-19 and the new ways of working this has promoted including the increased use of technology. We also continued to make progress in reducing the overall amount of energy we consume in conducting our operations and our transition towards procuring 100% of electricity we consume from renewable sources.

In 2022, we improved our CDP rating to A- compared to B in the previous year, despite a fall in the financial services average from B to B-. We also exceeded our medium-term ambition in relation to proportion of women at the first management level below the Executive Board and met our ambition for the second management level. The resumption of physical volunteering activities in 2022 led to a significant increase in volunteer hours compared to 2021. The decline in corporate engagements versus prior year was driven by additional requirements for preparation and documentation of engagements under our enhanced engagement framework, however we remain above our medium-term ambition.

Further details of our achievements in 2022 against our sustainability KPI ambitions can be found in the related sections of this report, and our future KPI ambitions can be found in the section 'Our Strategy and our Market'.

Sustainability KPIs

KPI	Ambition as at 31 December 2022	2022 Result	2021 Result
ESG AuM and net flows:[1]			
ESG AuM	Continue to grow our ESG AuM through a combination of flows into existing products, flows into new products and supporting the transfer by existing clients of their assets from non-ESG products into ESG products	€ 117.0 bn.	€ 115.2 bn.
ESG net flows	Grow ESG net flows at the same, or at a faster rate, than our overall flow target of >4% of AuM	€ 1.0 bn.	€ 18.9 bn.
Operational emissions:[2]			
Energy	Reduce our total energy consumption by 20% by 2025 compared to 2019	(28)%	(21)%
Electricity from renewable sources	Source 100% renewable electricity by 2025, with an interim ambition of 85% by 2022	96 %	95 %
Travel (air and rail)	Reduce our travel emissions by 25% by 2022 compared to 2019	(49)%	(88)%
Sustainability rating	Maintain or improve our CDP B rating by 2024	A-	B
Proportion of women	Achieve 32% of positions at the first management level below the Executive Board held by female executives and 33% at the second management level below the Executive Board by 2024	34.5% – 1. level 33.0% – 2. level	28.1% – 1. level 29.0% – 2. level
Volunteer hours per employee	Perform 1.5 hours of volunteering on average per employee by 2024	84 minutes	38 minutes[3]
Corporate engagements	Participate in 475 or more corporate engagements per annum by 2024	532	581

[1] ESG net flows are derived from the ESG Framework, with ESG net flows being included only at the point from which products are classified as ESG under this framework. Any products that are declassified as ESG under this framework will no longer be included from that point in time. The growth of ESG net flow is calculated as % of beginning of period ESG AuM on average in the medium term.
[2] DWS Group energy consumption, electricity from renewable sources and rail emissions are determined on a pro-rata average number of effective staff employed (full-time equivalent) basis from Deutsche Bank Group data. DWS flight data is sourced from Deutsche Bank Group and the associated air emissions are calculated using Deutsche Bank Group methodology. Prior year emissions and energy consumption results have been restated due to updated methodology and historic data.
[3] Volunteer hours per employee was impacted by COVID-19 restrictions in 2021.

Our Impact on Climate Change

GRI 201-2; 305-5

Highlights

- Publication of our Net Zero Annual Disclosure for the Base Year 2020 via CDP
- 6.3% year-on-year decrease in the inflation-adjusted WACI

Management Approach

To mitigate climate change, transformational change is required across all parts of the real economy. For us as an asset manager, we therefore see it as part of our responsibility to become climate-neutral in our actions well ahead of 2050 and have underlined this claim by becoming a founding member of the Net Zero Asset Managers initiative (NZAM). This initiative sees asset managers commit to support the goal of net zero greenhouse gas emissions by 2050 at the latest.

To make this claim more concrete and measurable we published our net zero interim target for 2030, that aims to achieve a 50% reduction in weighted average inflation-adjusted financial carbon intensity (inflation-adjusted WACI) related to Scope 1 and 2 emissions by 2030, compared to the base year 2019.

We have put 35.4% or € 281.2 billion of our total global assets under management as of 31 December 2020 in scope to be managed towards net zero by 2030 (subject to the consent of clients, legal entities, and fund boards). As of 31 December 2021, 38.6% or € 358.0 billion AuM were in scope to be managed towards CO_2-neutrality. The overall increase of in-scope assets included both changes in AuM of portfolios that were already in-scope in 2020 as well as some new portfolios coming into scope. These in-scope assets comprise equity and corporate bond holdings in mutual funds (ex-US) and in mandates of net zero committed clients, as well as selected real estate and infrastructure holdings. Illiquid assets in scope for net zero (€ 29.3 billion out of the € 358.0 billion) are currently not part of the WACI calculation.

The guiding principle of our actions towards portfolio net zero is to support the transition of the real economy and to contribute to a real-world reduction in carbon emissions. Therefore, engagement rather than divestment, remains our preferred mechanism. For further details on our net zero engagements, please refer to 'Active Ownership' in the section 'Our Investment Approach'.

Whilst engagement remains the primary means to manage towards our net zero goals, we also focus on, amongst others, product innovation and moving toward a SBTi target framework. Further details on our approach to combat climate change, can be found in our Climate Report 2022.

Organisational Structure

Sustainability governance at DWS starts with the Executive Board, which has the overall responsibility for managing sustainability-related risks and opportunities throughout our activities.

During 2022, we adapted our sustainability governance and created a Sustainability Strategy Team to support the CEO in the development of our sustainability strategy and to ensure that it is embedded within our corporate strategy. Effective January 2023, the Executive Board is supported by a new sub-committee, the Group Sustainability Committee, which is empowered to take decisions to implement our sustainability strategy. Additionally we have set-up a Sustainability Oversight Office which aims to ensure effective sustainability governance throughout the organization and to support the Group Sustainability Committee.

For further details please refer to the section 'Corporate Governance Statement – Sustainability Governance' and our Climate Report 2022.

Opportunities and Risks

As corporate and fiduciary, it is our duty to measure, analyse and manage all material opportunities and risks - including climate-related opportunities and risks. Our approach on the integration of climate-related risks in the risk management strategy and processes has been formalized within a dedicated Sustainability Risk Management Policy, which describes how sustainability risks, including climate risks, are integrated into our Risk Management Framework. It requires sustainability risks to be incorporated into our operating model for impacted risk types and business functions.

As a result, we have identified several (climate-related) risk types and dimensions either affecting ourselves or investors. This includes investment risks in DWS managed products related to climate transition and physical climate events and corporate risks from our strategic decisions and reputation in the market. Based on their relevance and materiality, we are driving the integration of climate-related risks in our risk management processes.

Further details on our sustainability risk can be found in the section 'Risk Report – Sustainability Risk' and climate-related opportunities and risks are further elaborated on in our Climate Report 2022.

Targets and Measures

As a NZAM signatory, we regularly report against our net zero commitments. In the first annual disclosure submitted to CDP in July 2022, we reported a 6.3% year-on-year decrease in the inflation-adjusted WACI for those AuM in-scope for net zero (emissions for 2020 vs. the 2019 baseline). The inflation-adjusted 6.3% WACI is broadly in-line with the average year-on-year reduction needed to reach our overall 50% interim decarbonisation target by 2030. To put this into context, the MSCI All-Country World Index over the same year saw an inflation-adjusted WACI decline of 0.3%.

Extract of our latest CDP disclosure including further details on methodology, metrics and reconciliation of figures:

Assets under management in-scope for net zero commitment	€ 358.0 bn. or 38.6% of total AuM as of 31 December 2021
Target of 50% reduction in inflation-adjusted WACI by 2030 versus 2019 baseline for in-scope assets	6.3% decrease for 2020 versus 2019 baseline

We employ the inflation-adjusted WACI instead of the standard WACI to strip out the effect of price increases. The above-mentioned reduction refers to the emissions for 2020 versus the 2019 baseline. Due to a lag in reporting, emission data for 2021 was not available for all companies at the time of our reporting to CDP. To account for this lag, emission data for 2020 – in combination with holdings as of 31 December 2021 – has been used.

The main drivers of the reported portfolio decarbonization were changes made by portfolio companies to their own carbon intensity, changes to our product mix i. e. closure of existing products or launch of new products and changes to portfolio holdings either due to fund flows, market movements, or other portfolio considerations.

Throughout 2022, we continued to guide our climate-related activities and disclosures as required by the Task Force on Climate-related Financial Disclosures (TCFD). To consider the recommendation made by the Financial Stability Board to make TCFD disclosures in our mainstream financial filings, we include information that addresses the disclosure area in this Annual Report in the table below. In parallel, we also released our Climate Report 2022 on our webpage with additional information regarding our impact on climate change, net zero actions and TCFD information.

In the UK, the Financial Conduct Authority published its policy statement in relation to climate-related financial disclosures to extend mandatory TCFD reporting to asset managers. Our legal entity DWS Investment UK Limited is in scope of this reporting obligation for phase one and will publish a TCFD Entity Report by June 2023.

TCFD Disclosures

Disclosure Focus Area	Recommended Disclosure	Section in this document
Governance	1a) Describe the board's oversight of climate-related risks and opportunities.	Compliance and Control – Internal Control System for the Financial and Non-Financial Reporting Process Corporate Governance Statement – Corporate Bodies Corporate Governance Statement – Sustainability Governance
	b) Describe management's role in assessing and managing climate-related risks and opportunities	Risk Report – Sustainability Risk Compliance and Control – Internal Control System for the Financial and Non-Financial Reporting Process Corporate Governance Statement – Corporate Bodies Corporate Governance Statement – Sustainability Governance
Strategy	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	Our Responsibility – Our Impact on Climate Change Our Responsibility – Our Investment Approach Risk Report – Sustainability Risk
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	Our Responsibility – Our Impact on Climate Change Risk Report – Sustainability Risk
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Risk Report – Sustainability Risk
Risk management	a) Describe the organization's process for identifying and assessing climate-related risks.	Risk Report – Sustainability Risk
	b) Describe the organization's processes for managing climate-related risks.	Risk Report – Sustainability Risk
	c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	Risk Report – Sustainability Risk
Metrics and targets	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk-management process.	Our Responsibility– Sustainable Action
	b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	Our Responsibility– Sustainable Action
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Our Responsibility– Sustainable Action

Our Product Suite

Highlights

- Since August 2022, investment advisors and financial portfolio managers have had to take into account the sustainability preferences of their clients in accordance with the amended MiFID II Directive. For its EU-domiciled retail funds, DWS has therefore implemented the requirements for the inclusion of relevant sustainability-related information in product documentation already in 2022, which were required to be implemented by beginning of 2023 only.
- Our ESG Framework for actively managed retail funds domiciled in Germany has been further enhanced including the application of BaFin draft guidelines for retail funds that fall under ESG/sustainability naming convention.

Management Approach

Throughout 2022, we continued to increase the number of our European domiciled actively managed retail funds and Xtrackers ETFs which promote environmental or social characteristics and report as Article 8 SFDR. Most of our European domiciled actively managed retail funds apply one of two DWS ESG filters: "DWS ESG Investment Standard" or

"DWS Basic Exclusions". The "DWS Basic Exclusions" filter represents our basic approach to incorporating certain exclusions in the investment policy of the relevant fund. Products applying this filter only are excluded from the 2022 ESG AuM number. The "DWS ESG Investment Standard" filter enhances the exclusions in comparison to the "DWS Basic Exclusion" filter and adds an "ESG quality assessment" approach encompassing investments in issuers selected for positive ESG performance relative to industry peers (so-called "Best-In-Class approach"). Products applying this filter are included in the 2022 ESG AuM number.

For Alternative funds, SFDR disclosure is determined based on the respective asset class or, where applicable, the fund's environmental and social management system which is an ESG framework outlining how to address and manage ESG and / or Sustainable Investment objectives in the investment cycle for the entire underlying portfolio.

We introduced a framework for ESG product classification or disclosure (ESG Framework) in 2021. Given the further refinement of EU regulation, notably the issuance of SFDR Level II Regulatory Technical Standards and MiFID II requirements, the ESG Framework was further refined during 2022 for our EU-domiciled funds.

Since August 2022, investment advisors and financial portfolio managers have had to take into account the sustainability preferences of their clients in accordance with the amended MiFID II Directive. For its EU-domiciled retail funds, DWS has therefore implemented the requirements for the inclusion of relevant sustainability-related information in product documentation already in 2022, which were required to be implemented by beginning of 2023 only. We have implemented and disclosed information on the consideration of Principal Adverse Impacts (PAIs) and the minimum share of sustainable investments aligned with Article 2(17) SFDR for Article 8 and 9 SFDR funds where feasible. We have opted not to show a minimum percentage for environmentally sustainable investments according to EU Taxonomy in our retail funds in 2022 given that very few companies disclose the corresponding information and estimates should not be used. An exception are certain Xtrackers ETFs which temporarily reported a minimum percentage for environmentally sustainable investments according to EU Taxonomy during the year.
For our actively managed retail funds domiciled in Germany marketed and sold as "ESG" or comparable, we implemented the BaFin draft guidelines for retail funds that fall under ESG/ sustainability naming convention.

We have also reflected regulatory clarifications and our interpretation thereof in some of our actively managed retail funds and Xtrackers ETFs. Considering continuous clarifications, we have decided that most of our funds which have previously reported as Article 9 SFDR report as Article 8 SFDR going forward.

Enhancements to the ESG Framework, are focused on EU domiciled funds. We acknowledge that there are regional differences in the application of ESG standards and we will develop further our ESG Framework for financial products that are not subject to EU regulation and also in light of the ever evolving EU regulations applicable to EU funds.

Organisational Structure

The Product Division is a global and dedicated function positioning the product suite as the key differentiator and strategic instrument for growth in an increasingly competitive asset management industry.

The Global Head of Product is an Executive Board member and leads the Product Division. The Product Division is organized around functions and regions including Product Strategy and Analytics; Digital Strategy, Products and Solutions; Product Specialists Liquid; Alternatives Specialists; Product Management; Structuring; Product COO and regional product heads for the Americas, EMEA and APAC.

The Product Division owns processes across the whole product value chain: Starting from the product specific strategic planning process, product development, and product launch, the Product Division also owns product lifecycle management.

Dedicated ESG teams within the division support our internal investment teams and external clients in providing ESG information, analysis, and investment solutions.

Opportunities and Risks

As outlined in our 2021 Annual Report, ESG regulation is evolving rapidly, particularly in the EU. There is ongoing interpretation and clarification of these new regulations as well as the expectation of further regulatory requirements which will continue to influence product design, disclosure and reporting with respect to ESG components. Further divergence of regulatory regimes between different regions could increase challenges on global asset managers and we have aligned and will aim to align our product suite to these evolving regulatory and industry standards.

During 2022, the Russian invasion of Ukraine impacted our product range. Given the situation, it was decided in March 2022 that our actively managed retail funds should no longer make new investments into Russian securities until further notice. Furthermore, in coordination with fund boards, we have suspended the subscription and redemption of new shares in retail funds with significant Russian exposure and manage existing Russian exposure on behalf of our clients in line with the individual funds investment policy and our fiduciary commitment.

We see client demand for ESG products which could provide opportunities for asset managers with a differentiated ESG product suite.

Targets and Measures

Based on the refinements made to our global ESG Framework, the following products are considered as ESG AuM as at the end of 2022:

- Liquid actively managed products: retail mutual funds which follow the "DWS ESG Investment Standard" filter, or have a "sustainable investment objective", and US mutual funds which have been labelled as ESG and seek to adhere to an ESG investment strategy
- Liquid passively managed funds (ETFs) which apply a screen comparable to the "DWS ESG Investment Standard" filter, or which track indices that comply with the EU Benchmark regulation on EU Climate Transition Benchmarks and EU Paris-Aligned Benchmarks, or have a "sustainable investment objective", and other liquid passively managed funds which have been labelled as ESG and/or seek to adhere to an ESG investment strategy
- Liquid mandates or special funds for institutional clients or White Label products in-scope of SFDR and report pursuant to Article 8 SFDR which follow the "DWS ESG Investment Standard" filter or a comparable ESG filter aligned with the client or which are in scope of SFDR and report pursuant to Article 9 SFDR
- Liquid mandates or special funds for institutional clients or White Label products which are out of scope of SFDR but comply with certain of the "General Industry Standards and Guidelines for Sustainable Investing"
- Illiquid products which are in scope of SFDR and report pursuant to Article 9 SFDR
- Illiquid products which are out of scope of SFDR but which have a "sustainable investment objective"

ESG AuM (according to our ESG Framework)

in € m.	31 Dec 2022	31 Dec 2021
ESG AuM - Active	81,263	84,129
ESG AuM - Passive	34,193	29,499
ESG AuM - Alternatives	1,552	1,608
Total ESG AuM (according to our ESG Framework)	**117,007**	**115,236**

Our Investment Approach

GRI 203-1; 203-2

Highlights

- The latest Principles for Responsible Investment (PRI) assessment gave us a score above the median, amongst peers.
- In 2022, we adopted an enhanced engagement framework in EMEA for our three largest management companies, namely DWS Investment GmbH, DWS International GmbH and DWS Investment S.A. and conducted 532 engagements.

Management Approach

The importance of ESG factors for investors has been long recognized by us. We are among the early signatories of the United Nations-backed PRI, which we joined in 2008. As a consequence we have had processes, commitments and policies in place that are designed to incorporate ESG factors into the investment process for a long time.

DWS is constantly reviewing and developing its ESG integration approach. This is guided by requirements from regulators, clients, the PRI initiative, as well as the constant dialogue with other stakeholders (e.g. ShareAction, Greenpeace, Urgewald, Coalition for Environmentally Responsible Economies).

Our Responsible Investment Framework summarizes how our ESG Integration approach is implemented into our investment process (https://www.dws.com/solutions/esg/ri-statement).

Organisational Structure

The Head of Investment Division is a member of our Executive Board.

The Investment Division is organised by investment approach (Active, Passive and Alternatives) and regions (Americas, EMEA, APAC), each with tailored approaches to the incorporation of ESG factors in the investment process.

The CIO for Responsible Investment is part of the Research House, which is led by the Global Head of Research/ESG. It enables ESG incorporation for the investment platform for Active and Passive as well as overseeing parts of the ESG processes within Alternatives.

ESG Governance and Oversight: Three councils address ESG activities in the Investment Division:

- The global **Sustainability Assessment Validation Council (SAVC)** is designed to operate as a quality assurance function on ESG assessments.
- The global **ESG Methodology Panel** is designed to define and oversee the ESG assessment and grading methodology. Its roles and responsibilities remain unchanged compared to previous reporting periods.
- The regional **Engagement Council** oversees the engagement activities defined by the enhanced engagement framework, such as providing guidance to the engagement leads, performing quality checks and tracking engagement progress. The objective of this council is to facilitate the discussion of important financial and non-financial issues and to drive engagement for the assets managed by DWS Investment GmbH, DWS International GmbH and DWS Investment S.A. It is chaired by the Head of the Corporate Governance Center and the Head of the ESG Integration team.

The CIO for Responsible Investment responsibilities include:

- **Corporate Governance Center**
  The Corporate Governance Center is organised by regional focus areas to account for varying market practice standards and proxy voting operational procedures. For our largest management companies in Europe, the Corporate Governance Center defines our proprietary standards and expectations for good corporate governance for our portfolios and mandates according to the pooled voting rights agreements between DWS Investment GmbH, DWS Investment S.A. and for specific portfolio management mandates of DWS International GmbH. For our other legal entities that have their own processes and policies in place, the Corporate Governance Center provides guidance and support on relevant stewardship topics. In 2022 the Corporate Governance Center further expanded its headcount to accommodate for increasing proxy voting coverage and corresponding engagement duties.

  Our corporate governance understanding builds on over 30 years' experience as active owners and is based on relevant national and international legal frameworks and associations (e.g., German Corporate Governance Code, the UK Corporate Governance Code, International Corporate Governance Network and the Group of Twenty/OECD Principles of Corporate Governance). We actively participate in relevant global investor working groups, as well as providing our input on German and international regulatory consultations.

- **ESG Integration team for Active Investment Management**
  The ESG Integration team for Active Investment Management enables investment professionals to integrate material ESG factors into the investment process. The team expanded its headcount in 2022 to further advance Active ESG integration activities and to assume additional engagement responsibilities as part of the enhanced engagement framework for our portfolios and mandates according to the pooled agreements between DWS Investment GmbH, DWS Investment S.A. and for specific portfolio management mandates of DWS International GmbH.

- **Involvement of our Research Institute**
  Our Research Institute is responsible for producing research on key investment themes and the long view, including on ESG matters. The team acts as a key channel for delivering all research produced in the investment teams across the Group. In 2022, the ESG Thematic Research team continued to publish articles on key sustainability topics with a focus towards the ESG and sustainability implications of the war in Ukraine given its impact on global energy and food systems. The team also further examined energy independence and the vulnerability of the world's essential systems covering climate, biodiversity, water, land and oceans and their financial materiality.

- **ESG Engine and Solutions team**
  The ESG Engine and Solutions team is responsible for the ESG Engine, our proprietary ESG tool. The ESG Engine produces key assessments, which are the basis for DWS ESG investment strategies (defined in the section 'Our Product Suite') and for ESG integration activities. The ESG Engine collects data from various sources including leading commercial ESG vendors. For the asset classes where data is available, the data is standardised and aggregated to yield ESG assessment scores and grades which are used by different functions within DWS. The ESG Engine and Solutions team owns both the ESG methodology implementation as well as the process that produces our ESG assessments in regular update cycles. Throughout 2022, we used five external commercial ESG data providers MSCI ESG, Morningstar Sustainalytics, ISS ESG, S&P TruCost, ESG Book and onboarded additional – partly non-commercial – vendors to support our net zero ambitions. The data is made available to research analysts and portfolio managers for liquid assets through the Aladdin platform and provides support to research, investment decision making and for managing ESG strategies. The use of the ESG Engine and the scope of application remained unchanged throughout 2022.

Opportunities and Risks

Human Rights and Norm Assessment

GRI 412-3

In recent years, countries such as Germany, France, UK, and Australia made laws on corporate accountability for topics such as human rights issues, which require larger companies to identify risks related to violation of human rights and environmental destruction. The United Nations Guiding Principles on Business and Human Rights clearly expect companies to operate to a higher international standard where national laws do not sufficiently respect human rights.

Investee companies can have an impact on the human rights of their employees and workers along their value chain as well as local communities. We incorporate human rights requirements through relevant internal policies and frameworks. Additionally, our norm assessment incorporates, among other factors, human rights controversies. These norm assessments are available to our investment professionals so that they can integrate these signals and material risks into the preparation of engagement discussion, investment research analysis and subsequently into investment decision making. Furthermore, we also carried out our thematic engagements on human rights in Myanmar and Belarus. Please refer to the next section for respective international norms and guidelines applied in the process.

ESG Data

Given the rapid changes taking place in the world of ESG, we have processes in place that are designed to incorporate changes into the ESG Engine in a reasonable time. Such processes are required, for example, to enable us to meet specific client needs, or comply with developments in regulatory reporting requirements. The processes are run by the ESG Engine Team and controlled by the ESG Methodology Panel.

Targets and Measures

Enhancing Incorporation of ESG in the Active Investment Process

The ESG Integration team has further enhanced policies and procedures on ESG integration with the aim to expand our investment opportunities and reduce investment risks. The Investment Division has a number of policies, statements and commitments. These are guided by the PRI initiative, client needs, regulatory requirements and other initiatives including our stakeholder requests.

Some of these apply globally, others are regional and/or national in scope or only applicable to certain portfolio management teams. The applicability is a function of the nature of the matter concerned and applicable regulation.

Relevant policies can be found on our website under https://www.dws.com/solutions/esg/information-on-sustainability/ and legal entity specific statements pursuant to SFDR can be found under https://www.dws.com/footer/Legal-Resources/ and are regularly updated.

Investment professionals, for the relevant legal entities within Active fall under the scope of the ESG Integration Policy for Active Investment Management. Jurisdictional differences, as well as different regulatory requirements, may lead to differences in the implementation of the policy. However, our investment professionals are expected to be aware of material ESG matters and to comply with internal processes and legal, contractual and regulatory obligations.

For European regulated strategies under SFDR, the requirement refers to the identification, analysis and prioritization of principal adverse impacts in accordance with requirements laid out by SFDR.

Active Ownership

The Corporate Governance Center, for DWS Investment GmbH sent an annual letter to more than 2,300 investee companies early in the year. The “pre-season” letter represented an important step as it elaborated key changes to our Corporate Governance and Proxy Voting Policy and marked the start of a constructive dialogue with our investee companies. Based on our commitment to fostering good corporate governance and in line with our active ownership approach, we sent written questions to the boards of directors of 64 investee companies at their annual general meeting, as published at https://www.dws.com/en-gb/solutions/esg/corporate-governance/. This was an increase of approximately 60% compared to 2021. We also sent our individualised post-season letters to more than 772 of our investees, where we had voted against management recommendations as we were not in agreement with with specific issues on the agenda.

One of our priorities in 2022 was to progress on the net zero commitment that we made in 2020. In support of our ambition, we followed on the initial letter we had sent in 2021 by sending our thematic engagement letter to more than 50 additional companies with high WACI portfolio contribution in 2022. In the letter we set-out our expectations, informed the companies of our voting strategy and requested transparency and detailed information around their concrete net zero strategies. In 2022, as part of our thematic net zero engagement,we conducted 175 dedicated follow-ups. We remain in constructive dialogue with many issuers and expect this to continue in 2023.

Following the political events in Belarus and Myanmar, we engaged with selected issuers operating in both countries to monitor their practices and standards in terms of human rights. In 2021, we sent 38 human rights thematic engagement letters to companies operating in Myanmar and Belarus which led to 11 engagements in 2022. The engagements provided more insights into their human rights due diligence practices, internal standards and grievance mechanisms. We will continue to actively engage with the investee companies and monitor any developments.

We regularly update our policies and procedures including the Corporate Governance and Proxy Voting Policy for DWS Investment GmbH, DWS International GmbH and DWS Investment S.A.. The policy is reviewed annually to reflect developments in regulation and/or market best practices. In 2022, the changes to our Corporate Governance and Proxy Voting Policy focused on enhanced board accountability and specifically:

Board Elections:
We extended our guidelines, where we vote against the re-election of non-executive directors when they fail to:

- take climate action
- adequately and timely respond to thematic engagement requests, which, in 2022, was related to our thematic engagement programme on net zero

In addition, we extended our guidelines to hold the nomination committee and board chair responsible for insufficient board and committee level independence.

Diversity:
We aligned our expectations with regard to gender and ethnic diversity to best practices (e.g. at least one person from an ethnic minority background on company boards for FTSE 100 issuers).

Executive Compensation:
Since 2021, we expect the integration of ESG metrics into short-term and/or long-term incentives. In 2022, we began voting against incumbent compensation committee chairs for failure to do so.

ESG Assessment Activities

The ESG Engine activities are driven by the business, regulation and clients' demands and are monitored by the ESG Methodology Panel.

The focus in 2022 was on regulatory reporting and disclosure. New data sources were integrated into the ESG Engine. They refer to principal adverse impacts, regulatory sustainability indicators and net zero metrics. The ESG Engine provides ESG and principal adverse impacts information with the aim of improving the assessment of the future expected risk/return of a security and making our investment professionals aware of the issuer’s PAIs.

The SAVC was established at the end of 2021 to oversee ESG assessments within the ESG Engine. The council seeks to ensure that the ESG Engine assessments reflects the current underlying risk of the issuer. In 2022, there were 198 reviews including 120 downgrades and 28 upgrades.

ESG Integration Activities

In 2022, the ESG Integration Team supported the investment platform in several areas. It:
- reviewed the global Credit and Equity Research handbooks and increased the visibility of the ESG analysis in the research notes.
- continued to engage investment professionals for ESG integration on an ad-hoc basis through global training sessions on new ESG methodologies, the updated Engagement Policy and the enhanced engagement framework for DWS Investment GmbH, DWS International GmbH, DWS Investment S.A, as well as on how to integrate ESG signals into fundamental research. In total, more than 20 training sessions were conducted.
- held regular meetings with ESG Gatekeepers (ESG representatives in investment teams),
- continued the global materiality workshops to assist investment professionals in their day-to-day identification of critical ESG issues based on double materiality approach.
- trained colleagues aiming to get the the Certified ESG Analyst certification. By the end of 2022, additional 86 colleagues qualified as certified ESG analysts (please refer to the section ‘Our Responsibility – Entrepreneurial Spirit’ for further details).

We scored above the median, amongst all signatories, in 15 modules assessed by the UN-supported PRI assessment for the calendar year 2020 which was published in 2022. We, specifically, achieved five out of five stars in eight modules and four stars in seven modules.

Our enhanced engagement framework

We continue to operate an enhanced engagement framework for the pooled legal entities, as executed by DWS Investment GmbH, which is designed to define and track sustainability outcomes for our investees as noted in the Annual Report 2021.

The enhanced engagement framework is overseen by a regional Engagement Council which meets on a regular basis to discuss and review engagement plans for companies on the strategic engagement list. This engagement list contains 50 investee companies that are of strategic importance for us and our clients and where we believe there is potential to improve ESG and financial quality. The Engagement Council members also discussed changes to strategic and focus list companies, based on the selection criteria and have reviewed relevant thematic engagement letters.

For the DWS equity holdings that are in the scope of our Corporate Governance and Proxy Voting Policy according to the pooled legal entities (as executed by DWS Investment GmbH), 532 engagements were conducted in 2022. There is a separate policy and process for the US. Further details can be found in our Climate Report 2022.

Proxy Voting Activity

In 2022, for funds and mandates domiciled with our legal entities in Europe and Asia, we submitted votes at a total of 3,857 general meetings at 2,897 investee companies across 62 markets. This is an increase of 19% compared to 2021.

These meetings represented approximately 92% of our equity assets under management in Europe and APAC. The objective remains to increase the number of meetings voted per year and the results for our proxy voting and engagement are reported annually on our website. For the mutual funds domiciled in the US, we also exercise voting rights for all equity holdings and in 2022, we voted at a total number of 9,340 meetings.

Proxy voting and corporate engagements

	2022	2021	% change
Proxy voting:			
For mandates and funds domiciled with our legal entities in Europe[1] and Asia[2] (submitted votes[3])	3,857	3,242	19
Companies votes submitted to[3]	2,897	2,426	19
For mandates and funds domiciled with our legal entities in the US (submitted votes)	9,340	9,406	(1)
Companies votes submitted to	6,777	6,879	(1)
Annual General Meeting attendance/questions sent to company boards for virtual/physical shareholder meetings for funds and mandates domiciled in Europe[1]	**64**	**40**	**60**
Corporate engagements for funds and mandates domiciled in Europe[1]	**532**	**581**	**(8)**

[1] DWS Investment GmbH (with discretion to vote for certain assets under management of DWS International GmbH, DWS Investment S.A. (including SICAVs and PLCs) based on delegation agreements). Other DWS legal entities may have their own voting process based on different local regulatory requirements.
[2] DWS Investment GmbH acts as a proxy advisor for the two separate DWS legal entities in Hong Kong (DWS Investments Hong Kong Ltd.) and Japan (DWS investments Japan Ltd.), for which DWS Investment GmbH provides voting recommendations and the voting rights and voting execution lies with the respective Hong Kong and Japan entity.
[3] Of these, 41 meetings at 35 invested companies were unsuccessful in 2022 and 35 meetings at 20 investee companies were unsuccessful in 2021 due to rejected votes.

Contribution to Action on Climate Change

GRI 201-2

Climate change, the global efforts to curb emissions and the shift to a net-zero economy will most likely lead to an economic transformation comparable to previous waves of industrialisation. This green industrialisation will likely accelerate over time, driven by digitalisation, artificial intelligence, automation, biotechnology, fintech and clean technologies. As an asset manager we are in a good position to evaluate risks and opportunities arising from green industrialisation and to support the economy in this process.

Throughout 2022, we continued to focus on fundamental ESG thematic research, engaging with third parties and ensuring that ESG is discussed in the DWS CIO View. Various topics which are relevant to climate change were either part of our CIO Day or can be found in our Climate Report 2022.

ESG in Alternatives

The scope of illiquid investments comprises direct investments into unlisted real estate, infrastructure (both via debt or equity) and private equity. The inherent differences between the liquid and illiquid asset classes require that the approach to incorporating ESG for Alternatives be tailored specifically to the relevant Alternatives asset classes as outlined in the sections below. In general, the incorporation of ESG into the illiquid investment process takes place during investment due diligence and portfolio management.

ESG in Real Estate Investments

Our real estate business recognises the importance of identifying, assessing, and managing material ESG issues as an integral part of conducting business. ESG issues can present risks and opportunities for financial performance, and investments may have positive and negative environmental and social effects. Therefore, our real estate business has identified the sustainability issues most relevant for real estate investments and developed the four strategic ESG themes:

- Resilience, including efficiency and adaptation
- Well-being, including comfort and air quality
- Nature, including ecosystems and circularity, and
- Community, including engagement and affordability

DWS Real Estate takes a fiduciary-first approach to ESG factors and sustainability performance in private real estate investment management, defining a range of operation between ESG and financial risk boundaries. DWS Real Estate focuses on ESG factors which are material for Real Estate: transitional, physical, social norms, and governance risks (for debt investments). ESG performance objectives on portfolio level are considered in relation to the investment strategy, contractual financial requirements, market and regulatory conditions and specific client expectations and formalized in a portfolio specific ESG strategy. Material ESG issues are considered and addressed at every stage of the investment process, directly informing acquisition, asset management and disposal decisions. Identified actions are assessed against accretive returns objectives and integrated in sustainable asset management plans accordingly.

Sustainability benchmarking and certification in relation to Real Estate

In order to provide transparency to our investors, we report into the Global Real Estate Sustainability Benchmark (GRESB), which provides an independent assessment of portfolios and funds using a peer-based approach and scoring based on several ESG metrics. In 2022, we reported 20 individual portfolios which is 87.9% of total real estate portfolio to GRESB, covering 17.7 million square meter area and USD 55 billion AUM out of total USD 63 billion of assets globally.

Aggregated across all portfolios, using the GRESB analysis feature, we achieved a 30/30 Management score, compared to the GRESB average of 28. Management component covers governance categories such as leadership, policies, reporting and stakeholder engagement. Furthermore, the aggregated portfolio achieved a performance score of 52/70, as compared with the GRESB average of 51. Performance component measures issues such as certifications and ratings, carbon, energy, water and waste performance. Five portfolios achieved four-star or above GRESB rating (Five stars is the highest rating and recognition for being an industry leader). In addition, 18 portfolios achieved Green Star recognition. Other than the GRESB Rating, which is a relative rating, the GRESB Green Star is a rating on absolute performance. For more information, please see https://www.gresb.com/nl-en/faq/what-is-a-green-star/.

ESG in Infrastructure Investments

GRI 203-1

We seek to incorporate ESG considerations into the investment framework of the Infrastructure business at all stages of the investment lifecycle for equity investments, from the initial screening and due diligence to the asset management and exit stages. During the holding period, we monitor the ESG attributes of the investments through the regular reporting of KPIs to us from the portfolio companies, and through completion of the annual GRESB Infrastructure benchmarking assessment at both fund and asset level. The KPIs cover environmental, social and governance issues such as carbon footprint, water usage, health and safety indicators and diversity and inclusion metrics at both staff and board levels. Our due diligence also considers governance topics such as fraud, bribery, sanctions and compliance, as required. Findings from the due diligence phase are incorporated into the Investment Committee paper and presented to the Investment Committee for consideration.

The Infrastructure business also places emphasis on reporting, producing an annual Sustainable and Responsible Investment report for investors. Infrastructure achieved a five-star rating in the UN PRI assessment for the calendar year 2020 which was published in 2022.

During 2022 we have updated the Environmental and Social Management System under which the business operates in order to reflect changes in the ESG environment and to strengthen our procedures. It has also been updated to reflect our obligations under SFDR. The Environmental and Social Management System applies to all potential and existing portfolio investments in infrastructure equity and also creates obligations on portfolio companies that are designed to ensure regular reporting to us.

As a result of this regular reporting and engagement, we aim to help drive improvements in ESG metrics and performance at our portfolio companies with a view to improving the businesses' sustainability credentials and to create value.

The infrastructure approach to ESG is summarised by the following 3 pillars:

- **Policies:** The Infrastructure business is governed by the Environmental and Social Management System, which provides the overarching framework, processes and governance for our ESG integration approach in Infrastructure.
- **ESG Assessment process:** We have an ESG checklist which should be completed during the acquisitions process for all prospective equity investments. The findings should then be incorporated in the Investment Committee memo.
- **Monitoring:** As part of the asset management process, we seek to collect data on key ESG metrics within each of the operating companies. This information is then used to better refine our asset management strategies and is also reported to our investors in the form of a Sustainable and Responsible Investment Report. Certain KPIs, such as those around occupational health and safety, are also embedded into the performance review process for the operating companies.

The Infrastructure debt business, in collaboration with our research teams, developed a bespoke proprietary ESG scoring methodology, which has been rolled out to new and existing investments starting 2021. The methodology supports the overall investment process and ongoing monitoring of environmental risks. It is designed to guide the ESG due diligence process and to assign an ESG assessment to each potential investment, based on a pre-defined set of ESG KPIs, which are sourced from the borrower/sponsors, external advisors or public sources.

ESG in Sustainable Investments (SI) Funds

Our Sustainable Investments team creates solutions for institutional, private investors, development banks, and governments, who share common social and environmental investment objectives and seek attractive financial returns. The business is organized around three components:

- Financial Inclusion/Microfinance;
- Social Enterprise Financing (agriculture, health, and energy); and
- Energy Efficiency/Renewable Energy.

The Sustainable Investments team represents experienced global investing capabilities that include several regionally-focused strategies in Europe, Africa, and Asia.

The SI business aims to integrate key ESG considerations in the investment process, but is primarily guided by general accepted frameworks including, for example, the Sustainability Accounting Standards Board and OPIM standards. During the due diligence process, the manager engages professional third-party advisors to examine the financial, technical and legal aspects of the projects, especially those that would translate into sustainable risks. Potential risks and mitigation measures are presented to the Investment Committee and rectification work is carried out to reduce such risks. The SI team monitors the operation of the portfolio companies and seeks to ensure that they operate in compliance with the environmental standards and regulations. Where appropriate, some of SI’s funds may engage a third-party consultancy to conduct the quarterly ESG reporting for the fund and the quarterly reports include risk analyses and record the waste generation and air pollutant emissions in detail. For some funds we use a proprietary tool to measure and monitor impact.

ESG in Private Equity

We incorporate ESG into our screening, due diligence and monitoring process when reviewing potential investments. ESG metrics relevant to investment opportunities are defined ahead of the due diligence process. The types of risks screened for include governance issues, such as potential fraud or reputational risks, social issues with the workforce or the surrounding communities, environmental risks, occupational health and safety issues and accident track record.

During due diligence the investment team will review the potential transaction counterparty’s ESG policy and framework and assess the extent to which the investment and the manager in the potential transaction adhere to the key concepts defined by the PRI. The business also reviews the risks and KPIs most relevant to the industries in which it invests, and opportunities are often benchmarked against the ESG leaders in both the company’s asset class and among comparable alternatives within the industry. The investment team typically monitors the funds and assets we invest in and periodically meets with the management of these funds/fund vehicles with an agenda including ESG topics.

In December 2022, we have reached an agreement to transfer our Private Equity Solutions business to Brookfield Asset Management and the deal was completed in early 2023.

Client Commitment

GRI 102-34

Highlights

- 15,000 sign ups for "DWS Investmentkonferenz"
- Annual satisfaction surveys for clients and partners
- Our service quality remains in top three ranking of "FONDS professional"

Approach and Structure

We conduct business every day in accordance with our fiduciary duties: In the best interest of our clients. We aim to build long-term and trusted client relationships, delivering the best investment solutions and the highest quality client service. The Client Coverage Division aims to serve the investment needs of our clients across all client segments and regions. Our relationship managers work collaboratively with product specialists, portfolio managers, and client service specialists to bring suitable investment products and solutions to our clients. We provide ongoing training to our staff on various topics, including investment research, macroeconomics, ESG and new product solutions, with the aim of best serving our clients. As we did in previous years, we also continue to provide seminars, conferences and webinars to our clients.

We are committed to handling complaints fairly, effectively, and promptly. Our complaint registers provide valuable insights into how we are performing from our clients' perspective. A robust and consistent client complaint handling and transparent reporting process helps facilitate improvement in client satisfaction, by identifying and remediating poor client outcomes, learning from these and training client-facing staff. This process also assists with the reduction of mistakes and attributable costs and enhances risk transparency, as well as management information. Our Code of Conduct includes a complaint handling policy framework to facilitate a consistent approach to complaint management, as well as oversight according to regulatory requirements.

Measures and Goals

In March 2022, we held the annual "DWS Investmentkonferenz", on a virtual basis with 15,000 clients in Germany. In September 2022 we held "Investorendialog" for our institutional clients. In addition to the client events in Germany, further events in hybrid format took place in other countries. Our client service teams offered clients a range of webinars on various topics including Research House papers and our CIO View.

We value feedback from our clients on their experience with us, to bring further improvements to our client service. To assess the client experience we review client complaints on an ongoing basis, and conduct internal and third-party client satisfaction surveys.

The volume of client complaints trended slightly down. A significant number of client complaints in previous years was in relation to our DIP. We agreed with BlackFin Capital Partners on a long-term strategic partnership to jointly evolve the DIP by transferring the business into a new company, MorgenFund GmbH, in which we maintain a minority stake of 30%. The transaction was completed in November 2022. We will not report client complaints raised against MorgenFund GmbH.

We received a number of protest emails in November 2022 as a result of a concerted action by a non-governmental organization which were also dealt with by our client complaint department.

In addition to evaluating client complaints, we conduct third-party client satisfaction assessments, which enable us to gain a 360-degree view of our client services. Client satisfaction assessments are conducted by third parties in all regions.

Our service quality was ranked in the top three by "FONDS professionell", one of the largest magazines for financial advisors in Germany and Austria. Each year, "FONDS professionell" readers are asked to choose asset managers, broker pools and real estate investment providers with the best service quality and award them with the "German Fund Award".

In Germany, annual client satisfaction surveys were conducted for our clients and distribution partners. Two options were offered to clients, a "Voice Survey" over the phone and an "E-Mail Survey".

Clients and advisors rated their satisfaction on friendliness of staff, professional competence, comprehensibility and solution orientation as well as sales-specific questions. The results were communicated to relevant internal stakeholders, including senior management, service centre staff, and the workers' council. Based on the respective feedback, we formulate steps for improvement and incorporate into employee training.

Compared to 2021, the overall participation rate increased from 9.2% to 9.6% in 2022 and customer satisfaction was rated very high. Based on feedback from our customers in the 2021 Business-to-Consumer survey, measures were implemented to improve the quality of e-mail services and improved the overall customer satisfaction score.

In the US, we conducted an annual client satisfaction survey for our insurance clients. It focused on investment performance, client service, innovation and overall satisfaction levels. This survey has shown a consistently positive overall satisfaction rating of over 90% for the last five years.

To measure client satisfaction globally in a consistent approach, a new client satisfaction survey with our top 50 global clients, including our strategic distribution partners, was published as a pilot project last year using the Net Promoter Score methodology. The Net Promoter Score rates the likelihood of recommending us to a business contact. We have achieved a score of 50 in this pilot. We intend to roll out the Net Promoter Score survey to our entire client base to continuously monitor and improve client satisfaction.

Entrepreneurial Spirit

Highlights

- We established an in-house recruitment function which resulted in a reduction of reliance on third party recruiters.
- We launched an ESG Educational Framework series open to all employees on ESG-related topics.
- We increased our participation in volunteering activities significantly.

Employees and Workplace

People Strategy and Employee Effectiveness

This year, as we emerged from the COVID-19 pandemic and returned to offices, we have continued to prioritize sustainable people management across the firm to support our employees as they transition to new ways of working.

Our key areas of focus have included:

- **Further evolving our Functional Role Framework:** Introducing “real-time” compensation adjustments; increasing flexibility for emerging talent to progress; and strengthening oversight around workforce transparency and financial planning
- **Increasing awareness of our DWS Brand:** Establishing an in-house recruitment function and Employer Value Proposition to frame the Group as employer of choice
- **Rolling out our hybrid working model Future of Work:** Communicating global principles across all regions
- **Focusing on Diversity, Equity and Inclusion:** Sharing who we are and what we stand for with the market and continued certification with Human Capital Reporting Standards
- **Enhancing our training and development:** Through the introduction of our learning experience platform (LearningHub) and DWS Career Guide

Functional Role Framework and Career Progression

Following the introduction of the Functional Role Framework we set a new foundation in how we work together as a standalone, publicly listed asset manager.

Our new framework has equipped us with a clear organizational blueprint and the workforce management capabilities we need to drive long-term sustainable business success. It has also allowed us to better differentiate between experts who deliver content, services, thought leadership, products and solutions to our clients and those who are responsible for leading teams.

Our employees continue to benefit through greater transparency on the different career progression opportunities open to them - not only in their immediate team, but across our wider Group. These moves continue to take place throughout the year, with increased flexibility now being offered for our emerging talent.

Human Capital Reporting Standards

In 2022 we were delighted to be certified for our commitment to Human Capital Reporting Standards (ISO30414), for the third-year having been one of the first organizations to be certified in this developing area of disclosure.

This provides guidance on the human capital metrics companies should report internally and those they should disclose publicly - including areas such as “Compliance and Ethics”, “Diversity”, “Leadership”, “Organizational Culture” and “Health and Well-being”.

Continued certification with these standards is a fundamental part of our commitment to the Social and Governance ESG pillars and strategy to support the global community in achieving the UN's Sustainable Development Goals (SDGs), predominantly SDG 3: “Good health and well-being”, SDG 5: “Gender Equality”, SDG 8: “Decent work and economic Growth” and SDG 10: “Reduced Inequalities”.

Employer Attractiveness

GRI 102-33; 102-34

Culture Strategy

In early 2022 we communicated our new corporate brand “Investors for a new now”, together with three new core values: Client Commitment; Entrepreneurial Spirit; and Sustainable Action.

People Survey Results

A key barometer of the culture we see across the firm comes from our annual People Survey. In 2022, we had a response rate of 66% (2021: 70%), and over 3,000 free text comments, as colleagues shared their ideas, insights, and feedback with us.

What our people told us:

- Enablement levels have reached a record high of 78% (2021: 76%) This is above high performing external benchmarks (73%) with colleagues telling us that they find their work more interesting and perceive there are fewer barriers to doing their job well.
- Commitment levels, despite a marginal decline to 73% (2021: 74%), are in line with high performing external benchmarks.
- Employee Effectiveness – which focuses on motivation and productivity – also remains above high performing external benchmarks at 57%. This is an endorsement of how we have continued to collaborate with each other.
- Our Culture Pulse Index increased to 75% (2021: 71%) year-on-year with quarterly areas of focus all improving over the past 12 months (Giving and Receiving Feedback; Speaking-Up; Sharing Appreciation; Facilitating Effective Team Meetings; and Productive Behaviours).
- Linked to the evolution of our brand, 90% of employees told us they were familiar with our values and 73% believe they support behaviours that contribute to a productive working environment.

Over the past five years, seven out of eight key cultural dimensions now score in the Good to Excellent range. The dimensions are: 1) Speak Up; 2) Ethics, Conduct and Speak Up; 3) Enablement; 4) Empowering and Effective Managers; 5) Positive Impact of Values; 6) Culture Pulse Index (formerly Feedback Culture); and 7) Commitment.

In addition to the People Survey, we also measured staff grievances. In 2022 we saw a decrease from 9 to 6 complaints. For more information, please refer to ‘Employee Incident Management – Grievances’ in the ‘DWS Human Capital’ section.

In 2023 we aim to establish strong leadership behaviours with renewed attention on a people-centred approach including regular conversations, positive behaviours, showing care and concern for people and building trust.

Employee Value Proposition

Throughout 2022, we defined our Employee Value Proposition alongside a set of Employer Branding guidelines to position DWS as Employer of choice with the external market.

This comprises the following three pillars, Client Commitment, Entrepreneurial Spirit and Sustainable Action. For further details please refer to section ‘Our Responsibility'.

Future of Work

Our hybrid working model Future of Work, which was rolled out across all regions over the course of 2022, allows eligible employees to choose to split their time between working from home and working in the office, with the office remaining the primary place of work. Implementation timelines vary by country, reflecting local pandemic conditions and associated restrictions.

We conducted the Future of Work survey in November 2022 to gauge employee's feelings towards the hybrid working model. The survey revealed the hybrid model is having a positive impact, with 89% of respondents saying the impact on their job is positive and 88% saying they feel productive in the hybrid model.

Importantly, the level of remote working meets employee's expectations and employees understand what is expected of them and feel supported when working in the hybrid model.

Employee Training and Development

Our approach to employee training is to create a pro-active learning and development environment that supports business performance and personal growth. We approach training on the basis that learning happens according to the 70-20-10 model: 70% is learning on the job, 20% is social learning, and 10% is formal learning. All employees take responsibility for their development supported by access to the right channels, resources, and tools.

Learning Hub

In 2022 we piloted a new Learning Experience Platform (LearningHub), which provides employees access to recommended content based on the skills each want to develop. The platform is powered by artificial intelligence and employees can recommend and share content with others and see what is trending. They can also assess their skills and track their progress against development goals.

DWS Career Guide

In 2022 we launched a DWS Career Guide, highlighting role families and sharing illustrative career paths that are possible across the firm. The guide provides tips and best practices to help employees understand their strengths, interests and career goals. It also reinforces the importance of regular and meaningful conversations and breaks down the learning available – whether this is on the job, social learning or more formal learning opportunities.

ESG

ESG-related training has been another core area of focus, offering a wide range of solutions, from online training to certification. Currently we have 330 active employees who are CESGA certified (EFFAS Certified ESG Analyst®). We also launched an ESG Educational Framework series open to all employees on ESG-related topics.

Total Performance

We support employees and managers during the full performance management lifecycle – from setting priorities at the start of the year, facilitating meaningful conversations to cover career development during the year, to providing effective feedback as part of the year-end process.

New Ways of Working

We partnered with an external vendor to deliver 48 training sessions and Exchange Forums to educate managers on new ways of working, exchange feedback, and to develop solutions with fellow peers. We have also created similar training events for non-managerial staff and offered training courses focusing on hybrid working for all our colleagues.

Wellbeing

Training and support for employees and managers, which focused on wellbeing and resilience during the COVID-19 pandemic, has now become embedded into our standard training and support offerings.

74% of employees felt that we showed care and concern for our employees, which has remained consistent for the past three years.

Additional topics

In addition, we piloted a DWS Corporate Curriculum by offering soft skill training to employees on a regular basis (e.g. Presentation Skills and Communication Skills training). This offering includes eLearning on Project Management Essentials which was launched in November 2022.

Graduates

Early Careers represent our future talent, bringing fresh perspectives and innovative ideas. They contribute to our agenda of change, sustainability, reflect our future clients, and the diversity of our organisation.

In 2022, we transformed the Group's graduate recruitment process by designing a robust and tailored Intern and Graduate selection process to support the growing talent pipeline. This involved hiring 27 graduates globally, with the aim to scale our in-house offerings in the coming years.

Vocational training and dual studies are another important component of our junior employee strategy and offer an additional opportunity, particularly in Germany, to attract junior talent to the company.

Overall we supported 145 early career talents in four different pathways in 2022.

DWS Alumni Network

The DWS Alumni Network has been up and running since May 2020 with approximately 650 members – former colleagues who have since left the platform.

Whether our former colleagues spent their entire career with us, or just a part of it, their contribution to building the organization that stands before us today will always be appreciated. We are committed to building on their legacy as we work passionately to serve our clients and communities.

To ensure they stay informed on latest developments we share a newsletter with them every six weeks to highlight hot topics – ranging from quarterly results announcements, strategic initiatives, award wins, thought leadership, and updates on our Diversity, Equity and Inclusion, Future of Work and CSR programmes.

Leadership development

Following last year’s pilot, we communicated the DWS Responsible Leadership programme to cover topics such as Wellbeing and Leading Virtual Teams with a specific emphasis on staying connected, productive, healthy, to decode signs of stress, build resilience and to take care of each other.

First time leaders were provided with a “Welcome to Leadership” guide – a custom built toolkit to set them up for success – along with a New Manager Learning Pathway in our LearningHub. This includes guidance on how to lead their teams - both globally and remotely. It highlights the grey areas and risks they need to be mindful of, explains how to navigate through the right processes, and sign-posts helpful links and resources throughout.

In terms of regulatory awareness, 516 managers attended “Doing what is right, not just what is allowed” training sessions focused on ethical decision making. This highlights “grey areas” to be mindful of and stresses the importance of exercising good judgement and appropriate behaviour.

Talent Management

In 2022, we launched a talent management strategy targeting key talent in the organization. Here we aim to:

- strengthen critical capabilities and skills needed for the future by preparing talent to be thought leaders
- accelerate the development of targeted talent through a variety of interventions geared toward personal development and broadening business knowledge
- support internal mobility by providing deeper insight into career progression opportunities
- build stronger networks across the firm

Talent Reviews were conducted focusing on the identification of critical roles, successors and talent to be considered for talent programs. Additionally, an initiative focusing on female talent in the Investment Division was launched in Frankfurt.

Recruitment

In 2022, we established an in-house recruitment function (excluding India and the Philippines), hiring experienced recruitment professionals to recruit directly for us, including our newly formulated employee value proposition to position us as an employer of choice with the external market.The in-house recruitment function has overseen 747 permanent hires in 2022, globally, and the most significant share of hiring volume was delivered in Germany (42%). The team has reduced the reliance on third party recruiters to 9% in 2022.

Remuneration Strategy

GRI 102-35

A key aspect of our remuneration strategy is our compensation framework which embodies the “pay for performance” principle and ensures that all contributions to our success are appropriately recognized and rewarded. ESG measures, alongside others, are integrated as a key performance indicator within the framework. This is linked to employee compensation to reflect its strategic importance.

In 2022 additional employee cohorts have been aligned to this framework, such as our German tariff employees. As we continue our corporate journey to become a standalone asset manager, we further expect to align our teams in India and the Philippines to the group compensation framework in 2023.

Social Engagement

GRI 413-1

At DWS, social responsibility means anchoring our commitment in a Corporate Social Responsibility (CSR) strategy: We are committed to tackling climate change and addressing social inequalities – to help overcome two of the greatest challenges facing our society today.

Together with selected partner organizations, our aim is to provide targeted support for projects and initiatives that contribute to our strategy. Through donations, we can offer monetary support to organizations to purchase necessary equipment. Through collective and individual efforts via staff organized social days as well as through team corporate volunteering activities, our employees provide active support on site.

Significant increase in our voluntary commitment

We are proud that more employees volunteered in 2022 than in the previous year. On the one hand, this is due to the emergence from pandemic restrictions, particularly in the Asia-Pacific region, but on the other hand it is also due to the motivation of our employees. Compared to 9% in 2021, in 2022, 25% of our workforce either participated in centrally organized team volunteering activities or initiated a social day themselves.

Not only were our employees in the Asian countries of India, Japan, Singapore and the Philippines able to participate in volunteering activities under the DWS flag for the first time this year, but also some of our teams in France, Italy, Luxembourg, Switzerland and Spain.

In 2022, our employees performed 5,206 hours of volunteering which equated to 84 minutes of volunteering per employee.

Employees support for our CSR partner Healthy Seas has increased further. During lockdown some colleagues became involved with the marine conservation organization through skills based mentoring and the number of ambassadors for Healthy Seas has increased. As was the case in 2021, employees in EMEA had the opportunity to attend Healthy Seas training sessions to better understand their mission and goals. This group expanded to the US in 2022.

Further in person volunteering days were performed including park and beach clean-ups, tree planting events, renovation of daycare centres for children and providing support in senior citizens' homes.

In Asia, employees in India and Singapore in particular have supported organizations that look after the welfare of marginalized people. In Japan, the Philippines, India and other sites around the world, our employees organized events as part of World Clean-up Day.

Disaster relief

In addition to our volunteering efforts, we have made several donations as part of our disaster relief support. In 2022, we made two separate donations of € 250,000 and € 70,000 to provide both humanitarian aid and psychological support to the people of Ukraine. In addition, we also made donations to flood affected areas of Pakistan and those affected by the hunger crisis in the Horn of Africa.

When making donations, we follow our internal guidelines. The Head of Communications, Brand and CSR is responsible for approving expenditure in coordination with the Executive Board.

Ongoing support to protect the oceans

In addition to disaster relief, we support organizations which follow our CSR strategy. As part of our focus on ecological issues, we are committed to protecting the oceans and preserving the Blue Economy. This is why we work closely with ocean and conservation organizations such as “World Wide Fund for Nature” (WWF) Germany and Healthy Seas.

Since 2020, we have been supporting yearly the marine conservation organization Healthy Seas in its efforts to free up the world's oceans of “ghost nets” and thus protect the lives of countless marine creatures.

In 2022, we continued to support their efforts of expanding salvage missions beyond Europe to across Asia and the US. In addition, with our support, Healthy Seas launched a scientific project in the Adriatic Sea to investigate the ecological impact of ghost nets as well as their causes and origins.

As a further contribution to ocean conservation, we have been supporting a multi-year WWF project along the Mesoamerican Reef near Belize since 2021. The goal of this initiative is to restore and protect the coral reef and mangroves ecosystems so that they continue to provide sustainable livelihoods for local coastal communities. During this time, important project milestones have been achieved including the development of a "Belize Mangrove Alliance" network and creation of five coral gardens. Furthermore, staff from the authorities and local NGOs were trained to monitor the development and health of the corals.

With this partnership and wider CSR engagement, we are contributing to the protection of marine biodiversity as well as to the mitigation of the impacts of climate change thus reinforcing our commitment to the Blue Economy.

Diversity and Equal Opportunities

GRI 405-1

We are committed to building an inclusive culture that respects and embraces the diversity of our colleagues, clients, and communities and that nurtures an environment where every perspective matters and where every voice is heard.

We aspire to offer a workplace where creativity, confidence and ideas can bloom. Where individual strengths, different backgrounds and broad perspectives are valued. And where everyone can come to work as their true authentic selves as we attempt to create a workforce as diverse as our global footprint.

With colleagues across 68 nationalities, speaking more than 79 languages, locally rooted, yet globally connected across 21 countries, we celebrate our differences, treat each other with respect, listen openly without judging, and value each other's insights. This brings us closer together and contributes to a thriving and inspiring workplace.

We are proud of the progress we are making to foster a more diverse and inclusive workplace. But we know that the process of building a more just and equitable society is not easy or quick. Driving real change requires long-term commitment and action. It requires all of us to push beyond comfortable boundaries.

This includes constantly examining our own culture and talent practices, tackling unconscious bias and building a network of allies. It means speaking up as we work with peers to advocate for broad change, both within our industry and the society we serve. And it means putting building blocks in place across the firm that enable diverse and multi-cultural talent to thrive.

We are proud to be different. And we are 100% committed to embracing and driving change to help build a better, fairer society.

Diversity, Equity and Inclusion (DE&I)

We aim to attract, develop, and retain the best people from all cultures, countries, races, ethnicities, genders, sexual orientations, abilities, beliefs, backgrounds, and experiences. To this end, and to prepare for opportunities and challenges arising from changing demographics, digitalization, and the future of work, we follow an integrated and multi-dimensional approach to DE&I. We also aim to give equal opportunities to employees who work both full-time and part time. This year the percentage of employees globally who work part time stood at 7.4% (2021: 8.7%).

As part of our broader Sustainability Strategy and our Human Rights commitments, we worked on the following DE&I areas:

- Reaching voluntary goals at the Supervisory Board and Executive Board-1 and Executive Board-2 levels per the German Gender Quota Law (Erstes Führungspositionengesetz). Our efforts will also continue to align us to the German Executives Positions Act II (Zweites Führungspositionengesetz) introduced in August 2021. Gender Diversity is one of the KPIs that we are tracking internally with continued success in meeting our voluntary goals
- Establishing Regional DE&I Committees across our APAC, EMEA and US regions
- Launching our first internal global DE&I survey – sponsored by the Executive Board
- Recruiting our first Regional Head of DE&I in the US
- Publishing our first external DE&I webpage "Proud to be different" to outline to the market who we are and what we stand for
- Piloting an unconscious bias training programme for US employees, ahead of a global roll out in 2023
- Introducing an Advancing Diverse Talent Programme in the US
- Introducing a Disability Smart focus in the UK working towards the UK Government Disability Confident scheme to become Disability Confident Employer
- Sponsoring five black women to be part of the Black Women in Management Programme in the UK
- Increasing opportunities for social mobility in the UK by partnering with upReach, CityHive, The Skills Workshop and 10,000 Black Interns for the second year running to offer work experience, mentorship and skills training to students from lower socio-economic backgrounds or black heritage
- Launching a Women's Returners Programme in the UK to help facilitate a return to work in financial services to Women who have taken a career break.

Employee Inclusion and Engagement Networks

Our internal Employee Inclusion and Engagement Networks are spearheaded by colleagues across all regions. Many leverage diversity in its broadest sense – from race, colour, religion, age, physical or mental disability, medical condition, sexual orientation, gender and veteran status – to create a greater sense of purpose for themselves, their colleagues, and the Group.

The networks inspire inclusiveness in our daily interactions. They are voluntary, employee-led groups, driven by a common purpose: making a better workplace – for everyone. By sharing information, educating, and engaging with our communities, they contribute to business development as well as recruitment, retention, and professional development. They are open to all employees. Allies who do not self-identify with a particular group are all welcome.

Continuing our focus on gender diversity

Our aspiration is for greater female representation across our organization and we continue to monitor and report on our progress to the Executive Board. Individual goals and targets form part of Balanced Scorecards allocated to senior leaders across the firm – and these are aligned to performance evaluation and compensation.

We are committed to ensuring that:

- At least 30% of our Supervisory Board members are women.
- Female representation on our Executive Board is always in line or above German Gender Quota Legislation.
- We reflect gender diversity within our product range.
- 32% of managers at the first management level below the Executive Board are women by December 2024.
- 33% of managers at the second management level below the Executive Board are women by December 2024.
- We increase diversity in decision making bodies which include voting committees, legal entity boards, and other bodies.
- We continue to participate in "Women in the Workplace Study" developed by LeanIn.Org and McKinsey & Company.
- Together with Deutsche Bank Group, we publish our Gender and Ethnicity Pay Gap Report in the UK.
- We promote gender balance through our hiring and retention practices, external partnerships with charities and industry groups, and internal mentorship and sponsorship programmes.

In Germany, the German Remuneration Transparency Act (EntgTranspG), which came into force in January 2018, offers employees the right to request specific aggregated information about the remuneration of employees of the opposite gender in comparable jobs. As a global company, we continue to look forward to monitoring and reporting on our progress. In 2022, we have seen an increase in requests for this information.

Implementing German Gender Quota Legislation at the Group

The percentage of women on the Supervisory Board was 33.3% at the end of the year (2021: 33.3%), which met the statutory requirement of 30% for listed and co-determined German companies under gender quota legislation. Similarly, we will have three females representing 50% on the DWS Executive Board as of 1 January 2023 which is above the new enhanced requirements.

As of year-end 2022, 34.5% of the executive positions at the first management level below the Executive Board were held by women (2021: 28.1%). At the second level below the Executive Board, this percentage stood at 33.0% (2021: 29.0%).

Inclusive benefits

We as DWS are proud to be named among the leading US companies on Seramount's "2022 100 Best Companies" list. This year, we secured a spot on this list after being recognized for our inclusive benefits for families, such as paid gender-neutral parental leave, emergency childcare support, mental health care resources and more.

In addition, we were also recognized in the "2022 Best Companies for Dads" list in the US for the first time. Both awards reflect our commitment to providing our employees with a range of family-friendly benefits and flexible work arrangements – and demonstrating that we are taking greater efforts to make our workplace more inclusive for all parents.

EEO-1 reports

We have also published our consolidated EEO-1 reports for the US workforce. The EEO-1 report is a mandatory annual data collection that requires all private sector employers with 100 or more employees to submit demographic workforce data including data by ethnicity, sex and job categories to the US Equal Employment Opportunity Commission on an annual basis.

External partnerships

In nurturing an inclusive work environment we have developed several key external partnerships across the globe. These partnerships not only help us to drive our internal agenda, but they also enable us to share good practice and to positively impact the societies we are operating in.

They include:
- Partnership and Sponsorship with Diversity Project, whose vision is to create a truly diverse and inclusive UK investment and savings industry. As part of this, we signed up to the Diversity Project's Pathways scheme to develop female portfolio managers across the industry.
- Additionally, we worked closely with the Menopause workstream to raise awareness and to support women going through the menopause through a series of webinars, created a toolkit to support managers, and signed up to an industry wide pledge to stop women retiring early and leaving the financial services industry.
- Membership with New Financial, a think tank and forum launched in 2014 with the view to rethinking how Diversity and Inclusion can be improved in capital markets in Europe, and to look at rebuilding trust and improving industry culture
- Sponsorship of the Fondsfrauen initiative in Germany, a business network for women in asset management and finance
- Member of the "U.S. Institute", a think tank for leading investment management firms
- Member of the Business Disability Forum whose vision is to improve the life experiences of disabled employees and consumers by removing barriers to inclusion
- Financial Supporter of Level20, a not-for-profit organization dedicated to improving gender diversity in the European private equity industry
- Joined the Human Rights Campaign's Business Coalition opposing Anti-LGBTQI State Legislation and also signed in support of the Respect for Marriage Act
- Founding member of Morgan Stanley's diversity and inclusion initiative "The Equity Collective". The group is comprised of 23 leading asset managers. The partnership was named best "Inclusive Program" at the Money Management Institute/ Barron's 2022 Industry Awards.

Risk Report

GRI 102-15; 102-30

Risk Management Introduction

Disclosures in line with IFRS 7 and IAS 1

IFRS 7/IAS 1

The following Risk Report provides qualitative and quantitative disclosures covering credit, market, strategic and non-financial risks in line with the requirements of IFRS 7 "Financial Instruments: Disclosures", and disclosures required by IAS 1 "Presentation of Financial Statements". Information which forms part of and is incorporated by reference into the financial statements of this report is marked with a reference to IFRS 7/IAS 1 throughout this Risk Report.

Our Risk

We are exposed to a variety of risks because of our business activities. These risks include non-financial risk, financial risk and sustainability risk. Sustainability risk is not considered to be one individual risk type, but rather sustainability factors are drivers of existing risk types. The corporate risk profile is driven by various external and internal factors, including fiduciary risk. Our fiduciary obligation is paramount for our assets under management and requires us to put the interests of our clients first. We achieve this by risk managing the investment portfolios on behalf of our clients and by complying with regulatory requirements and contractual obligations.

The integration of sustainability factors in our risk management framework remains a strategic focus area. Its importance has been emphasized by increased public attention, continued client interest as well as the entry into force of ESG and sustainability risk related regulations on EU and national level. We are therefore continuously enhancing our ESG related risk identification, measurement, and management methods and processes, into which we have within 2022 also started to integrate adverse sustainability impacts.

In this context, there are two core principles we embrace in our risk management framework: every employee needs to manage risk and is obligated to ensure that we operate in the best interest of our clients, and we have strict segregation of duties enabling us to operate a control environment that is designed to protect the franchise, our clients, and shareholders.

Risk and Capital Overview

IFR Article 47

Key Risk Metrics

IFRS 7/IAS 1

We manage our own funds to meet the regulatory capital requirements according to IFR/IFD, and comply with rules of the relevant authority, BaFin.

We also adhere to the liquidity requirements under Article 43 IFR. The Group is required to hold an amount of liquid assets such as cash and bank balances and government bonds equivalent to at least one third of the fixed overhead requirement for the previous year plus 1.6% of the total amount of guarantees provided to clients.

The management of the own funds excess based on the k-factor metrics form part of our holistic risk management across the individual risk types. In addition, we continue to use the IFR liquidity requirements and the measurement of the stressed net liquidity position as a specific internal risk metric.

Key Risk Metrics

in € m.	31 Dec 2022	31 Dec 2021
Own funds excess (shortfall)[1]	2,455	2,045
Own funds requirement based on k-factors[1]	587	560
IFR liquidity requirement[1]	477	495
Stressed net liquidity position	2,190	2,289

[1] Scope and methods of consolidation in line with Capital Requirement Regulation.

Overall Risk Assessment

Material corporate risk categories include:

- **financial risks** such as market risk associated with our co-investments, seed investments, guarantees, credit risk, liquidity risk and strategic risk and
- **non-financial risks** including reputational risk and operational risk (with important sub-categories such as fiduciary obligations, information security, transformation, regulatory adherence, service providers) and potential spill-over effects from our fiduciary risks.

We manage the identification, assessment, and mitigation of key risks through internal management processes and the use of risk management tools. We have a clearly defined risk appetite and our approach to identifying and assessing risks ensures that we mitigate their impact on our financial results, long-term strategic goals and reputation. Please refer to the section 'Risk Report – Risk Framework' for detailed information on the management of our material risks.

External factors outside of our control can have a significant effect on our financial profile and strategic plans. Please refer to the section 'Outlook – DWS Group – Opportunities and Risks' for detailed information on these external factors. The potential impacts of these risks are analysed by stress tests, which indicate our ability to absorb these events should they materialize. The results of these calculations show that the current available capital, in combination with available mitigation measures, would allow us to absorb the impact of these risks if they were to materialize in line with the stress test parameters.

Risk Profile

Development of our standalone infrastructure may have material implications for our risk profile posing both strategic and operational risks. From a non-financial risk perspective, we are faced with transformation risks as we move from project design and planning into a multi-year execution phase to replace our core infrastructure platforms, embrace new technologies and engage with new external service providers. All transformation activities are subject to close monitoring to ensure the appropriate controls and safeguards are in place to protect our firm and clients.

The main risk driver in our business is non-financial risk. We are, however, exposed to other forms of risk given the impact from the market, flows, and foreign exchange rates on our corporate activities.

Risk Framework

IFR Article 47

Risk Management Principles

IFRS 7/IAS 1

The diversity of our business model requires us to identify, assess, model, measure, aggregate, mitigate, and monitor our risks. The core objective is to reinforce our resilience by deploying a holistic approach to the management of risk and return throughout our organization as well as the effective management of our risk, capital and reputational profile. The following principles underpin our risk management framework:

- Risk is taken within a defined risk appetite.
- Every risk taken needs to be approved within the Risk Management Framework.
- Risk taken needs to be adequately priced.
- Risk should be continuously monitored and managed.

Risk and capital are managed via a framework of principles, organizational structures, and measurement and monitoring processes that are closely aligned with our business activities.

- Core risk management is the responsibility of the Executive Board which delegates to senior risk managers and the Risk and Control Committee (RCC) (and its delegates) for execution and oversight.
- We operate a the three lines of defence (LoD) risk management model. The three LoD approach and its underlying standards apply to all levels of the organization.

First LoD: As risk owners businesses are fully accountable for the identification, assessment, and management of risks that originate in their organization or that their organization is exposed to, and for managing them against a defined risk appetite. Risk owners are those roles in the Group that generate risks, whether financial or non-financial. The heads of the business areas determine the appropriate organizational structure to identify their organization's risk profile, implement a risk management and control approach within their organization, take business decisions on the mitigation or acceptance of risks within the risk appetite and establish and maintain risk owner controls. For the first LoD there is a dedicated Control Office, which focuses on a consolidated risk profile and acts as primary contact for risk management matters.

Second LoD: The second LoD control functions (e.g. Risk, Legal, AFC and Compliance) define risk appetite for the specific risk type they control and monitor and report on the risk type's profile against risk appetite. As experts for their risk type, they (as independent functions) advise the first LoD on how to identify, assess and manage this risk and how to implement the risk type framework. The second LoD control functions have a veto authority for risk decisions to prevent risk appetite breaches.

Third LoD is the internal audit function which is accountable for providing independent and objective assurance on the effectiveness of how the business divisions and the second LoD control functions interact with respect to risk management.

- The Group Business and Risk Strategy and the Risk Appetite Statements are approved annually by the Executive Board. In addition, Deutsche Bank Group sets the risk appetite for its Asset Management division with which we comply.
- The Business and Risk Strategy including capital planning provides the basis for aligning risk, capital, and performance targets for regular risk and capital profile monitoring.
- Cross-risk analysis reviews are conducted across the firm to validate the existence of appropriate risk management practices and an awareness of risk.
- All material risks across non-financial risk, financial risk, strategic risk and sustainability risk are managed via dedicated risk management processes. Sustainability risk is not considered to be a standalone risk type, but rather sustainability factors are risk drivers of existing risk types being managed. Modelling and measurement approaches for quantifying risk and capital demand are implemented across the material risk types. Furthermore, we have set up a dedicated reputational risk control framework including a committee for decision making on reputational risk matters.
- We have monitoring, stress testing tools, and escalation processes for key capital and liquidity thresholds and metrics.
- Systems, processes, and policies are critical components of our risk management capability to facilitate a comprehensive view and articulate the underlying roles and responsibilities.

Risk Management

IFRS 7/IAS 1

Our activities and operations throughout the world are regulated and supervised by relevant competent authorities in each of the jurisdictions in which we conduct business.

The Executive Board is responsible for managing the Group in accordance with the law, regulations, the Articles of Association and its Terms of Reference with the objective of creating sustainable value in the interest of the Group, thus taking into consideration the interests of shareholders, employees, clients, and other stakeholders. Furthermore, the Executive Board is responsible for establishing a proper business organization, encompassing appropriate and effective risk management and approves the Strategic Plan and the Risk Appetite Statement.

The Supervisory Board is regularly informed of the Group's risk position, risk management and risk controlling activities, as well as on our reputational risks and material litigation cases. It has formed an Audit and Risk Committee to deal with risk related matters (See 'Standing Committees of the Supervisory Board – Audit and Risk Committee'). At the meetings of the Audit and Risk Committee of the Supervisory Board, the Executive Board reports on key risks, risk strategy, mitigation strategies, and on matters of importance due to the risks they entail. The Audit and Risk Committee deliberates with the Executive Board on issues of the aggregate risk profile and the risk strategy and supports the Supervisory Board in monitoring the implementation of this strategy.

The following functional committees have been set-up by the Executive Board and are central to the management of risk:

The **Risk and Control Committee** is the key committee dealing with review of and decisions on material risk topics. It is supported by the **Capital Investment Committee**, which is responsible for overseeing all aspects of risk associated with portfolios of co-investments and seed capital investments.

The **Reputational Risk Committee** is responsible for oversight, management, and coordination of reputational risks.

The **Strategic Investment Committee** is responsible for corporate investment decisions and principal corporate transactions (acquisition, disposals, and joint ventures). In addition, it evaluates strategic investment decisions and monitors progress and performance of approved transactions.

The **Chief Risk Officer** reports to the CFO and has Group-wide responsibility for the management of corporate and fiduciary risks as well as for the comprehensive control of risk, and ongoing development of methods for risk measurement. In addition, the Chief Risk Officer is responsible for monitoring, analysing, and reporting risk on a comprehensive basis. We manage our risk and capital via a framework of principles, organizational structures and measurement and monitoring processes that are closely aligned with the underlying business activities and associated risk profile. To achieve this, the Group leverages Deutsche Bank for defined risk services across several risk types, notably in terms of risk principles and frameworks, capital models including stress testing as well as support on capital adequacy requirements, and in non-financial risks specifically where specialist skills are required. The Group control model has been designed to balance the need for alignment with our business, while maintaining independence and strong relationships with Deutsche Bank key control functions.

Risk Appetite and Capacity

Risk appetite expresses the aggregate level of risk that we are willing to assume within our risk capacity to achieve our business objectives. This is defined by a set of minimum quantitative metrics and qualitative statements. Risk capacity is defined as the maximum level of risk we can assume given our capital and liquidity base, risk management and control capabilities, our regulatory constraints, and our obligations to stakeholders.

Risk appetite is an integral element in our strategic planning processes via our business and risk strategy, designed to promote the appropriate alignment of risk, capital, and performance targets, while considering risk capacity constraints from both non-financial and financial risks.

To determine risk appetite, we set different group level triggers and thresholds on a forward-looking basis and define the escalation requirements for further action. We assign risk metrics that are sensitive to the material risks to which we are exposed, and which are able to function as key indicators of our financial health. In addition to that, we link our risk management framework with the risk appetite framework.

Reports relating to the risk profile, as compared to risk appetite and strategy are presented regularly to the RCC, the Executive Board, and the Audit and Risk Committee. If our desired risk appetite is breached, a predefined escalation matrix is applied so these breaches are highlighted to the respective committees. Changes to the risk appetite must be approved by the Executive Board.

Risk and Capital Plan

We conduct an annual integrated strategic planning process which articulates the development of our future strategic direction for the business. The strategic planning process is designed to deliver an overview of capital, liquidity, and risk under risk-return considerations. This process translates our long-term strategic targets into measurable short- to medium-term financial targets and enables intra-year performance monitoring and management. Risk-specific portfolio strategies complement this framework and allow for an in-depth implementation of the risk strategy at the portfolio level, addressing risk specifics including risk concentrations.

Stress Testing

Stress testing is performed on a regular basis to assess the impact of a severe macroeconomic downturn or other shocks on our capital profile and financial position. This exercise complements traditional risk measures and leverages Deutsche Bank Group’s stress testing process with enhancements tailored to our risk profile as an asset manager. All material risk types which consume capital and liquidity risk are subject to stress testing. The time-horizon of internal stress tests are generally one year and can be extended to multi-year, if required by the scenario assumptions.

Risk Measurement and Monitoring

The appropriate measurement of all risks is a crucial prerequisite for robust risk management. All risks are measured quantitatively and/or qualitatively, using advanced and approved methodologies. All measurement approaches must be appropriate for the type and materiality of risk measured and provide sufficient transparency including correlation.

Quantitative analysis allows the measurement of the potential impact (size and likelihood) and is complemented by best-in-class qualitative measures to ensure comprehensive coverage of all risks on a risk-based approach. All material risks in non-financial, market, credit, sustainability and strategic, are managed via dedicated risk management processes. Modelling and measurement approaches for quantifying risk and capital demand are implemented across the material risk types. Reputational risk is implicitly covered in our economic capital framework – which ensures that we maintain an adequate capitalization to cover the risks to which we are exposed - primarily within operational and strategic risk. Established teams within Finance, Capital and Liquidity Management and Risk assume responsibility for measurement, analysis and reporting of risks while promoting appropriate quality and integrity of risk-related data.

We monitor all risks taken against risk appetite and in consideration of risk and reward at the Group level, underlying risk type, and at the portfolio level.

The monthly Risk and Capital Profile report is used to detail the risk profile and is presented to the RCC and used as the base for regular reporting to the Executive Board and the Audit and Risk Committee. The Risk and Capital Profile report is complemented by other standard and ad-hoc management reports maintained and produced by Risk, Finance, and Capital and Liquidity Management, which are presented to the RCC and/or its sub-committees where appropriate.

We use a variety of data sources to support internal and external reporting. The risk infrastructure considers reporting at relevant legal entity and business levels and provides the basis for reporting on risk positions, capital adequacy and limit utilization to the relevant functions on a regular and ad-hoc basis.

Model Risk

Model Risk Management is a core component of our risk management framework. We rely on models for investment, portfolio management, risk management, valuation, capital planning, and other purposes. The Model Risk Management framework is in place to safeguard the interests of our clients and stakeholders as well as to fulfil regulatory requirements with respect to model risk.

Models used by the firm and covered by the Model Risk Framework include models used for both fiduciary and non-fiduciary purposes and may either be internally developed or sourced from third party vendors. These models generally fall into the following categories:

- Pricing models are used to generate asset and liability fair value measurements reported in official books and records and/or risk sensitivities.
- Risk and Capital models are used to evaluate the risk exposures used for regulatory or internal capital adequacy requirements.
- Other models include those within our business lines that do not fall into the above categories, such as fund level valuation/pricing related models, trading/investment related models, risk management models and asset allocation models.

Model risk appetite is aligned to the Group's qualitative statements, ensuring that model risk management is embedded in a strong risk culture and that risks are mitigated as appropriate.

Model Risk management has the following objectives:

- Maintain a robust model risk management and framework, including monitoring and escalation of model risk related topics
- Ensure model risk policies and key operating procedures with clear roles and responsibilities for key stakeholders across the model risk life cycle
- Assess and monitor the model control environment
- Maintain model inventory to a high degree of integrity
- Support ongoing model risk assessments
- Perform independent model validations providing effective review and challenge to the model development and the appropriateness of model use
- Ensure the model risk framework aligns to industry best practice and regulatory expectations

There is interaction with Deutsche Bank in the provision of model development support and advisory services for the current suite of risk and capital models used within the Group including changes related to new regulations and/or changes in business strategy.

Non-Financial Risk

Non-financial risk is comprised of Operational Risk and Reputational Risk.

Operational Risk means the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events, including legal risk. Operational risk excludes business and reputational risk.

Reputational Risk means the risk of possible damage to our brand and reputation, and the associated risk to earnings, capital, or liquidity, in case circumstances arise, which could be perceived by stakeholders to be inappropriate or unethical or inconsistent with our Code of Conduct.

Key Drivers for Non-Financial Risk

Non-financial risk is inherent to our business activities. We have embedded internal risk management and control processes and the use of risk management tools and concepts. Our integrated approach along the risk management lifecycle enables sound identification, evaluation, remediation, and monitoring of the key non-financial risks. Any failures related to key non-financial risks, induced by external or internal influences, could lead to material financial, regulatory, or reputational impacts.

Our business profile is exposed primarily to the following non-financial risks:

- **Fiduciary Obligations:** As an asset manager, we face the risk that we do not comply with our fiduciary obligations to put the interests of our clients first. This requires us to balance between various interests of our clients and the economic interests of our firm to avoid undue conflicts, considering specific disclosures, regulatory requirements, principles and contractual agreements.
- **Information Security:** We face the risk that our business is not sufficiently protected against information security failures, i. e. targeted cyber security attacks. The financial

industry is subject to elevated threat levels of cyber-attacks in the context of geo-political developments and technology advancements. Direct or indirect attacks may undermine our ability to act in a fiduciary capacity to serve our clients in a resilient way.

- **Transformation:** As our firm continues to mature as a standalone asset manager, we have elected to develop and implement a standalone corporate infrastructure from our majority shareholder Deutsche Bank AG. A strategic decision to utilize our own infrastructure platform poses both transformational risks as well as increased time and resources for our business-as-usual operations. Delays coupled with deviations in expected system and process functionality may cause the firm incremental costs and diminished staff productivity.
- **Regulatory Development:** The ongoing development of new and evolving regulatory requirements for the Asset Management industry, for instance on ESG requirements, IT disclosures or record retention, impose a challenge for us for timely identification, interpretation and implementation. Non-compliance with laws and regulations may expose us to material non-financial risks.
- **Service Providers:** Third parties support us to successfully deliver our business operations and fiduciary obligations. The use of and dependency on our vendors has increased over the recent years. Inadequate vendor oversight may adversely impact our business resiliency.

Management of Non-Financial Risk

The management of non-financial risks follows the three lines of defence (LoD) approach with the aim of protecting the Group, our clients, and shareholders against risk of material financial, regulatory, or reputational damages. It seeks to ensure that all our key non-financial risks are identified and addressed, that accountabilities regarding the management of non-financial risks are clearly assigned and risks are consciously taken and managed in the most appropriate and long-term interest of our franchise, clients and stakeholders. The three LoD approach and its underlying standards apply to all levels of the organization.

To manage our non-financial risks, the Operational Risk Management Framework defines interrelated concepts and processes aligned to the Deutsche Bank Group framework. The Operational Risk Management Framework provides a comprehensive approach across all three lines of defence for managing the key non-financial risks across the risk management lifecycle. The approach enables us to determine our non-financial risk profile in comparison to our risk appetite, to systematically identify non-financial risk themes and concentrations, and to define risk mitigating measures and priorities. Our approach to identification and impact assessment aims to ensure that we mitigate the impact of these risks on our financial results, long-term strategic goals, and our reputation. Key concepts and processes for managing our non-financial risks are loss data collection, lessons learned, scenario analysis, sustainable risk remediation tracking, transformation risk assessment and risk and control assessments.

The most material risks we seek to remediate qualify as our top risks and are regularly analysed, monitored and reported to our senior management. Top risks are rated in terms of both the likelihood of their occurrence and the potential impact (severity) on the Group. The concept provides a forward-looking perspective on the impact of planned remediation and control enhancements. It also contains emerging risks and themes that have the potential to evolve into top risks in the future.

Business Continuity and Crisis Management

Our Business Continuity and Crisis management approach established over the last years includes a crisis contact and escalation process, which is tested on a regular basis. The Executive Board retains overall responsibility for policy setting, supervision and effective implementation and has delegated responsibility for business process disruption risk to the Chief Operating Officer. As we recognize that significant business disruptions are a possibility, the Business Continuity Management program has defined roles and responsibilities, which fosters a consistent and effective approach to resiliency throughout our company and results in an effective fit-for-purpose business continuity capability. We have in place comprehensive business continuity procedures designed to minimize the impact of a significant business disruption, which are proven through various crises (e.g. pandemic and natural disasters). Each of our core businesses functions and infrastructure groups construct and maintain their business continuity plans to ensure a continuous, reliable service. These plans are reviewed, updated and tested annually.

Dedicated Product Lifecycle Risk Management

We have embedded a Product Lifecycle Management Framework to ensure that appropriate systems, processes and controls for the design, approval, marketing and ongoing management and systematic monitoring of products throughout their lifecycle are in place. This framework is designed to manage the risks associated with the implementation of new products as well as product changes during the product lifecycle. Products and services are subject to a systematic review process to ensure that they remain fit for purpose.

Dedicated Reputational Risk Management

We have a dedicated Reputational Risk Management Framework, which sets out the management and process, to assist our employees in identifying, assessing, managing, and monitoring reputational risk. The Reputational Risk Committee is responsible for decision-taking and the oversight, management, and coordination of reputational risk.

We seek to ensure that reputational risk is in line with our business strategy and overall risk profile. Reputational risk cannot be excluded, and is also driven by any unforeseeable change in the perception of practices by our various stakeholders (e.g., public, clients, shareholders, and regulators). In line with our fiduciary responsibilities, we strive to balance reputational risk against the economic interest of our clients and the firm. We seek to avoid unnecessary reputational risks that exceed risk appetite such as violations of laws and regulations including sanctions and embargoes.

Financial Risk

IFR Article 47

Key Drivers for Market Risk

IFRS 7/IAS 1

Market risk is the potential for change in the value of financial instruments due to changes in market prices. We are exposed to non-trading market risk, which arises from our investments and from off-balance sheet exposures. The key risk drivers include movements in interest rates, credit spreads, foreign exchange rates, commodity prices, and equity prices. These, in turn, can be impacted by general market movements related to the economic environment or socio-political events. The primary objective in the management of our market risk is to ensure that our risk exposure is within the approved risk appetite.

Market risk primarily concerns seed investments, co-investments, guaranteed products, foreign exchange, pension, and equity compensation, as outlined below.

Seed Investments: Seed capital is deployed to build marketable track records by providing initial liquidity for new products initiated by us. We execute an economic risk position offset program to minimize the profit/loss volatility of the seed investment portfolio. Seed investments are typically short-term (up to three years, frequently shorter) and risk positions are broadly offset within a 6% tracking error on notional to minimize market risk. Offsetting positions are classified as derivatives on the balance sheet.

Co-Investments: We have co-investments primarily in funds that invest in a variety of alternative asset classes such as real estate, infrastructure, private equity, and sustainable investments. Investments are made to ensure an alignment of interest between fund investors and the Group and are normally held to maturity.

Strategic Investments: Strategic investments typically have the primary objective of enhancing the franchise value by providing access, for example, to specific markets, products or exchanges. A strategic investment, therefore, has a broader strategic business objective than making a return on the investment itself.

The key risk inherent in our co-investment and strategic investment portfolio is the impact of an event on the value of the underlying assets in each portfolio potentially resulting in the need to partially impair or even fully write-off the value of the investment in the portfolio. Key events can include:

- **Economic environment:** Material economic downturn impacting the value of the underlying fund investments
- **Geo-political risk:** Material geo-political events impacting the value of underlying fund investments such as the US-China trade dispute or a political shift in willingness to support or subsidize certain industries such as the sustainability sector
- **Equity prices:** Impact on underlying investments of a change in equity prices in turn impacting the value of the co-investment in the relevant funds
- **Foreign Exchange (FX):** Impact on reported value of investments of movements in foreign currencies (i. e., US Dollar) relative to Euro. In addition, FX movements may directly impact underlying investments within co-investment funds
- **Interest rates:** Impact of interest rate movements on funds invested in debt instruments and/or providing loans (e.g., financing of development projects in sustainable funds); wider, indirect impact of rising interest rates on investor appetite for investment in alternative funds
- **Commodity prices**: Impact on underlying investments of a change in commodity prices in turn impacting the value of investment in the relevant funds (e.g., real estate construction costs, etc)
- **Idiosyncratic risk:** Market risk can also occur because of specific investment characteristics, for example operational leverage, management quality, or fraud

Decreases in investment valuations directly impact our profits via reduction of fair value. In addition, fee income is negatively affected as result of lower asset value of the underlying fund. Furthermore, potential issues in current or future capital raising and/or reputational/ litigation risk may arise.

Guaranteed Products: We manage guaranteed retirement accounts (“Riester Products”) and guaranteed funds, whereby we provide a full or partial notional guarantee at maturity. Riester guaranteed retirement accounts are voluntary private pension schemes in Germany that are government subsidized.

The guaranteed products portfolios are managed using constant proportion portfolio insurance strategies and techniques, which use a rule-based exposure allocation mechanism into highly rated assets and riskier assets, depending on market levels.

This allocation mechanism between the two components is designed to limit the downside risk. Guaranteed products may invest into a wide range of equity and fixed income securities as well as other instruments permitted in the product documentation.

The risk for the Group as guarantor occurs if the net asset value of underlying funds at the respective guarantee date is less than the guaranteed amount. The respective guarantee shortfall is reflected as negative market values from derivative financial instruments. A provision is booked, aligned to the long-dated maturity of the underlying guarantees.

The guarantee shortfall is particularly sensitive to movements in the long-dated interest rate curves and can also fluctuate due to changes in:

– **Market development:** In addition to changes in long-dated interest rates, the shortfall is also impacted by changes in equity prices, volatility, and other market factors impacting the Net Asset Value (e. g. performance of underlying assets and funds)
– **Changes in client behaviour,** e. g. decreases in cancellation rates increase the shortfall as do client contributions if made in a low interest rate environment
– **Model assumptions:** The shortfall calculation can be influenced by changes in model assumptions and the timing of the market data snapshot used

This risk is regularly monitored under different stress scenarios and client contribution and cancellation simulations. We mitigate interest rate risk as and when necessary to retain a balanced risk position in line with our risk appetite and strategic goals. The mitigating instruments include long-dated bonds, long-dated interest rate swaps or swap options.

Pension Risk: We are exposed to market risk from several defined benefit pension schemes for past and current employees. The ability of the pension schemes to meet the projected pension payments is maintained through investments and ongoing plan contributions. Market risk can materialize due to a potential decline in the market value of the assets or an increase in the liability of each of the pension plans. Key risk factors include interest rates, inflation, credit spreads, and equity values. The overall risk increases with reduction in plan contributions as plans mature (no new entrants), increased, or offset by changes in the longevity profile of the pensioner population.

Equity Compensation Risk: Equity compensation is linked to our share price and performance and so is a right way risk since liabilities will primarily only increase if the share price and relevant performance improves. We monitor and manage the resulting profit and loss volatility and enter into short-term derivatives to retain a balanced risk position as and when necessary, in line with our risk appetite and strategic goals.

Structural Foreign Exchange: Structural foreign exchange (FX) risk arises from our non-Euro denominated subsidiaries, primarily US Dollar and Great Britain Pound. We monitor our structural foreign exchange risks on an ongoing basis and may selectively offset the risk positions with the primary objective to stabilize consolidated capital and internal capital adequacy ratios.

Foreign Exchange: Foreign exchange risk arises from our assets and liabilities that are denominated in currencies other than the functional currency of the respective entity. These positions are translated at the period end closing rate and can give rise to fluctuations in the reported value of the investments. Foreign exchange gains and losses resulting from the translation and settlement of these items are recognized in the consolidated statement of income as net gains (losses) on financial assets/liabilities at fair value through profit or loss. We may selectively use instruments to offset foreign exchange exposure as and when necessary to retain a balanced risk position in line with our risk appetite and strategic goals.

Management of Financial Risk

The above-mentioned types of financial risks are subject to dedicated approval processes which ensure that all aspects of risk, capital and funding are considered before new risk exposures are taken. For new co-investment and seed capital requests, for example, there is a clearly defined approval authority matrix dependent on the quantum of risk involved. Capital allocations and requests are monitored and reviewed by the Capital Investment Committee and assigned to the respective authority.

Market risk exposure is identified and captured based on our risk type framework covering equity, FX, interest rate, credit spread, commodity, and idiosyncratic risk. Risk is measured by estimating the potential losses from a particular risk type. This is usually achieved by determining the exposure, the trend and potential change in market value as well as the covariance with other relevant assets and liabilities. Established capital models, specific to us, are used to calculate the capital consumption of financial risks.

When necessary, approvals are granted subject to conditions to mitigate the potential risk to the Group and its stakeholders. Such conditions can include limiting concentrations in high-risk sectors and/or geographies. One area where risk position offsetting is routinely used as a direct risk mitigation is the seed capital portfolio.

A limit structure for the Groups' investments is in place with regular monitoring to ensure the risks remain within risk tolerance levels. The co-investment portfolio is also subject to bi-annual reviews at the underlying fund level to ensure the risk profile is maintained and any emerging risks are escalated where necessary. Ad-hoc monitoring and/or reviews of any aspect of the financial risk portfolio are carried out as and when required.

For sensitivity analyses on market risk exposures please refer to note '09 – Financial Instruments' to the 'Consolidated Financial Statements'.

Credit Risk

IFRS 7/IAS 1

Credit risk arises from all transactions where actual, contingent or potential claims against any counterparty, borrower, obligor or issuer (which we refer to collectively as "counterparties") exist.

As an asset manager, we do not undertake business activities that result in material credit risk. For the Group, credit risk exposure relates primarily to cash and cash equivalent positions that are placed with third party banking and financial institutions, typically overnight but also, in certain circumstances, for longer periods. The counterparties are monitored via market parameters, the usage of independent credit rating agencies and proprietary analysis. The related credit risk to these counterparties is aggregated and managed within appropriate limits.

To further diversify credit risk in our corporate liquidity management, other options have been used, including investing in government bonds, corporate bonds, and money market instruments.

Strategic Risk

Strategic risk is the risk of an operating income shortfall due to lower-than-expected performance in revenues not compensated by a reduction in costs. Strategic risk may arise from a decline in our assets under management driven by changes in asset values, from our ability to attract and retain assets under management and maintain competitive investment performance or from changes to the competitive landscape or regulatory framework. Strategic risk is a material risk type that may arise due to a failure to execute our strategy and/or failure to position us strategically and/or failure to effectively take actions to address underperformance caused by external or internal factors. Exposure categories to help guide the assessment process for strategic risk include competitive landscape, key personnel, regulation, strategic relationships, macroeconomic downturn, and product suite.

The Strategic and Capital plan is approved annually by the Executive Board. During the year, execution of business strategy is regularly monitored to assess the performance against strategic objectives and to seek to ensure we remain on track to achieve targets.

Liquidity Risk

IFRS 7/IAS 1

Liquidity risk is the risk arising from our potential inability to meet all payment obligations when they come due or only being able to meet these obligations at excessive costs. The objective of the Group's liquidity risk management framework is to ensure that it can always fulfil its payment obligations and can manage liquidity and funding risks within the agreed risk appetite. The framework considers relevant on-balance sheet and off-balance sheet drivers of liquidity risk as well as expected future cash flows.

Capital and Liquidity Management is mandated to manage the overall liquidity and funding position of the Group as well as the liquidity risk profile. Risk oversees the application of the liquidity risk framework and adherence to the risk appetite.

The Group proactively manages liquidity risks by:

- Maintaining a liquid balance sheet with a prudent cash buffer
- Assessing and monitoring liquidity and liquidity risks
- Stress testing of liquidity by applying a combined, market and idiosyncratic stress event in which the Group needs to remain solvent over a prolonged period of stress
- Performing a rolling 12-month cash flow forecast, which is also stressed as part of the monthly stress testing
- Maintaining a funding plan to assess upcoming funding demands and sources
- Maintaining contingency funding procedures to enable swift and coordinated action and decision making in a liquidity crisis event

On 31 December 2022, available liquidity after stress was significantly above the risk appetite.

Liquidity risk is an area of lesser concern for the Group due to the cash generating nature of our business and the conservative funding profile of our balance sheet. We principally fund the business through equity and cash generated from operations. We may, however, raise debt funding to address specific funding demands that may arise as part of growing the business.

As part of the annual strategic planning process, we project the development of the key liquidity and funding metrics based on the underlying business plans to ensure that the plan complies with risk appetite. This includes maintaining a funding plan to specifically assess upcoming funding demands and sources to accommodate projected seed and co-investments within the respective limits.

To diversify our funding and access to liquidity, we have put in place a revolving credit facility of € 500 million for general corporate purposes under which there were no drawings as of 31 December 2022.

For the maturity analysis of financial liabilities please refer to note '09 – Financial Instruments' to the 'Consolidated Financial Statements'.

Risk Diversification and Concentration

Risk Concentrations

IFRS 7/IAS 1

Risk concentrations refer to clusters of the same or similar risk drivers within specific risk types, including intra-risk concentrations in operational, credit, market, liquidity and other risks. They could occur within and across counterparties, businesses, regions/countries, industries, and products. The management of concentrations is integrated as part of the management of individual risk types (e.g., operational, credit, market, liquidity risk management) and monitored on an ongoing basis, with the key objective to avoid excessive risk concentrations. This is supported by limit setting on different levels and/or management according to risk type.

Risk Type Diversification Benefit

The risk type diversification benefit quantifies diversification effects between operational, credit, market, and strategic risk in the capital adequacy assessments. To the extent correlations between these risk types fall below 1.0, a risk type diversification benefit results. The calculation of the risk type diversification benefit is intended to ensure that the standalone capital for the individual risk types is aggregated in an economically meaningful way.

Fiduciary Investment Risk

While non-financial, market, credit, strategic and liquidity risk management are focusing on risk management for us, the scope of fiduciary investment risk is the management of investment portfolios in accordance with our fiduciary and regulatory obligations.

The investment funds risk framework, which covers regulatory, client specific and internal requirements is embedded in our control framework.

Fiduciary Investment Risk in Traditional Asset Classes

Market Risk Management

The market risk management process identifies, measures, monitors, and reports the market risks as well as portfolio concentrations of the investment portfolios. Both the specific risks on position level and the overall risk of the portfolio are considered – aiming at protecting investor assets and interests.

The risk identification process is performed on a quantitative and on a qualitative basis. The most relevant quantitative metrics are based on movements in credit spreads, equity prices, implied volatilities, commodity prices, foreign exchange rate, interest rates, and inflation rates.

The risk management function monitors market risks with dedicated escalation procedures. Appropriate thresholds are defined and consumption of the capacity within the limits is reported to portfolio management. Indications for a high probability of a limit breach trigger immediate escalation and mitigation actions.

Liquidity Risk Management

Liquidity risk is defined as the risk arising from potential inability to meet investor redemptions or at significant cost to redeeming and remaining investors. The liquidity risk management framework includes processes to identify, measure, monitor, assess, manage, and report liquidity risk over the complete life cycle of a portfolio.

The portfolio liquidity risk identification considers portfolio's strategy, the liquidity of its assets, and future liquidity demands.

Portfolio's asset liquidity is measured by considering asset and market specific factors. Liquidity demand scenarios are estimated based on redemption and collateral call scenarios. In addition, liquidity stress tests are run to simulate the impact of stress conditions. Liquidity stress tests are also used to determine whether liquidity management tools shall be added to improve management of portfolio's liquidity risk under stress conditions.

A portfolio's current liquidity risk is assessed via a scoring system. In addition, each portfolio's liquidity risk relative to investment strategy and redemption obligations is reviewed through a formal annual risk review process.

The risk management function regularly monitors portfolio's limit utilizations. The limit structure consists of regulatory and internal limits as well as thresholds. Escalation chains and contingency planning are defined within the liquidity framework.

Fiduciary Investment Risk in Alternative Asset Classes

Whereas market prices are available daily for traditional assets, alternative assets are in most cases much more illiquid, or prices are not directly observable. In these cases, regular measurement and control processes are undertaken on a monthly or quarterly basis rather than daily.

The methodology for alternative risk management requires expertise in the asset acquisition process, credit analysis where appropriate, regular stress testing, and calculation and monitoring of leverage, where applicable.

We have defined an appropriate catalogue of criteria which are observed to measure risk. This catalogue differs among the different sub-asset classes in Alternatives, e. g. real estate, infrastructure, private equity and fund of funds. Thresholds are established, and consumption reported regularly to management.

Identification of Risk in Alternatives

The risk management function is responsible for identifying material portfolio risk, which is defined as the risk of decreasing market values of the portfolio positions. This risk is considered material if it leads to a significant loss for the investor with a sufficient probability. Due to changing market conditions and volatilities as well as trading activities, the market risk for a given portfolio changes over time. The relevant risks to be considered, as well as traditional market risks and special alternatives risks, are interest rate risk, FX risk, volatility risk, inflation risk, real estate risk and credit risk.

Internal thresholds are implemented for the relevant criteria at the individual asset level, contract and the entire portfolio level. Portfolio levels close to the warning threshold are regularly discussed and notified to the respective Alternatives Investment Committees or Boards of the management companies, whereas individual assets are monitored separately. The monitoring of individual assets may be triggered by reaching internal thresholds or by violation of contractually defined limits. In these instances, an asset is included in a watch list jointly overseen by portfolio management and risk management with regular monitoring of any mitigating actions. If investments further deteriorate, work-out specialists or additional stress scenarios will be considered.

Liquidity Risk Management

Liquidity risk is the risk arising from potential inability to meet investor redemptions or other liquidity demands within a requested time period (liquidation period). Liquidity risk arises due to expected or unexpected investor redemption or other liabilities for payment such as settlements of foreign exchange forward transactions or margin calls which must be met by the current cash positions or by selling assets to generate cash. Hence the liquidity risk management framework considers both, the specific liquidation risk of the individual investments and the overall risk of the portfolio to generate liquidity. Within Alternatives products, open ended funds and closed end funds require a different type of liquidity risk management.

Measurement of the liquidity risk compares possible liquidity needs with asset liquidity and is summarized in a liquidity profile, which aggregates available liquidity by time buckets, considering the time it takes to liquidate assets. In addition, Risk defines further internal limits where appropriate.

Liquidity risk primarily affects open end funds and is addressed by respective provisions within the funds. The liquidity limit utilization is monitored on a regular basis. The implemented liquidity stress tests follow the approach that, under several predetermined liquidity stress test scenarios, the liquidity factors that drive the liquidity of funds are subject to severe stress levels which could reasonably be expected to occur. Appropriate thresholds are defined and limit utilisation is reported to management, as appropriate. Indications for high probability of a limit breach trigger immediate escalation and mitigation actions.

Counterparty Risk

Counterparty Risk relates to the potential losses arising when a counterparty cannot (or does not) fulfil its obligation in a transaction. In the context of the Group, counterparties are typically third party with direct market access (broker) or derivative counterparties, securities lending counterparties or banks where cash deposits are placed.

Each counterparty must be approved by Risk before any trade can be entered. Counterparty risks are identified via market signals (e.g. credit spreads), factors like ratings as well as by the regular review of counterparties. ESG aspects are also considered when reviewing a counterparty. Where appropriate, aggregated counterparty exposure limits are defined. Monitoring and escalation of limit excesses ensures adequate oversight. Over the Counter derivatives are traded under an International Swaps and Derivatives Association (ISDA) or ISDA equivalent agreement like a German Master Agreement mitigating counterparty risks. Derivatives exposure is collateralised according to European Market Infrastructure Regulation (EMIR) standards.

Valuation Risk

Valuation Risk is defined as the risk from the potential to mismark the assets in investment portfolios, which can arise due to data feed issues; errors by accounting agents, pricing agents or valuation advisor; lack of adequate controls over pricing exceptions or missing prices; model or input errors; and other control processes failures. The Valuation Control Group is responsible for oversight, monitoring and management of risk mitigating activities aimed to ensure that the assets in investment portfolios are fairly valued in accordance with our fiduciary and regulatory obligation.

The valuation process is implemented by dedicated business and infrastructure teams, as well as internal and external service providers. Valuation processes, procedures and service relationships are documented and ensure compliance with our global standards and principles detailed in the valuation policies, as well as relevant legal and regulatory requirements and client guidelines. The valuation risk management framework guides the implementation of consistent, robust and reliable valuation and monitoring and control processes that define the organizational set-up, standardized procedures and applicable controls. The risk management framework also provides direction for the committees, senior management and fund boards mandated to govern the asset valuation process.

Sustainability Risk

IFR Article 53

Sustainability Risk and Sustainability Factors

Sustainability risk is defined as the potential negative impact to the value of an investment from sustainability factors. Sustainability factors are environmental, social and governance events or conditions. They can either be “outside-in” factors, such as physical climate or climate transition factors, or “inside-out” factors caused by us or any investment, such as environmental impacts from our company activities.

Our overall risk management and control framework covers three main areas: non-financial risks (operational and reputational risks), financial risks and fiduciary investment risks. Sustainability factors can impact all three of the risk areas mentioned above. There is also an increased focus on assessing and monitoring adverse impacts, which are negative, material or potentially material effects on sustainability factors that result from or are directly related to our actions, our employees, investee companies within our portfolios or other related stakeholders.

Sustainability Risk Identification

To ensure effective sustainability risk identification and assessment, we have classified the impact of the identified sustainability factors under “ESG risk themes”, aggregating patterns of impact related to sustainability factors. ESG risk themes can be grouped into

- Adverse Impacts
- Sustainability Risk materializing as Non-Financial Risks
- Sustainability Risk materializing as Strategic and Financial Risks
- Sustainability Risk materializing as Investment Risks

They form the basis for defining guiding principles for managing the resulting risks.

We reviewed existing risk types for both portfolio and corporate risks and determined whether sustainability factors may potentially be relevant risk factors. In addition, a review was performed to ensure our risk appetite statement covers all identified ESG risk themes.

ESG integration in the Risk Management Framework

We continue to integrate sustainability factors into our risk management framework, including:

- Identification of ESG risk themes impacting individual risk types and definitions of ESG risk scenarios for selected risk types in the risk taxonomy
- Formalization of an ESG risk strategy based on the identified ESG risk themes
- Enhancement of the Sustainability Risk Management Policy to provide guiding principles on ESG risk management based on ESG Risk themes
- Updating of the risk appetite statement with qualitative statements and quantitative indicators
- Enhancements to ESG risk appetite monitoring and reporting processes in accordance with the development of our Risk Appetite Statement

To integrate adverse impacts in our Risk Management Framework, adverse impacts have been added to the Sustainability Risk Management Policy and our Risk Appetite Statement. National or regional regulations as well as existing contractual relationships may supersede the consideration of adverse impact for certain regions or asset classes. Hereby, national or regional regulations as well as contractual relationships may impact the consideration of adverse impact for certain regions or business lines.

The Sustainability Risk Management Policy describes how sustainability risks are integrated into our Risk Management Framework. It requires sustainability risks to be incorporated into our operating model for impacted risk types and business functions. This policy outlines ESG and sustainability risk-related definitions, how sustainability factors interact with the risk taxonomy, as well as roles and responsibilities for the management of sustainability risk.

The Risk Appetite Statement lists qualitative statements and/or quantitative metrics. Four qualitative statements have been included in the Risk Appetite Statement, one for each group of ESG risk themes mentioned above. They define the tone from the top for ESG related risk taking within the organization. Quantitative indicators have been defined related to each group of ESG risk themes.

Corporate Sustainability Risk Management

Non-Financial Risk: We have established risk assessment processes to identify inherent risk exposures, to assess the related control environment and to highlight areas where residual risks levels are not in line with risk appetite. Dedicated ESG assessment templates were established in 2022 that have been enhanced compared to previous years in terms of ESG impact identification and assessment approach.

Reputational Risk: ESG factors are considered in the reputational risk management process. ESG related activities that may have a material impact on our reputation are analysed and addressed to the Reputational Risk Committee (see also section ‘Risk Report – Non-Financial Risk’). Furthermore, an analysis of the impact of certain ESG related reputational risk scenarios on flows and the associated revenues was performed.

Financial and Strategic Risk: ESG factors were integrated in selected risk management processes related to corporate investments. In addition, we performed an impact analysis of the strategic risk of selected ESG products not meeting ESG related client and market expectations.

Fiduciary Sustainability Risk Management

Sustainability risk and sustainability factors have potential impacts on portfolio risk profiles. The number of sustainability factors potentially impacting the valuation of assets contained in a managed portfolio led to the conclusion that a comprehensive measurement and management of sustainability risk requires a diverse set of risk indicators and measures.

Fiduciary Sustainability Risk Management in Liquid Asset Classes

To identify and assess the sustainability risk profile of a fund, our Climate Transition Risk Assessment as well as our Norm Controversy Assessment (please refer to Our Responsibility - Sustainable Action' for further details) are considered in the risk management process in combination with gross and risk adjusted exposure information.

In 2021, we implemented a portfolio sustainability risk management process for European domiciled funds pursuing actively managed Equity or Fixed Income strategies. In 2022, this process was enhanced and subsequently implemented across all European domiciled UCITS and AIFs, including the ETF product suite. This process includes portfolio risk appetite setting, measurement, monitoring and reporting activities. In addition to the above, selected ESG assessments were considered within counterparty risk and issuer concentration risk processes.

Fiduciary Sustainability Risk Management in Alternative Asset Classes

We identify and assess the level of sustainability risk taken by illiquid alternatives funds based on individual asset level risk scores or ratings, which are informed by both quantitative and qualitative data points. These can be based on external ESG data providers (e. g. Measurabl for Real Estate), as well as internal subject-matter experts (e. g. DWS ESG Specialists).

In 2022, sustainability risk measurement and management processes were developed for the European domiciled illiquid alternative asset classes Real Estate, Infrastructure Equity, Private Equity, Sustainable Investments and Private Debts.

Compliance and Control

[Compliance Management, (ESG) Public Policy and Regulation]

Highlights

- An effective Compliance organisation safeguards our regulatory, reputational and operational business interests.
- We are in constructive dialogue with political decision-makers in Germany and the EU.
- Entries into the new statutory German Lobbying Register and comprehensive updates into the EU Transparency Register provide more visibility of our engagement with political stakeholders in Berlin and Brussels.
- Financing the economic transformation in the EU, upcoming EU Retail Investment Strategy, and improving regulation around sustainable finance are our most important public affairs topics in 2022.
- The further development and integration of sustainability risks and factors into existing processes continued in order to meet changing legal and regulatory requirements.

Management Approach

As a global fiduciary business, an effective compliance culture enables us to perform our duties in safeguarding client assets. This includes risk management processes such as risk identification, risk management and evaluation, risk monitoring and mitigation as well as accountability, and a clear responsibility across all three lines of defence but also setting out, communication and compliance with standards of behaviour which we expect our employees to adhere to. The Code of Conduct is at the heart of everything we do. It is designed to ensure that we conduct ourselves in compliance with law and regulation as well as ethically – with integrity, and in accordance with ours and Deutsche Bank's policies and procedures as well as the laws and regulations that apply to us across the world. Underpinning all of this is a simple but basic principle that we should do what is right and proper. Whenever issues arise, investigations are carried out promptly.

In addition to the rules of conduct, our risk management framework shows the importance of an effective Compliance organisation in safeguarding our regulatory and operational business interests as well as our reputation. Compliance is embedded in this Risk Management Framework. In this context,we monitor and assess our risk profile against the agreed risk appetite as well as the effectiveness of the controls that ensure risk mitigation.

Public Policy and Regulation

Regulatory reforms in the EU and internationally introduce changing legal requirements for our clients and us. Failure to comply with laws and regulations applicable to us could result in regulatory penalties or fines, harm to our reputation and a material adverse effect on our results of operations. To be compliant with all relevant rules and regulations is of paramount importance. Our aim is to identify new regulations and changes to existing regulations at an early stage and to inform the relevant parties in the Group so necessary changes can be implemented in time, to amend, upgrade or introduce new policies, procedures, systems and controls as required.

Since the risk of changing rules and regulations is inherent to our daily business, we have developed a framework to identify and implement new or changed regulations and allocate clear accountability for the identification, impact assessment, and implementation.

The framework governs how we identify and communicate new and changed regulatory requirements. It helps to build our profile in public-policy and regulatory interactions in general, so that we engage constructively with regulatory stakeholders as well as contribute to informed strategic decision-making, provide oversight of key initiatives, and insight for senior management on upcoming regulatory changes.

On a monthly basis, information on new and changed regulations is communicated to the business divisions and stakeholders. Within Compliance, a Global Regulatory Practice Group was established consisting of regional regulatory Compliance experts to provide updates of key items in the respective jurisdictions and potential extra-territorial impact. Information on regulatory developments and changes is summarized and forms part of Compliance's quarterly reports to management.

The implementation of regulatory changes depends on the complexity and impact of the specific regulatory changes. Major regulatory changes such as prudential requirements of investment firms are executed through programmes to manage the cross-divisional implementation and ensure the involvement of relevant stakeholders.

We have established the Public Affairs and Regulatory Strategy team providing inter alia in 2022 relevant ad-hoc updates on political and regulatory developments to senior management, coordinates the development and delivery of our positions on important regulatory topics, and acts as a clearing house for memberships in trade bodies and business organisations close to political stakeholders.

ESG Regulatory Compliance

GRI 419-1

Sustainable Finance Disclosure Regulation (SFDR), EU Taxonomy Regulation

In 2018, the European Commission adopted the EU Action Plan on Sustainable Finance, which has the goal of supporting investment in low-carbon and resource-efficient technologies.As a member of the German Investment Fund Association (Bundesverband Investment und Asset Management e.V. – BVI) and the European Fund and Asset Management Association (EFAMA), we take an active role in contributing our experiences and insights in sustainable finance throughout the policy and legislative process.

In 2022 we focused on the analysis and implementation of further regulations and amendments such as Sustainable Finance Disclosure Regulation (SFDR) and EU Taxonomy Regulation.

Due to specifications outlined in the SFDR Regulatory Technical Standards (RTS) which were published in the Official Journal of the European Union on 25 July 2022, we focused our work on the further development of pre-contractual documents, as well as periodic reports and website disclosures on product level to fulfil regulatory requirements that went live in 2022.

There was further project work on the integration of sustainability risks and sustainability factors into organisational requirements. Additional requirements on sustainability preferences as well as on the integration of sustainability factors into the product governance obligations were added and implemented on time.

To facilitate the exchange of ESG data between the manufacturer and distributor of financial products the EET (European ESG Template) was developed by FinDatEx in cooperation with market associations for the banking, fund, and insurance sectors.The EET references to data as defined by applicable EU legislative acts (SFDR, Taxonomy, MiFID II/IDD). It enables product manufacturers to provide information on the sustainability characteristics of the financial instrument and ESG related data for the sustainability preference assessment now introduced by the MiFID II amendments. EET 1.0 and EET 1.1 were implemented.

Besides product and legal entity disclosures, we must provide KPIs on Taxonomy Eligibility at group level in the Annual Report. This is a requirement the EU Taxonomy Regulation Article 8 – please refer to 'Complementary Information – Disclosures on Taxonomy Eligibility in Accordance with Article 8 Taxonomy Regulation and Delegated Regulation'. The preparation of the eligibility KPIs for 2022 was also covered.

Our efforts in the second quarter of 2022 were expanded to include the implementation of the UK Sustainability Disclosure Requirements, which are part of the UK Green Finance Strategy, due to the company's structure and our presence in the UK.

Organisational Structure

Since November 2022, our Compliance organisation is part of the Chief Administrative Office.

Risk Management

We have a risk management process in place and regularly review our various controls, procedures, systems and policies. Nevertheless, we are aware that non-compliance with relevant laws and regulations and an inadequate control framework could expose us to significant financial, regulatory and reputational risk.

[Business Ethics]

GRI 102-16; GRI 102-17

Highlights

- Expansion of training measures with regard to the so-called "Tone from the Top" to help promote the Speak Up culture.
- Continuation of the program to develop our corporate culture, which has been underpinned by further initiatives with corresponding milestones in the focus areas.
- Identifying and appropriately managing conflicts of interest is crucial to avoid adverse consequences for customers, the Group and our employees.
- Introduction of the DWS's Antitrust Compliance programme and respective training aiming to prevent or mitigate breaches of anti-trust laws.

The underlying foundation adopted is the Deutsche Bank Group global conduct risk framework designed to avoid the inappropriate creation of bad outcomes for our clients, for us or the integrity of financial markets through breaches of laws, regulations, or internal requirements, as stipulated within the Code of Conduct of Deutsche Bank Group and supporting policies/procedures. This global framework defines the principles for oversight over the management of conduct risk so that there is timely identification, reporting, escalation and remediation of issues that arise. The Code of Conduct defines rules of behaviour that are binding for all our employees. When incidents occur, we explicitly encourage our employees to escalate potential concerns to a supervisor or the relevant control function (e.g. Compliance).

We have developed a distinct set of values to position ourselves for the future. Specifically, all our employees are personally responsible and accountable for living up to our core values of Client Commitment, Entrepreneurial Spirit and Sustainable Action. We want to continue to foster an environment that is open and diverse, where staff opinions and "speaking-up" are valued and encouraged without fear of retaliation, and our success as an organization is built on respect and collaboration, in serving our clients, stakeholders and communities. With regards to reputational risk, our brand is one of our most important assets. Our brand offers identity, distinguishes us and our products from our competitors, impacts our value and attracts future employees.

Our corporate culture is one of our greatest and most intangible assets. Therefore, enhancing and protecting our corporate culture which is grounded in trust, accountability, transparency and propelled by a shared business vision remains of paramount importance. Our 2022 Culture Plan included nine initiatives designed to drive our corporate culture, which is further broken down into actionable milestones across focus areas that include trust, accountability, and purpose. These initiatives are intended to foster a transparent and robust culture for employees that facilitates ethical behaviour and appropriate decision-making, supported by other divisional messages, for example, the "People Leader Enablement" initiative emphasises increased engagement between manager and employee and the "More Effective and Timely Decision Making" initiative creates a more modern work environment that empowers employees to reach peak performance.

Another key initiative, "Grey Area Training, Scenario Framework" increases employee awareness of grey areas, which enable employees to feel confident to challenge behaviour that could represent conduct risk, raise concerns related to dilemmas, navigate unclear boundaries and challenges that may arise in their daily work, as well as speak-up on how the organization can do better. In November 2022, a Part (1) eLearning module was disseminated to our people managers globally. A Part (2) interactive classroom/virtual training session will be delivered in 2023 with further focus on specific grey area scenarios.

Dealing with Conflicts of Interest

GRI 102-25

Conflicts of interest are inherent to asset management businesses. Failure to recognise and appropriately manage conflicts of interest can result in inappropriate or adverse consequences for clients, the Group, and our employees. Every part of the Group is required to implement a dedicated framework for conflicts of interest in line with the Conflicts of Interest Policy, to identify actual and potential conflicts and to seek to manage them fairly and appropriately for all involved parties.

Each area of DWS must implement measures to ensure that actual or potential conflicts of interest are identified and managed appropriately. This includes, among other things, a conflict of interest register listing conflicts of interest that have arisen and may arise within a business area.

Beyond the business units, there are further control functions that deal directly or indirectly with the management of conflicts of interest. As an example, we use the Employee Compliance program to check whether employee transactions are in line with regulatory requirements and whether they are detrimental to our customers or the market. Furthermore, the Compliance Control Room monitors and controls the flow of insider information to minimize conflict scenarios.

Anti-Competitive Behaviour

GRI 206-1

The consequences of anti-competitive behaviour could be serious and far-reaching. Our Anti-Trust Compliance programme defines the minimum standards of behaviour for our employees and includes a comprehensive training and control framework that is designed to identify and monitor anti-trust risks to prevent or mitigate breaches of anti-trust laws.

In 2022, efforts around further strengthening our anti-trust framework continued, including initiating the drafting process for a dedicated Antitrust Policy as well as employee training.

To our knowledge, there were no pending or completed legal actions against the Group during the reporting period regarding any anti-competitive behaviour or violations of antitrust and monopoly legislation in which the organization has been identified as a participant.

Marketing and Labelling

Our governance structure including operation guidelines, defined policies, and our corporate values provides a structured framework for all employees that is designed to protect our brand and reputation.

All marketing efforts must be fair, balanced and designed to ensure that risks are reasonably disclosed. Such materials are subject to regulatory requirements, which vary depending on the entity, product, intended audience, venue where the offer or sale occurs, and other criteria. Our employees should not only adhere to these requirements but also use professional judgment to present product and marketing content with honesty and transparency.

As part of the marketing review process,our marketing and product materials are reviewed and approved by Compliance or respective business gatekeepers to ensure that all requirements are being followed. Only material that has been reviewed and approved can be published or distributed externally to clients.

We promote our concept of a responsible employee conduct by regular training events, communication and compliance with our Code of Conduct and legal requirements, which is the minimum standard for us and seeks to protect our clients' interests as well as our brand and reputation. We also promote the standards of relevant policies and guidelines, our global framework on controls of marketing material and for some regions additional marketing policies that have been defined based on local requirements.

[Anti-Financial Crime – Preventing Fraud, Bribery and Corruption]

GRI 205-2; 206-1

Highlights

- Avoid financial crime to protect our clients, society and the Group
- Strengthen the collaboration between businesses and control functions
- Maintain a regular dialogue with our supervisory authorities

Management Approach

The fight against financial crime is vital to ensure the stability and integrity of the international financial system. Failure to identify and manage risks relating to financial crime exposes us and our staff to potential corporate criminal and/or regulatory liability, civil lawsuits, financial losses, and a loss of reputation.

Organisational Structure

The Executive Board is ultimately responsible for the management and mitigation of financial crime risks within the Group. It has delegated tasks relating to those obligations to the AFC- and Compliance function. This function maintains a close alignment with the AFC and Compliance function of Deutsche Bank Group.

The goal of AFC is to prevent us and our clients from being misused, or from engaging in the commission of certain criminal offences, referred to as financial crime. AFC is a second line of defence control function, managing and mitigating the financial crime risks assigned to it in the Non-Financial Risk Management taxonomy. These relate to the prevention of money laundering, countering terrorism financing, and the prevention of other criminal activities (e. g. fraud, bribery, and corruption) as well as observing sanctions and embargoes. AFC develops and implements, or oversees the development by other areas, of policies, procedures and processes, which form the control framework for those risks. AFC not only has oversight in respect of the broader control framework as it relates to countering other criminal activities, including controls for which other functions are accountable, but also performs second line of defence controls to detect and prevent financial crimes to which we are exposed, as well as identifying potential oversight and control gaps. The AFC-function provides specific training to our employees and to business development consultants engaged by us to ensure sufficient knowledge and awareness.

Risk Management

Every employee is responsible for the prevention, detection, and reporting of internal and external fraud as well as bribery and corruption in connection with our business. We require all employees to always conduct themselves with the highest standards of integrity and to follow the correct procedures if they believe that something is not right. A speak-up culture is essential to maintaining a positive compliance culture in which everyone not only adheres to our policies, but also respects applicable laws and regulations in all jurisdictions at the same time as offering a safe environment for employees to raise issues. Our Anti-Fraud Policy applies to all employees, permanent and temporary, and explains how to immediately escalate any known or suspected fraudulent incident or any concern via our whistle-blower tool or hotline that protects the identity of the individuals raising the incident or concern. We take a zero-tolerance approach to bribery and corruption in line with our Code of Conduct, our values and beliefs, and national and international laws and regulations. The Anti-Bribery and Corruption Policy sets out the minimum standards of behaviour expected of all employees and third parties as well as the minimum safeguarding measures to be implemented. Any non-compliance with the Anti-Fraud as well as the Anti-Bribery and Corruption Policies will lead to consequences for the respective individuals.

During 2022 we did not identify or report any material breaches of laws and regulatory requirements in relation to fraud, bribery, or corruption.

[Data Privacy Management and Information Security]

GRI 418-1

Highlights

- No personal data breaches with material impact of individuals observed
- Continually adapting information security based on an evolving threat landscape

Data Privacy and Protection

Data protection is required by law and an important social value. Our customers, employees and other stakeholders expect the personal data they have entrusted to us to be treated with the utmost care. Therefore, we are committed to protecting personal data and complying with the General Data Protection Regulation and comparable laws.

Key Topics 2022

In 2022, we continued to focus on the renewal of the EU standard contractual clauses for third-country transfers ("Schrems II") which was completed in 2022. A project was set up in Deutsche Bank Group, including DWS, with the purpose of complying with the recommendations of the European Data Protection Board and the new EU standard contractual clauses as a result of the Schrems II ruling of the European Court of Justice. This included the adaptation of all relevant existing contracts with certain suppliers.

Another focus of activity was advising on data protection law in connection with the sale of the Digital Investment Platform to MorgenFund GmbH, which was completed at the end of November.

Data protection law expertise was also required for the transformation of various IT platforms into a cloud environment in the context of our infrastructure transformation.

Management Approach and Organisational Structure

For data privacy, we are supported by Deutsche Bank Group Data Protection, a specialised, independent control function that advises the business divisions and infrastructure functions and monitors the collection, processing and use of personal data. It is supported by local Data Protection Officers in the countries where we conduct business. As part of the DWS mandate the Deutsche Bank Group Chief Data Privacy Officer provided an annual report to the COO.

Following the establishment of the CAO, such report will be provided to the Chief Administrative Officer.

Deutsche Bank Group's data protection policies and directives define data protection principles and compliance requirements within our organisation, such as personal data breach notification, the data subject's rights of access, consent and information requirements.

Where required by law, privacy notices are provided directly by the business units and infrastructure functions to our customers and employees or are made available on their respective public websites, including the website-specific privacy notice. These notices provide an overview of how we process personal data and what rights individuals whose personal data are processed have under data protection law.

Based on the Group-wide framework for managing non-financial risks, Group Data Privacy has established control requirements with which the business units and infrastructure functions must comply. These include the permissibility check of new activities involving the processing of personal data in Deutsche Bank Group, for example when processing personal data using artificial intelligence. Data protection controls are appropriately integrated into Group-wide processes, such as for approving new products or determining supplier risk.

In addition, Group Data Privacy works closely with the Technology, Data and Innovation function and the Information Security function (Chief Security Office) to implement specific data protection policies, e.g. to ensure the security of personal data processing.

In 2022, Group Data Privacy further strengthened the control requirements and, in collaboration with the business units and infrastructure functions, documented and further enhanced the key controls that need to be in place to mitigate data protection risk in Deutsche Bank Group as part of a Group-wide initiative by the Department to manage non-financial risks, for example to seek advice from Group Data Privacy on new internal processes and client products in addition to changes that are not reviewed through standard processes. The effectiveness review of the implementation of applicable data protection requirements continued and no material weaknesses were identified. Group Data Privacy has considered the findings in the Group-wide annual risk and control assessment to review and critique the business units' and infrastructure functions' assessment of data protection risk and control effectiveness.

In addition, Group Data Privacy regularly analyses current developments on data protection laws and regulations and, if necessary, adapts corresponding guidelines, directives as well as control requirements. The same applies to technical developments and new digital business models.

Employee Awareness and Training

Training for employees on the impact of data protection laws on our day-to-day operations is a key factor in ensuring effective data protection in all operational processes. Mandatory data privacy training is generally required of all employees, including personnel with contractor status.

Any new legal developments in data protection will be monitored by Group Data Privacy and the local data protection officers will be informed to conduct an assessment. If a need for adaptation of DWS processes and products is identified, appropriate measures are agreed with the business units and infrastructure functions. In addition, employees are made aware of data protection through internal online events and intranet articles. Group Data Privacy organised several regional webinars in 2022 to raise awareness of the importance of data protection and the handling of personal data. Employees were also made aware of how to obtain internal support for data protection issues, what rights individuals have regarding data protection, best practices for the protection of personal data, trends in data protection, and the consequences of poor data protection practices.

No Material Personal Data Breaches in 2022

For 2022, we did not identify any personal data breaches with a material impact on individuals. Our reporting processes and structures aim to ensure that data protection breaches are promptly escalated to Group Data Privacy and incidents are assessed and dealt with immediately. Should a data protection breach occur, follow-up measures are taken as part of the Deutsche Bank Group-wide incident management process. Group Data Privacy is involved in this process and, if necessary, informs the affected individuals as well as the competent data protection supervisory authorities.

Information Security

Management Approach

Our information and cyber security program follows a proactive threat-based approach, continuously improving the control standards to accommodate changes in the “threat landscape”, the evolution of the business model and the adoption of innovative technology and process solutions. To support this, we align our information security management system to the latest information security policies defined by Deutsche Bank Group. Our Information Security Framework is managed under the Deutsche Bank Group framework that has been validated by the certification ISO 27001, recertified in September 2021. To address the risk of breach of the confidentiality, integrity, and availability of our information by third parties, we have a multi-layer vendor management program with oversight by a dedicated Vendor Management team. This is governed by Deutsche Bank Group Third Party Risk Management principles.

Organisational Structure

The Chief Operating Officer (COO) is the Executive Board member overseeing information and cyber security which is managed by the Chief Information Security Officer who is responsible for establishing and maintaining security strategy in line with our business objectives and group risk appetite.

The Chief Information Security Officer is responsible for the implementation and execution of security measures to ensure that our assets are adequately protected. Our cybersecurity program is guided by a proactive risk-based approach that continuously improves control standards to account for changes in the "threat landscape", business model evolution, and adoption of innovative technologies and process solutions.

Employee Awareness and Training in Information Security

We aim to train all our employees in information security risk and controls as part of the on boarding process and regularly during their employment. Training sessions are continuously renewed, tailored and adapted to follow latest market developments and specific job profiles to ensure that employees are prepared in case of a cyber-threat.

In addition to the mandatory training, we use the Deutsche Bank Group awareness campaigns following the strategy to fortify the human firewall. In 2022, we continued to roll out the multi-channel awareness campaign to all staff globally, covering a broad range of information and security topics including the "Time to be aware" campaign to help our staff understand common yet significant security threats and their responsibility and contribution to helping us protect ourselves against such threats.

In 2022 we did not experience any material data leakages.

[Responsible Tax Practices]

GRI 207-1; 207-2; 207-3

Highlights

- Tax monitoring and control framework fully embedded into our business
- We consider tax consequences of business operations and their long-term impacts to align with economic and commercial outcomes as well as interest of our stakeholders
- Tax evasion is illegal and our policies prohibit aiding or abetting tax evasion

Management Approach

Our tax policy framework is part of Deutsche Bank's tax strategy and principles (https://www.db.com/ir/en/tax-strategy.htm). These principles are embedded in controls, apply to all our entities and have been approved by the Management Board of Deutsche Bank Group. The principles are subject to regular reviews. They enable us to manage our tax affairs in a value generating way while meeting applicable local and international laws and regulations (including international standards such as the Organisation for Economic Co-operation and Development Guidelines). These principles are designed that the tax consequences of business operations are appropriately aligned with the economic and commercial consequences of those operations, with due regard being given to the potential perspective of the relevant tax authorities.

Tax principles help to make our interactions with tax authorities proactive, transparent, courteous, and timely and we constantly seek to foster positive working relationships with tax authorities. As responsible taxpayer, we consider long-term tax impacts and carefully evaluate the interest of all our stakeholders. Considering various interests of our stakeholders is achieved by presenting important tax issues to the respective legal entity boards. Moreover, we participate and contribute to current discussions on tax regulations through business associations. This allows us to exert influence to ensure that new tax regulations represent our values with regard to a fair tax system in social, political and business terms.

Organisational Structure

The tax department as part of the CFO division is responsible for the global tax position. Our tax function is an independent risk and control function which is separated from the business divisions. We employ highly skilled professionals to ensure that our own tax matters are robust and that we deliver high quality tax services.

Risk Management

The management, control and reporting of tax risks follows the three lines of defence model. The business divisions are the first line of defence being responsible for managing tax risks within the defined tax risk appetite. This is to ensure that organisational structures and processes are in place to identify, monitor, and evaluate the tax risks they generate or are exposed to. The second line of defence is the tax function which facilitates the implementation of a sound tax risk management framework to ensure that the Group's position, with respect to tax matters, remains robust. The tax function is independent of the business divisions and responsible for defining the tax risk appetite as well as the tax risk management and control standards. The third line of defence is our internal audit function.

Targets and Preventing Infringements

We have controls and other mechanisms in place designed to ensure that we comply with applicable tax laws, file accurate tax returns, and pay the amount of tax due.

We advocate the development of sound regulations and internal procedures to combat financial crime, including tax evasion, and do not endorse actions that seek to undermine tax reporting of financial account information under applicable legislation, such as the Common Reporting Standard and the Foreign Account Tax Compliance Act. These requirements are also intended to prevent the Group from committing or facilitating – intentionally or negligently – criminal offences.

Internal Control System for the Financial and Non-Financial Reporting Process

General

Our Executive Board is responsible for establishing and maintaining an adequate internal control system to support the consolidated financial reporting process and the integrated non-financial Group statement. The control system comprises the principles, processes and measures to provide assurance regarding the reliability of financial and non-financial reporting and the preparation of the Group's consolidated financial statements in accordance with IFRS and HGB.

Internal Control System for the Financial Reporting Process

Internal Control System Objectives

To mitigate financial reporting risk the internal control system has been established to provide reasonable but not absolute assurance against material misstatements. To support this the Group adopts the following objectives:

- **Existence**: Assets and liabilities exist and transactions have occurred.
- **Completeness**: All transactions are recorded, account balances are included in the financial statements.
- **Valuation**: Assets, liabilities and transactions are recorded in the financial reports at the appropriate amounts.
- **Rights, obligations and ownership**: Rights and obligations are appropriately recorded as assets and liabilities.
- **Presentation and disclosures**: Disclosure, presentation and classification of financial reporting is appropriate.
- **Safeguarding of assets**: Unauthorised acquisition, use or disposition of assets is prevented or detected in a timely manner.

The internal control system covers both the financial reporting process of the entities included in the consolidated financial statements and the consolidation process itself. This ensures the consolidated financial statements are prepared in accordance with applicable rules and provisions.

The internal control system and risk management system as they relate to financial reporting form an integral part of our broader control environment.

Internal Control System Organisation

The Group organisational structure facilitates the operation of the internal control system with clear division of roles and responsibilities to support the financial reporting process and preparation of consolidated financial statements. The operation of the accounting related internal control system primarily involves staff based in the Chief Financial Office (CFO).

CFO is responsible for the periodic preparation of the financial statements. The two key control functions within CFO that contribute to the internal control system are the Group Controller and Financial Control Oversight.

The Group Controller is responsible for the financials of the Group and its consolidated subsidiaries. The Controller function sets the reporting timetables, performs the consolidation, controls and validates the period end results, executes adjustment processes, and compiles the Group financial statements. In addition, Product and Regional Finance teams are responsible for reviewing the quality of financial data by performing validation and control, in close contact with business, infrastructure and legal entity management.

Financial Control Oversight is responsible for implementation of the financial reporting control framework to minimise financial reporting risk. It also coordinates the evaluation and review of risk and control issues and performs ongoing assessment and monitoring of the effectiveness of the internal control system.

Financial Reporting Controls

The Group operates many controls in relation to the financial reporting and consolidation processes. Some of the key controls that support these processes include the following:

- **Consolidation and other period end reporting controls:** Controls over consolidation, financial statement disclosure and presentation
- **Accounting policy design and implementation:** Controls to promote the consistent recording and reporting of business activities in accordance with accounting policies
- **Balance sheet substantiation:** Controls relating to the substantiation of balance sheet accounts to promote the integrity of general ledger account balances based on supporting evidence
- **Valuation including the independent price verification process:** The Principal Valuation Control Council provides oversight over valuation processes.
- **Reconciliation controls, both external and internal:** Inter-system reconciliation is performed between relevant systems for all transactions, positions or relevant parameters.
- **New product and transaction approval, capture and confirmation:** Controls are intended to ensure the completeness and accuracy of recorded transactions as well as appropriate authorisation for new products and transactions.
- **System access controls:** Controls ensure that user access to financial information in the key financial reporting systems is governed by a need-to-know principle.

Monitoring and Oversight of Internal Control Effectiveness

The effectiveness of the internal control system relating to the financial reporting process is regularly monitored. This includes monitoring performed by Financial Control Oversight and as part of the broader Group financial reporting and non-financial risk and control frameworks. This monitoring includes regular forums comprising control representatives, key control testing procedures to centrally evaluate the operating effectiveness of the control environment and regular reporting of control environment metrics to senior management.

These processes are supported by independent Internal Audit who evaluate the design and operating effectiveness of the internal control system by performing periodic and ad-hoc risk-based audits.

Finally, the Audit and Risk Committee as standing committee of the Supervisory Board and the Executive Board provide senior oversight of the financial reporting process including signing off the consolidated financial statements for the Group.

[Internal Control System for the Non-Financial Reporting Process]

To support the accurate reporting of material non-financial information the Group has developed a non-financial internal control system, distinct from the internal control system for financial reporting. The objective of the internal control system for the integrated non-financial Group statement is to provide accurate reporting of internally compiled sustainability KPIs (as reported in the section 'Our Responsibility –Sustainable Action') and other non-financial disclosures.

In 2022, the Sustainability KPIs were reviewed with members of the GSC to determine if any changes were required to those being monitored. The Sustainability KPIs and their associated targets and ambitions were then approved by the Executive Board.

CFO is responsible for coordinating and reviewing the internal control system, internal and external ESG AuM and flow reporting and reporting of KPIs in collaboration with the KPI owners. Ownership of the KPIs is split across the following functions:

- **Product Division:** Owns the ESG Product Classification Framework.
- **Corporate Governance Centre:** Compiles corporate engagement results.
- **COO:** Co-ordinates with Deutsche Bank Group to obtain emissions data where required and determine our energy consumption, use of electricity from renewable sources and travel emissions.
- **Human Resources:** Compiles proportion of women results.
- **Corporate Social Responsibility:** Tracks volunteer hours per employee.

In 2022 the results of the sustainability KPIs were presented to the GSC on a quarterly basis.

The internal control system comprises key controls that are designed to ensure the accuracy of sustainability KPIs. These controls reflect the following key principles:

- **Four eyes review:** All internally produced KPIs are subject to four eyes controls with at least two independent parties involved in the review and reporting of KPI data. In addition for all KPIs, the CFO division acts as an independent control function before any KPIs are disclosed externally.
- **Data quality:** Data quality checks are performed to ensure accurate KPI reporting. Sustainability KPIs involve diverse sources of data and as such appropriate controls are executed to ensure integrity of the underlying data.
- **Documentation:** All internally produced KPIs (that are published externally) are supported by control documentation which comprise key static data, process flow, key controls, and risk assessment.

Complementary Information

[Disclosures on Taxonomy Eligibility in Accordance with Article 8 Taxonomy Regulation and Delegated Regulation]

Background

As an independent asset manager with a focus on sustainability we will report under Article 8 of Regulation (EU) 2020/852 ("Taxonomy Regulation") as a financial undertaking and will disclose how and to what extent our activities are associated with economic activities that qualify as environmentally sustainable under Articles 3 and 9 Taxonomy Regulation. We take into consideration all disclosure requirements published until 31 January 2023.

In terms of the reporting requirements and content, Article 8 Taxonomy Regulation differentiates between so-called non-financial undertakings and financial undertakings. Although DWS KGaA does not qualify as a financial undertaking pursuant to Article 1(8) of the Delegated Regulation (EU) 2021/2178, we are engaged in financial activities as the activities performed by several of our subsidiaries are those of an asset manager or as investment firm. Since the quantitative indicators (KPIs) for non-financial undertakings would not appropriately demonstrate to what extent our economic activities are sustainable under the Taxonomy Regulation, we are reporting under Article 8 Taxonomy Regulation as a financial undertaking. We are further reporting the KPIs for asset managers as they most appropriately reflect our underlying business model.

The content and presentation of the KPIs to be reported pursuant to Article 8 Taxonomy Regulation are further described in the Delegated Regulation (EU) 2021/2178.

Article 10 of the Delegated Regulation (EU) 2021/2178 provides a phasing in of the quantitative reporting requirements (or KPIs). From 1 January 2022 until 31 December 2023, financial undertakings need only disclose exposure to Taxonomy-eligible/non-eligible investments, the exposure to central governments, central banks and supranational issuers, the exposure to derivatives as well as the exposure to undertakings that are not obliged to publish information pursuant to the Non-Financial Reporting Directive (NFRD) – non-NFRD undertakings – in relation to their total assets. Pursuant to Article 10(3)(b) of the Delegated Regulation (EU) 2021/2178, exposures to central governments, central banks and supranational issuers are excluded both from the numerator and the denominator of the KPIs.

Our Annual Report 2022 covers our exposure to Taxonomy-eligible/non-eligible economic activities related to the climate objectives as described in the climate delegated regulation to the Taxonomy Regulation (EU) 2021/2139. This Regulation contains technical screening criteria for economic activities determining environmental performance requirements for a substantial contribution to the first two climate objectives of the Taxonomy Regulation (climate change mitigation and adaptation) as well as the criteria for the "do no significant harm" requirement relating to any of the other environmental objectives of the Taxonomy Regulation.

Pursuant to Article 27(2)(b) in connection with Articles 4 to 8 Taxonomy Regulation, disclosures of reporting undertakings related to the other non-climate environmental objectives of the Taxonomy Regulation should in principle apply from 1 January 2023. The EU Commission has not yet adopted a delegated regulation establishing the technical screening criteria for economic activities related to the non-climate environmental objectives of the Taxonomy Regulation. Taxonomy-eligible economic activities are however defined by the description of the economic activities in the delegated acts to the Taxonomy Regulation. Reporting undertakings thus cannot report on Taxonomy-eligibility / non-eligibility related to the non-climate environmental objectives of the Taxonomy Regulation. As a consequence, our Annual Report 2022 does not cover our exposure to Taxonomy-eligible / non-eligible economic activities related to the four non-climate environmental objectives of the Taxonomy Regulation.

The Delegated Regulation (EU) 2022/1214 which includes specific nuclear and gas energy activities, under certain conditions, in the list of environmentally sustainable economic activities covered by the Taxonomy Regulation, applies as of 1 January 2023. The Delegated Regulation (EU) 2022/1214 amends Delegated Regulation (EU) 2021/2139 and Delegated Regulation (EU) 2021/2178 by adding technical screening criteria and disclosure requirements for nuclear and gas energy activities. However, at this point in time, DWS has no actual data available for these economic activities. Therefore, DWS is not able to include exposure to nuclear and gas energy activities in the disclosure for 2022.

Quantitative Disclosures

	31 December 2022		31 December 2021	
	in %[1]	in % of total AuM[2]	in %[1]	in % of total AuM[2]
Proportion of exposure to Taxonomy-eligible investments	2.6	2.2	0.0	0.0
Proportion of exposure to Taxonomy non-eligible investments	10.6	9.1	0.0	0.0
Proportion of exposure to central governments, central banks and supranational issuers	N/A	14.0	N/A	14.1
Proportion of exposure to derivatives	0.2	0.1	0.4	0.3
Proportion of exposure to non-NFRD undertakings (financial or non-financial undertakings not subject to Articles 19a and 29a of Directive 2013/34/EU)[3]	65.8	56.6	68.1	58.5

[1] Based on actuals and the Group's AuM excluding investments in central governments, central banks and supranational issuers.
[2] Based on actuals and the Group's AuM.
[3] Comparative value for prior year 2021 has been amended based on updated information.

Qualitative Disclosures

The quantitative reporting from 1 January 2022 until 31 December 2023 for financial undertakings is to be accompanied by the qualitative disclosures under Annex XI of the Delegated Regulation (EU) 2021/2178.

Contextual information in support of the quantitative indicators, on the scope of assets, data sources and limitations

In accordance with Article 10 (3) and Article 7 (1) – (3) of the Delegated Regulation (EU) 2021/2178, we disclose the relevant quantitative indicators (KPIs) in the above table.

The KPIs on Taxonomy-eligible/non-eligible investments are based on actual turnover data provided by data service providers. However, it is important to note that in 2022 many companies, especially financial undertaking, still reported on estimates (voluntary reporting) and therefore these figures are not included in the taxonomy-eligible investments, since the mandatory Article 8 Taxonomy Regulation disclosure must be based on actual data, according to the EU Commission's FAQ.

Actual data is also available for calculating the KPIs illustrating the exposure to derivatives and exposure to non-NFRD undertakings.

To evaluate the exposure to non-NFRD undertakings in our Active and Passive investments, external data from data service providers has been used.

For Illiquid businesses, data sources include external counterparties such as investee companies and fund managers. A large portion of the Illiquid investments are made in non-NFRD undertakings, thus, are largely included in the exposure to non-NFRD undertakings.

For all assets, the data has limitations which include the reliance on external valuation methodology, data availability and data quality. The information is provided as of 31 December 2022.

Compliance of our business strategy, product design processes and engagement with clients and counterparties with the Taxonomy Regulation

We remain committed to comply with the Taxonomy Regulation in our business strategy, product design processes and our engagement with counterparties, subject to the increase of scope of economic activities covered by the Taxonomy Regulation and availability of data.

DWS aims to implement the additional quantitative disclosure requirements on the exposure to nuclear and gas energy activities once valid data is available as well as to disclosing our exposure to economic activities related to the non-climate environmental objectives of the Taxonomy Regulation in line with the delegated acts to be adopted by the EU Commission. Furthermore, from 2024 onwards, financial undertakings will have to disclose the KPIs as set out in the Annexes to the Delegated Regulation (EU) 2021/2178. Asset managers accordingly will have to report how their investments are directed at funding or are associated with Taxonomy-aligned economic activities. DWS aims to comply with those quantitative disclosure requirements, subject to availability of data.

We also aim to make further use of data reported as per the Taxonomy Regulation in our research activities as well as in proxy voting and engagement, where available and reliable. Please refer to 'Our Responsibility – Sustainable Action – Our Investment Approach' for further information.

Information pursuant to Sections 289a and 315a of the German Commercial Code and Explanatory Report

Structure of the Share Capital including Authorized and Conditional Capital

For information regarding DWS Group's share capital please refer to note '19 – Equity' to the 'Consolidated Financial Statements'.

Restriction on Voting Rights or the Transfer of Shares

Under Section 136 of the German Stock Corporation Act (AktG) the voting right of the affected shares is excluded by law. As far as DWS KGaA held own shares as of 31 December 2022 in its portfolio according to Section 71b of the German Stock Corporation Act (AktG) no rights could be exercised.

Pursuant to Section 285 (1) Sentence 2 of the German Stock Corporation Act (AktG), the shareholder of the General Partner, DB Beteiligungs-Holding GmbH, is not entitled to vote its shares in certain situations, for example, for the election or removal of the Supervisory Board members, the ratification of acts of management, the appointment of the auditor and the appointment of a special auditor.

We are not aware of any other restrictions on voting rights or the transfer of shares.

Shareholdings which Exceed 10% of the Voting Rights

The German Securities Trading Act (Wertpapierhandelsgesetz) requires that any investor whose share of voting rights reaches, exceeds or falls below certain thresholds as the result of purchases, disposals or otherwise, must notify us and the German Federal Financial Supervisory Authority thereof. The lowest threshold is 3%.

DWS KGaA has its registered seat in Frankfurt am Main, Germany and its business address is Mainzer Landstrasse 11-17, 60329 Frankfurt am Main. DWS KGaA is registered with the commercial register of the local court of Frankfurt am Main, Germany, under HRB 111128. The company is a partnership limited by shares incorporated in Germany and governed by German law.

DB Beteiligungs-Holding GmbH, which has its registered seat in Frankfurt am Main, Germany, and is registered with the commercial register of the local court of Frankfurt am Main, Germany, under HRB 87504, is the largest shareholder of DWS KGaA. As per 20 April 2018, DB Beteiligungs-Holding GmbH held 158,981,872 units or a 79.49% share in DWS KGaA. We are not aware of any changes as of 31 December 2022.

DB Beteiligungs-Holding GmbH is a wholly-owned subsidiary of Deutsche Bank AG, which has its registered seat in Frankfurt am Main, Germany and is registered with the commercial register of the local court of Frankfurt am Main, Germany, under HRB 30000. Deutsche Bank AG is the ultimate beneficial owner of those units held by DB Beteiligungs-Holding GmbH.

The remaining shares are held by investors outside of Deutsche Bank Group.

DWS KGaA is not aware of any other shareholder holding directly or indirectly more than 10% or more of the voting rights.

Shares with Special Control Rights

Shares which confer special control rights have not been issued.

Rules Governing the Appointment and Replacement of the Managing Directors of the General Partner (Executive Board)

Pursuant to the Articles of Association of DWS KGaA (Section 7) the management of DWS KGaA is the sole responsibility of the General Partner, DWS Management GmbH. Pursuant to Section 6 (1) and (2) of the Articles of Association of the General Partner, the General Partner shall have at least two Managing Directors (Geschäftsführer) who are appointed and dismissed by resolution of the shareholders' meeting of DWS Management GmbH. The Managing Directors manage the business activities of DWS Management GmbH and – with regard to the position of DWS Management GmbH as the General Partner of DWS KGaA – the business activities of DWS KGaA. For ease of reference, the Managing Directors are collectively referred to as the "Executive Board". They are also responsible for representing DWS Management GmbH as well as DWS KGaA vis-à-vis third parties. Decisions taken by the Executive Board are in accordance with the law, the Articles of Association of DWS KGaA and the General Partner, the Terms of Reference of the Executive Board and, subject to the statutory and regulatory restrictions, instructions from the shareholders' meeting of the General Partner. For certain material decisions in relation to the business of DWS KGaA the General Partner also requires approval from the Joint Committee (see section 'Corporate Governance Statement – Corporate Bodies'). The Executive Board has a Chairman (Chief Executive Officer), who is appointed by the shareholders' meeting of the General Partner pursuant to the Terms of Reference for the Executive Board.

Pursuant to the German Investment Firm Act evidence must be provided to the German Federal Financial Supervisory Authority (BaFin) and to the Deutsche Bundesbank that any member of the Executive Board is reliable and has adequate professional suitability and sufficient time availability to exercise the respective task before the member is appointed (Section 67 (2) No.1 of the Securities Institutions Act).

Pursuant to Section 62 (2) of the Securities Institutions Act, BaFin can demand that members of the Executive Board are dismissed and prohibit them from carrying out their activities if such members are not reliable or do not have the professional suitability to manage the company or do not commit sufficient time to the performance of their functions. In addition, BaFin can require the dismissal of members of the Executive Board and prohibit them from carrying out their activities if such members have intentionally or recklessly contravened the provisions of the Securities Institutions, the regulations issued to support its implementation or orders issued by BaFin, and if they persist in such behaviour despite having been duly cautioned by BaFin.

Rules Governing the Amendment of the Articles of Association

Any amendment of the Articles of Association of DWS KGaA requires a resolution of the General Meeting of the company pursuant to Section 179 of the German Stock Corporation Act (AktG). Pursuant to the Articles of Association of DWS KGaA, the resolutions of the General Meeting are taken by a simple majority of votes and, in so far as a majority of capital stock is required, by a simple majority of capital stock, except where law or the Articles of Association determine otherwise (Section 25 (1)). Resolutions passed in the General Meeting require the approval of the General Partner where they involve matters which, in the case of a limited partnership, require the authorization of the personally liable partners. This includes resolutions on the amendment of the Articles of Association. To the extent that the resolutions of the General Meeting are subject to the consent of the General Partner, the General Partner shall declare at the General Meeting whether consent to the resolutions will be given or will be refused (Section 25 (3)). The authority to amend the Articles of Association in so far as such amendments merely relate to the wording has been assigned to the Supervisory Board (Section 25 (4)).

Amendments to the Articles of Association become effective upon their entry in the Commercial Register pursuant to Section 181 (3) of the German Stock Corporation Act (AktG).

Powers of the General Partner to Issue or Buy Back Shares

On 9 June 2022 the General Meeting of DWS KGaA approved the creation of two authorized capitals in the total amount of € 80 million:

The General Partner is authorized to increase the share capital of the company on or before 8 June 2025 once or more than once, by up to a total of € 20 million – through the issuance of new shares against cash payment or contribution in kind (“Authorized Capital 2022/I”). Shareholders are to be granted pre-emptive rights, but the General Partner is authorized to except broken amounts from shareholders’ pre-emptive rights. The General Partner is also authorized to exclude pre-emptive rights if the capital increase against contribution in kind is carried out in order to acquire companies or shareholdings in companies. Finally, the General Partner is authorized to exclude the pre-emptive rights if the issue price of the new shares is not significantly lower than the quoted price of the shares already listed at the time of the final determination of the issue price and the total shares issued since the authorization in accordance with Section 186 (3) Sentence 4 of the German Stock Corporation Act (AktG) do not exceed 10% of the share capital at the time the authorization becomes effective – or if the value is lower – at the time the authorization is utilized. Decisions of the General Partner to utilize the Authorized Capital 2022/I and to exclude pre-emptive rights require the approval of the Supervisory Board. The new shares may also be taken up by banks specified by the General Partner with the obligation to offer them to shareholders (indirect pre-emptive right). Further details are governed by Section 4 of the Articles of Association.

The General Partner is authorized to increase the share capital of the company on or before 8 June 2025 once or more than once, by up to a total of € 60 million through the issuance of new shares against cash payment (“Authorized Capital 2022/II”). Shareholders are to be granted pre-emptive rights, but the General Partner is authorized to except broken amounts from shareholders’ pre-emptive rights. Decisions of the General Partner to utilize the Authorized Capital 2022/II and to exclude pre-emptive rights require the approval of the Supervisory Board. The new shares may also be taken up by certain banks specified by the General Partner with the obligation to offer them to the shareholders (indirect pre-emptive right). Further details are governed by Section 4 of the Articles of Association.

By resolution of the Annual General Meeting of 5 June 2019 the General Partner is authorized to purchase, on or before 31 May 2024, its own shares in a total volume of up to 5% of the share capital at the time the resolution is taken or – if the value is lower – of the share capital at the time this authorization is exercised. Together with its own shares acquired for other reasons and which are from time to time in the company’s possession or attributable to the company pursuant to Section 71a et. seq. of the German Stock Corporation Act (AktG), the own shares purchased on the basis of this authorization may not at any time exceed 10% of the company’s respectively applicable share capital. The own shares may be bought through the stock exchange or by means of a public purchase offer to all shareholders. The authorization provides for certain thresholds by defining a minimum and maximum consideration for the acquisition of a treasury share. The countervalue for the purchase of shares (excluding ancillary purchase costs) through the stock exchange may not be more than

10% higher or lower than the average of the share prices (closing auction prices of the DWS share in Xetra trading and/or in a comparable successor system on the Frankfurt Stock Exchange) on the last three stock exchange trading days before the obligation to purchase. In the case of a public purchase offer, it may not be more than 20% higher or lower than the average of the share prices (closing auction prices of the DWS share in Xetra trading and/or in a comparable successor system on the Frankfurt Stock Exchange) on the last three stock exchange trading days before the day of publication of the offer. If the volume of shares offered in a public purchase offer exceeds the planned buyback volume, acceptance must be in proportion to the shares offered in each case. The preferred acceptance of small quantities of up to 100 of the company's shares offered for purchase per shareholder may be provided for.

In addition, the General Partner is authorized to dispose of the purchased shares on the stock exchange or by an offer to all shareholders. The General Partner is also authorized to use shares purchased on the basis of authorizations pursuant to Section 71 (1) No. 8 of the German Stock Corporation Act (AktG) to issue staff shares to employees and retired employees of DWS Group or to use them to service option rights on shares of DWS and/or rights or duties to purchase shares of DWS granted to employees or members of executive or non-executive management bodies of DWS Group.

Furthermore, the General Partner is authorized, with the exclusion of shareholders' pre-emptive rights, to sell such own shares to third parties against cash payment if the purchase price is not substantially lower than the price of the shares on the stock exchange at the time of sale. The General Partner may only use this authorization if it has been ensured that the number of shares sold on the basis of this authorization does not exceed 10% of the company's share capital at the time this authorization becomes effective or – if the amount is lower – at the time this authorization is exercised. Shares that are issued or sold during the validity of this authorization with the exclusion of pre-emptive rights, in direct or analogous application of Section 186 (3) Sentence 4 of the German Stock Corporation Act (AktG), are to be included in the maximum limit of 10% of the share capital. Also to be included are shares that are to be issued to service option and/or conversion rights from convertible bonds, bonds with warrants, convertible participatory rights or participatory rights, if these bonds or participatory rights are issued during the validity of this authorization with the exclusion of pre-emptive rights in corresponding application of Section 186 (3) Sentence 4 of the German Stock Corporation Act (AktG).

Finally, the General Partner is also authorized to cancel shares acquired on the basis of the described authorizations or a preceding authorization without the execution of this cancellation process requiring a further resolution by the General Meeting.

By resolution of the Annual General Meeting of 5 June 2019 the General Partner is authorized pursuant to Section 71 (1) No. 8 of the German Stock Corporation Act (AktG) to execute the purchase of shares under the resolved authorization also with the use of derivatives. The purchase of shares may be executed, apart from in the ways described above with the use of put and call options or forward purchase contracts. DWS KGaA may sell to third parties put options based on physical delivery and buy call options from third parties if it is ensured by the option conditions that these options are fulfilled only with shares which themselves were acquired subject to compliance with the principle of equal treatment. All share purchases based on put or call options are limited to shares in a maximum volume of 5% of the actual share capital at the time of the resolution by the General Meeting on this authorization. The term of the options must be selected such that the share purchase upon exercising the option is carried out at the latest on 31 May 2024.

The authorization provides for certain thresholds for such transactions. The purchase price to be paid per share upon exercise of the put options or upon the maturity of the forward purchase may not exceed by more than 10% or fall below 10% of the average of the share prices (closing auction prices of the DWS share in Xetra trading and/or in a comparable successor system on the Frankfurt Stock Exchange) on the last three stock exchange trading days before conclusion of the respective transaction in each case excluding ancillary purchase costs but taking into account the option premium received. The call options may only be exercised if the purchase price to be paid does not exceed by more than 10% or fall below 10% of the average of the share prices (closing auction prices of the DWS share in Xetra trading and/or in a comparable successor system on the Frankfurt Stock Exchange) on the last three stock exchange trading days before the acquisition of the shares.

The authorized capitals and the authorization to purchase and sell own shares have not been utilized so far.

Significant Agreements which Take Effect, Alter or Terminate upon a Change of Control of the Company Following a Takeover Bid

Significant agreements which take effect, alter or terminate upon a change of control of the company following a takeover bid have not been entered into.

Agreements for Compensation in Case of a Takeover Bid

If a member of the Executive Board leaves the Group within the scope of a change of control, she or he is not entitled to any specific one-off compensation payment. For information on the compensation system, please refer to the 'Compensation Report –Executive Board Compensation'.

Consolidated Financial Statements

Consolidated Financial Statements

Consolidated Statement of Income

in € m.	Notes	2022	2021
Management fees income		3,719	3,590
Management fees expense		1,263	1,219
Net management fees	6	**2,456**	**2,371**
Performance and transaction fee income		134	229
Performance and transaction fee expense		8	17
Net performance and transaction fees	6	**125**	**212**
Net commissions and fees from asset management	6	**2,582**	**2,583**
Interest and similar income[1]		39	27
Interest expense		18	20
Net interest income		**21**	**7**
Net gains (losses) on financial assets/liabilities at fair value through profit or loss[2]		(185)	253
Net income (loss) from equity method investments	11	66	81
Provision for credit losses		(1)	5
Other income (loss)[2]		228	(198)
Total net interest and non-interest income		**2,712**	**2,720**
Compensation and benefits	20	846	799
General and administrative expenses	7, 14	933	836
Impairment of goodwill and other intangible assets		68	0
Total non-interest expenses		**1,847**	**1,635**
Profit (loss) before tax		**866**	**1,086**
Income tax expense	21	271	304
Net income (loss)		**595**	**782**
Attributable to:			
Non-controlling interests		1	2
DWS shareholders		594	780

[1] Interest and similar income includes € 21 million for 2022 and € 7 million for 2021, calculated based on effective interest method.
[2] Net gains (losses) in financial assets/liabilities at fair value through profit or loss are impacted by valuation adjustments of € (12) million for 2022 (€ (2) million for 2021) on derivatives mainly driven by guaranteed products and valuation adjustments of € (186) million for 2022 (€ 208 million for 2021) on guaranteed funds. Other income (loss) includes € 186 million for 2022 (€ (208) million for 2021) valuation adjustments on liabilities of guaranteed funds. DWS Group has no stake in these funds. Other income includes a sales gain of € 30 million from the transfer of the digital investment platform to MorgenFund GmbH.

Consolidated Statement of Comprehensive Income

in € m.	2022	2021
Net income (loss) recognised in the income statement	**595**	**782**
Other comprehensive income (OCI):		
Items that will not be reclassified to profit or loss:		
Remeasurement gains (losses) related to defined benefit plans, before tax	58	26
Income tax expense (benefit) related to items that will not be reclassified to profit or loss	19	8
Items that are or may be reclassified to profit or loss:		
Financial assets mandatory at fair value through other comprehensive income		
Unrealized net gains (losses) arising during the period, before tax	(73)	(44)
Equity method investments		
Net gains (losses) arising during the period	0	0
Foreign currency translation		
Unrealized net gains(losses) arising during the period, before tax	195	294
Realized net gains (losses) arising during the period (reclassified to profit or loss), before tax	0	1
Income tax expense (benefit) related to items that are or may be reclassified to profit or loss	(23)	(14)
Total other comprehensive income (loss), net of tax	**185**	**282**
Total comprehensive income (loss), net of tax	**780**	**1,064**
Attributable to:		
Non-controlling interests	1	2
DWS shareholders	779	1,062

Earnings per Common Share

	Notes	2022	2021
Earnings per common share:			
Basic	8	€ 2.97	€ 3.90
Diluted	8	€ 2.97	€ 3.90
Number of common shares (in million)	19	200	200

Consolidated Balance Sheet

in € m.	Notes	31 Dec 2022	31 Dec 2021
ASSETS			
Cash and bank balances	9	1,979	2,191
Financial assets at fair value through profit or loss:	9		
Trading assets		1,346	1,505
Positive market values from derivative financial instruments		21	26
Non-trading financial assets mandatory at fair value through profit or loss		2,122	1,745
Investment contract assets mandatory at fair value through profit or loss		469	562
Total financial assets at fair value through profit or loss	9	**3,959**	**3,838**
Financial assets at fair value through other comprehensive income	9	80	154
Equity method investments	11	415	349
Loans at amortized cost	9	6	5
Property and equipment	13	23	26
Right-of-use assets	14	121	119
Goodwill and other intangible assets	12	3,749	3,652
Assets held for sale	15	0	324
Other assets	9,16	877	762
Assets for current tax	21	71	46
Deferred tax assets	21	131	145
Total assets		**11,412**	**11,611**

in € m.	Notes	31 Dec 2022	31 Dec 2021
LIABILITIES AND EQUITY			
Financial liabilities at fair value through profit or loss:	9		
Trading liabilities		38	28
Negative market values from derivative financial instruments		127	160
Investment contract liabilities designated at fair value through profit or loss		469	562
Total financial liabilities at fair value through profit or loss	9	**634**	**750**
Other short-term borrowings	9	21	75
Lease liabilities	14	139	136
Liabilities held for sale	15	0	252
Other liabilities	9,16	2,500	2,623
Provisions	17	36	16
Liabilities for current tax	21	40	96
Deferred tax liabilities	21	213	218
Long-term debt	9	0	0
Total liabilities		**3,584**	**4,166**
Common shares, no par value, nominal value of € 1.00	19	200	200
Additional paid-in capital		3,447	3,448
Retained earnings		3,720	3,487
Accumulated other comprehensive income (loss), net of tax		432	286
Total shareholders' equity		**7,799**	**7,421**
Non-controlling interests		29	24
Total equity		**7,828**	**7,445**
Total liabilities and equity		**11,412**	**11,611**

Consolidated Changes in Equity

	Shareholders' equity									
				Accumulated other comprehensive income, net of tax						
				Unrealized net gains (losses)						
in € m.	Common Stock	Additional paid in capital[1]	Retained earnings	On financial assets mandatory at fair value through other comprehensive income, net of tax	From equity method investments	Foreign currency translation, net of tax	Total	Total	Non-controlling interest	Total equity
Balance as of 1 January 2021	**200**	**3,459**	**3,051**	**2**	**18**	**2**	**23**	**6,732**	**30**	**6,762**
Total comprehensive income (loss), net of tax	0	0	780	(30)	0	293	264	1,044	2	1,046
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	18	0	0	0	0	18	0	18
Cash dividends paid	0	0	362	0	0	0	0	362	0	362
Net change in share awards in the reporting period, net of tax	0	(10)	0	0	0	0	0	(10)	0	(10)
Other	0	0	0	0	0	0	0	0	(9)	(9)
Balance as of 31 December 2021	**200**	**3,448**	**3,487**	**(28)**	**19**	**295**	**286**	**7,421**	**24**	**7,445**
Balance as of 1 January 2022	**200**	**3,448**	**3,487**	**(28)**	**19**	**295**	**286**	**7,421**	**24**	**7,445**
Total comprehensive income (loss), net of tax	0	0	594	(50)	0	195	145	740	0	740
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	39	0	0	0	0	39	0	40
Cash dividends paid	0	0	400	0	0	0	0	400	0	400
Net change in share awards in the reporting period, net of tax	0	(2)	0	0	0	0	0	(2)	0	(2)
Other	0	0	0	0	0	0	0	0	4	5
Balance as of 31 December 2022	**200**	**3,447**	**3,720**	**(78)**	**19**	**491**	**432**	**7,799**	**29**	**7,828**

[1] Additional paid-in capital includes net changes in share awards.

Consolidated Statement of Cash Flows

in € m.	2022	2021
Cash flows from operating activities:		
Net income (loss)	**595**	**782**
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Restructuring activities	0	2
(Gain) loss on sale of financial assets from investing activity	(1)	(17)
Deferred taxes, net	1	2
Impairment, depreciation, other amortization and (accretion)	123	85
Share of net loss (income) from equity method investments	(66)	(84)
Other non-cash movements	54	(110)
Income (loss) adjusted for non-cash charges, credits and other items	**708**	**659**
Adjustments for net change in operating assets and liabilities:		
Interest-earning time deposits with banks	(48)	(3)
Other assets	210	(106)
Investment contract liabilities designated at fair value through profit or loss	(93)	36
Other liabilities	(386)	393
Trading assets and liabilities, positive and negative market values from derivative financial instruments, net[1]	141	(219)
Other, net	(10)	24
Net cash provided by (used in) operating activities	**522**	**783**
Thereof: Net cash provided by (used in) operating activities of guaranteed funds	(5)	23
Cash flows from investing activities:		
Proceeds from sale and maturities of:		
Non-trading financial assets mandatory at fair value through profit or loss[2]	1,869	1,734
Equity method investments	0	3
Property and equipment	1	9
Disposals of intangible assets	0	0
Purchase of:		
Non-trading financial assets mandatory at fair value through profit or loss[3]	(2,164)	(2,204)
Equity method investments	(49)	0
Property and equipment	(1)	(9)
Additional intangible assets	(39)	(35)
Dividends received from equity method investments	45	74
Loans at amortized cost made to other parties	(1)	(1)
Net cash provided by (used in) investing activities	**(340)**	**(430)**

in € m.	2022	2021
Cash flows from financing activities:		
Cash dividends paid to DWS shareholders	(400)	(362)
Other borrowings	0	1
Repayment of other borrowings	(53)	0
Repayment of lease liabilities (principal)	(19)	(18)
Net change in non-controlling interests	5	(7)
Net cash provided by (used in) financing activities	**(468)**	**(386)**
Net effect of exchange rate changes on cash and cash equivalents	**26**	**28**
Net increase (decrease) in cash and cash equivalents	**(259)**	**(5)**
Cash and cash equivalents at beginning of period	2,055	2,060
Net increase (decrease) in cash and cash equivalents	(259)	(5)
Cash and cash equivalents at end of period	**1,795**	**2,055**

[1] Comprises mainly of trading assets held by consolidated guaranteed funds that are offset by payables to clients held by guaranteed funds and presented in other liabilities.
[2] The inflows result mainly from maturity of government bonds.
[3] The outflows contain mainly investments in liquidity positions and government bonds.

Supplemental cash flow information

in € m.	2022	2021
Net cash provided by (used in) operating activities includes:		
Income taxes paid (received), net	348	240
Interest paid	18	21
Interest received	20	6
Dividends received	8	8
Cash and bank balances:		
Cash	0	0
Bank balances on demand	1,795	2,055
Total cash and cash equivalents	**1,795**	**2,055**
Time deposits	183	137
Total cash and bank balances	**1,979**	**2,191**

Notes to the Consolidated Financial Statements

01 – Basis of Preparation

DWS Group GmbH & Co. KGaA (DWS KGaA or the Parent) has its registered seat in Frankfurt am Main, Germany and its business address at Mainzer Landstrasse 11-17, 60329 Frankfurt am Main. It is registered with the commercial register of the local court of Frankfurt am Main, Germany, under HRB 111128. The company is a partnership limited by shares incorporated in Germany and governed by German law.

DB Beteiligungs-Holding GmbH, has its registered seat in Frankfurt am Main, Germany, is registered with the commercial register of the local court of Frankfurt am Main, Germany, under HRB 87504 and is the parent company of DWS KGaA holding a 79.49% share of DWS KGaA. The remaining shares are held by external investors. The ultimate parent company of DWS KGaA is Deutsche Bank AG, headquartered in Frankfurt am Main, Germany, registered with the commercial register of the local court of Frankfurt am Main, Germany, under HRB 30000. The consolidated financial statements of Deutsche Bank AG in accordance with IFRS can be viewed on the Investor Relations website of Deutsche Bank AG (https://www.db.com/ir).

The accompanying consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board and endorsed by the European Union and the relevant interpretations of the International Financial Reporting Interpretations Committee and in compliance with Section 315a German Commercial Code. The Group's application of IFRS results in no differences between IFRS as issued by the IASB and IFRS as endorsed by the EU.

The consolidated financial statements include the parent company, DWS Group GmbH & Co. KGaA, together with its consolidated subsidiaries, including certain structured entities presented as a single economic unit (collectively the Group).

The consolidated financial statements have been prepared as at the end our reporting period, 31 December 2022 for the period from 1 January 2022 to 31 December 2022. The individual financial statements of the companies included in the consolidation are drawn up on the same accounting date, 31 December 2022, as that of DWS Group GmbH & Co. KGaA. They have been prepared using uniform accounting policies. Please refer to note '02 – Significant Accounting Policies and Critical Accounting Estimates' for additional information on the presentation of the Group's reported amounts of income, expenses, assets, liabilities, equity and the disclosure of contingent liabilities at the reporting date.

The consolidated financial statements are stated in euro, the presentation currency of the Group except when otherwise indicated and are rounded to the nearest million. Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures. "N/A" is read as not applicable.

The Group offers individuals and institutions access to the Group's investment capabilities across all major liquid and illiquid asset classes. The diverse expertise in Active, Passive and Alternatives asset management – as well as the deep environmental, social and governance focus – complement each other when creating targeted solutions for the clients.

Disclosures about the management of risks arising from financial instruments as required by IFRS 7 "Financial Instruments: disclosures" are set forth in the 'Risk Report' of the 'Summarized Management Report' and are an integrated part of the consolidated financial statements. These audited disclosures are marked with a reference to IFRS 7/IAS 1 within the 'Risk Report'.

The Executive Board has a reasonable expectation that DWS KGaA and the Group have adequate resources to continue in operating existence for the foreseeable future. Accordingly, the Group's annual consolidated financial statements have been prepared on a going concern basis. Income and expenses are recognised using the accrual method, i. e. they are recognised in the period to which they relate.

On 10 March 2023, the Executive Board prepared the consolidated financial statements, submitted them to the Supervisory Board for review and approval, and released them for publication.

Principles of Consolidation

Subsidiaries and consolidated structured entities are consolidated using the acquisition method. This method requires all of a subsidiary's and consolidated structured entity's assets and liabilities to be recognised at fair value at the acquisition date or at the date on which control is acquired.

Any difference between the cost and the fair value of the assets and liabilities is recognised as goodwill under intangible assets.

Transactions between consolidated entities as well as intercompany profits resulting from transactions between consolidated companies are eliminated in full. Material intercompany transactions and profits related to companies accounted for using the equity method are eliminated.

Shares in joint ventures and associated companies are accounted for, if material, using the Equity method in our consolidated financial statements and are thus not included in the scope of consolidation.

02 – Significant Accounting Policies and Critical Accounting Estimates

The following is a description of the significant accounting policies and critical accounting estimates of the Group. Except for the changes in accounting policies and changes in accounting estimates described in this note these policies have been consistently applied for 2022 and 2021.

Accounting Policies

Subsidiaries

The Group's subsidiaries are those entities which it directly or indirectly controls. Control over an entity is evidenced by the Group's ability to exercise its power in order to affect any variable returns that the Group is exposed to through its involvement with the entity.

When assessing whether to consolidate an entity, the Group evaluates a range of control factors, namely:

– the purpose and design 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
– whether the Group has the ability to use its power to affect the amount of its returns

Where voting rights are relevant, the Group is deemed to have control where 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 Group also assesses existence of control where it does not control the majority of the voting power but has the practical ability to unilaterally direct the relevant activities or its exposure to the variability of returns is different from that of other investors. This may arise in circumstances where the size and dispersion of holdings of the shareholders give the Group the power to direct the activities of the investee

The Group reassesses the consolidation status at least at every quarterly reporting date. 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 as well as changes following a trigger event which was anticipated in the original documentation.

Consistent accounting policies are applied throughout the Group for the purposes of consolidation.

Issuance of a subsidiary's stock to third parties are treated as non-controlling interests. Profit or loss attributable to non-controlling interests are reported separately in the Consolidated Statement of Income and Consolidated Statement of Comprehensive Income.

At the date that control of a subsidiary is lost, the Group

a. derecognizes the assets (including attributable goodwill) and liabilities of the subsidiary at their carrying amounts,
b. derecognizes the carrying amount of any non-controlling interests in the former subsidiary,
c. recognizes the fair value of the consideration received and any distribution of the shares of the subsidiary,
d. recognizes any investment retained in the former subsidiary at its fair value and
e. recognizes any resulting difference of the above items as a gain or loss in the income statement.

Any amounts recognized in prior periods in other comprehensive income in relation to that subsidiary would be reclassified to the Consolidated Statement of Income or transferred directly to retained earnings if required by other IFRSs.

Structured Entities

In order to carry out its business activities, the Group uses, among other things, structured entities that serve a specific business purpose. Structured entities are entities that are structured in such a way that voting rights or similar rights are not decisive in deciding who controls the entity. This is the case, for example, when voting rights only relate to administrative tasks and the relevant activities are controlled through contractual agreements.

The Group engages in various business activities with structured entities which are mainly designed to manage funds and own-account investment in funds set up by the Group or portfolios of funds set up by third-party companies.

Structured entities are consolidated when the substance of the relationship between the Group and the structured entities indicates that the structured entities are controlled by the Group and the Group is exercising its power as a principal rather than as an agent in respect of the fund or portfolios it manages. In assessing whether the Group is an agent or a principal, it considers a number of factors, including the scope of its decision-making activities, rights held by the investors and others and its exposure to variable returns including remuneration. The Group does not consolidate funds where it is deemed to be an agent or when a third party investor has the ability to direct the activities of the fund.

The Group has the following consolidated structured entities:

Guaranteed Funds

The Group manages guaranteed funds, which provide a partial notional guarantee at a date specific in the respective guaranteed contract. These funds are consolidated by the Group under IFRS 10 "Consolidated Financial Statements" due to the fact it has power (being the asset manager), is exposed to variable returns (specifically via the guarantee) and can use its power to affect those returns. In general, the Group has no stake in these funds. Since investors can return their fund shares on a daily basis and receive back the market value of their shares, the interests of the investors do not qualify as equity and the Group recognizes a liability at amortized cost within other liabilities which reflects the implied fair value based on the assets held as trading assets measured at fair value through profit or loss. The assets held by the consolidated structured entity are classified as trading assets in the balance sheet.

Seed Investments

Seed investments are deployed to build marketable track records for new products initiated by the Group. Seed investments are made to establish necessary funding for a new fund. Over time, seed investments are withdrawn as the funds grow and/or clients make investments in the funds. Seed investments typically comprise shares of mutual funds, exchange traded funds (ETFs) or equity interests in other types of commingled vehicles. The underlying exposure is comprised of varying asset types (typically fixed income or equity securities with active primary and secondary markets). The duration of deployed capital is typically up to three years. The Group consolidates these structured entities typically when setting up as the Group has the ability to exercise its power in order to affect any variable returns. The Group deconsolidates those funds when losing the power to control in order to affect any variable returns that the Group is exposed to through its involvement with the entity.

Co-Investments

The Group has direct investments in co-investments primarily in structured entities that invest in a variety of asset classes, including (but not limited to), equities, fixed income, commodities and other alternative asset classes which may include real estate, infrastructure, private equity and hedge funds. Investments are made to ensure an alignment of interest with the management of the respective co-investments. Co-investment capital is subject to investment market movements.

Associates

Investments in associates are accounted for under the equity method. The Group's share of the results of associates is adjusted to conform to the accounting policies of the Group. Material intercompany transactions and profits related to companies accounted for using the equity method are eliminated.

An associate is an entity in which the Group has significant influence, but not a controlling interest, over the operating and financial management policy decisions of the entity. Significant influence is defined under IAS 28 "Investments in Associates and Joint Ventures" by holding percentage and representation on the board of directors.

Generally, significant influence is presumed when the Group holds between 20% and 50% of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered in assessing whether the Group has significant influence.

Among the other factors that are considered in determining whether the Group has significant influence are representation on the board of directors and material intercompany transactions. The existence of these factors could require the application of the equity method of accounting for a particular investment even though the Group's investment is less than 20% of the voting stock.

If the Group previously held an equity interest in an entity (for example, as available for sale) and subsequently gained significant influence, the previously held equity interest is re-measured to fair value and any gain or loss is recognized in the Consolidated Statement of Income. Any amounts previously recognized in other comprehensive income associated with the equity interest would be reclassified to the Consolidated Statement of Income at the date the Group gains significant influence, as if the Group had disposed of the previously held equity interest.

Under the equity method of accounting, the Group's investments in associates and jointly controlled entities are initially recorded at cost including any directly related transaction costs incurred in acquiring the associate, and subsequently increased (or decreased) to reflect both the Group's pro-rata share of the post-acquisition net income (or loss) of the associate or jointly controlled entity and other movements included directly in the equity of the associate or jointly controlled entity. Dividend income from investments under the equity method of accounting is recognised upon the receipt of proceeds from the investee company. Goodwill arising on the acquisition of an associate or a jointly controlled entity is included in the carrying value of the investment (net of any accumulated impairment loss). As goodwill is not reported separately it is not specifically tested for impairment. Rather, the entire equity method investment is subject to impairment testing requirements quarterly or when there is an indication of a possible impairment.

If there is objective evidence of impairment, an impairment test is performed by comparing the investment's recoverable amount, which is the higher of its value in use and fair value less costs to sell, with its carrying amount. An impairment loss recognized in prior periods is only reversed if there has been a change in the estimates used to determine the investment's recoverable amount since the last impairment loss was recognized. If this is the case the carrying amount of the investment is increased to its higher recoverable amount. The increased carrying amount of the investment in the associate attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognized for the investment in prior years.

At the date that the Group ceases to have significant influence over the associate or jointly controlled entity the Group recognizes a gain or loss on the disposal of the equity method investment equal to the difference between the sum of the fair value of any retained investment and the proceeds from disposing of the associate and the carrying amount of the investment. Amounts recognized in prior periods in other comprehensive income in relation to the associate are accounted for on the same basis as would have been required if the investee had directly disposed of the related assets or liabilities.

Foreign Currency Translation

The Consolidated Financial Statements are prepared in euro, which is the presentation currency of the Group. Various entities in the Group use a different functional currency, being the currency of the primary economic environment in which the entity operates. An entity records foreign currency revenues, expenses, gains and losses in its functional currency using the exchange rates prevailing at the dates of recognition.

Monetary assets and liabilities denominated in currencies other than the entity's functional currency are translated at the period end closing rate. Foreign exchange gains and losses resulting from the translation and settlement of these items are recognized in the Consolidated Statement of Income as net gains (losses) on financial assets/liabilities at fair value through profit or loss in order to align the translation amounts with those recognized from foreign currency related transactions (derivatives) which hedge these monetary assets and liabilities.

Non-monetary items that are measured at historical cost are translated using the historical exchange rate at the date of the transaction. Translation differences on non-monetary items which are held at fair value through profit or loss are recognized in profit or loss.

For purposes of translation into the Group's presentation currency, assets and liabilities of foreign operations are translated at the period end closing rate and items of income and expense are translated into euros at the rates prevailing on the dates of the transactions, or average rates of exchange where these approximate actual rates. The exchange differences arising on the translation of a foreign operation are included in other comprehensive income. For foreign operations that are subsidiaries, the amount of exchange differences attributable to any non-controlling interests is recognized in non-controlling interests.

Currency Translation Adjustments reflected in equity are the result of legal entities held by parent companies with a different functional currency.

Net Commissions and Fees from Asset Management

At the Group, IFRS 15 "Revenue from Contracts with Customers" applies to the fees and charges reported under 'Net commissions and fees from asset management' in the Group's consolidated statement of income. The income arises in connection with services that are directly related to the Group's ordinary business activities (asset management business) and hence fall within the scope of IFRS 15.

The Group applies the IFRS 15, "Revenue from Contracts with Customers" five-step revenue recognition model to the recognition of Commissions and Fee Income, under which income must be recognized when control of goods and services is transferred, hence the contractual performance obligations to the customer has been satisfied.

Accordingly, after a contract with a customer has been identified in the first step, the second step is to identify the performance obligation – or a series of distinct performance obligations – provided to the customer. The Group must examine whether the service is capable of being distinct and is actually distinct within the context of the contract. A promised service is distinct if the customer can benefit from the service either on its own or together with other resources that are readily available to the customer, and the promise to transfer the service to the customer is separately identifiable from other promises in the contract. The amount of income is measured on the basis of the contractually agreed transaction price for the performance obligation defined in the contract. If a contract includes a variable consideration, the Group estimates the amount of consideration to which it will be entitled in exchange for transferring the promised goods or services to a customer. Income is recognized in profit and loss when the identified performance obligation has been satisfied. The Group does not present information about its remaining performance obligations if it is part of a contract that has an original expected duration of one year or less.

Management Fees and Performance Fees

The Group is a global asset manager offering traditional active and passive strategies as well as alternative and bespoke solutions for its customers.

The Group earns management fees and performance fees with different products carrying different fee rates arising from trust and other fiduciary activities that result in segregated holding or investing of assets on behalf of individuals, trusts, retirement benefit plans, and others. Management fees are charged as a percentage of AuM and are received on a monthly or quarterly basis. Other recurring fees include ongoing fees for products not captured in an asset class mix such as, for example, custody fees for client accounts. Performance fees are received primarily for fund management services based on the fund's performance relative to a benchmark/target return or the realized appreciation of the fund's investments. Variable performance fees based on specific contractual terms and fees from transaction related contracts are further components of the performance and transaction fees.

The terms and conditions of management fees and performance fees are governed in the asset management agreement. Asset management services that give rise to the management fee and performance fees constitute a single performance obligation under IFRS 15 and are considered together for revenue recognition purposes. The management and performance fee are variable consideration such that at each reporting date the Group estimates the fee amount to which the entity will be entitled in exchange for transferring the promised services to the customer. This includes consideration of the following constraints in the estimation on the fee amount:

- The AuM in the case of the management fee; and
- The fund's performance relative to a benchmark/target return or the realized appreciation of the fund's investments in the case of the performance fee

Management fees and performance fees are recognized when it is highly probable that a significant reversal in the cumulative amount of the transaction price would not occur.

They mainly relate to gross fund management fees received and gross expenses mainly relate to distribution fees paid.

The benefits arising from the asset management services are simultaneously received and consumed by the customer over time. The Group recognizes revenue over time by measuring the progress towards complete satisfaction subject to the removal of any uncertainty whether it is highly probable that a significant reversal in the cumulative amount of revenue recognized would occur or not. For the management fee component including other recurring fees this is the end of the monthly or quarterly service period. For the performance fee this is when based on the contractual provisions any uncertainty from the performance-related nature of the fee component has been fully removed. Variable performance fees based on specific contractual terms and fees from transaction related contracts (such as for real estate transactions for alternative funds) are further components of the performance and transaction fees.

The asset management fee is often structured as so-called "all-in fee" such that it includes compensation for example for fund related services such as administrative services and audit services. The Group remains the primary obligor to provide the services. In this case the revenue and expenses are reported gross as commission and fee income and general and administrative expenses respectively.

For expenses incurred in relation to businesses where revenue is driven on a commission basis, and for which income is reported as that commission income in the consolidated financial statements, such expenses are presented on a net basis. For example, net management fees consist of gross management fees and other-related fees, including administrative service fees, net of distribution fees paid. The total level of management fees depends on the client and product mix. Subsequently all expenses that are incurred on a transaction basis and are directly incurred and incremental to the generation of fee income are presented in net commissions and fees from asset management in the Group's consolidated financial statements.

Revenue and Expenses from Distribution of Fund Units

Revenue and expenses from the distribution of fund units arise from "front-end load" fees and "distribution" fees. The associated revenue and expenses are reported gross as commission and fee income and commission and fee expense respectively. However, in certain distribution agreements the Group does not own the contractual obligation to perform the first-time distribution service to the end-investor. Instead, a third party agent enters directly into a contractual agreement with the end-investor to perform the distribution service. In this case, the Group does not report any revenue and associated expense in commission and fee income and commission and fee expense respectively.

The gross management fee and performance fee income and expense are disclosed in note '06 – Net Commissions and Fees from Asset Management' to the Group's consolidated financial statements. This includes income and associated expense where the Group contractually owns the performance obligation (principal) in relation to the service that gives rise to the revenue and associated expense. In contrast, it does not include situations where the Group does not contractually own the performance obligation (agent).

Financial Assets and Liabilities, Financial Instruments

Financial assets and liabilities are recognized in the Group's financial statements in accordance with the provisions of IFRS 9 as adopted by the European Union.

IAS 32 "Financial Instruments: presentation" defines financial instruments as any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity, i. e. any contract representing contractual rights or obligations to pay or receive cash or other financial assets.

Derivative instruments are financial assets or liabilities that derive their value from an underlying, which require little or no initial investment and which are settled at a future date. The Group does not apply hedge accounting.

IFRS 9 Classification and Measurement

IFRS 9 "Financial Instruments" sets out requirements for recognizing and measuring financial instruments. A financial instrument is any contract that gives rise to both a financial asset of one entity and financial liability or equity instrument of another entity.

IFRS 9 requires the classification of financial assets to be determined based on both the business model used for managing the financial assets and contractual cash flow characteristics of the financial assets. The classification and measurement of financial liabilities will continue to follow IAS 39 "Financial Instruments: recognition and measurement".

Financial assets and financial liabilities are recognized in the Group's consolidated statement of financial position when the Group becomes party to the contractual provisions of the instrument. Financial assets are derecognized when the contractual rights to the cash flows from the financial asset expire or when the contractual rights to those assets are transferred. Financial liabilities are derecognized when the obligation specified in the contract is discharged, cancelled or expires.

Financial Assets

Non-derivative financial assets (debt or equity instruments) are classified in accounting categories in the financial statements that determine their accounting treatment and their subsequent measurement method.

These financial assets are classified in one of the following three categories:

- Financial assets at fair value through profit or loss
- Financial assets at amortized cost
- Financial assets at fair value through other comprehensive income

Business Model

There are three business models defined under IFRS 9 for financial assets:

- **hold to collect:** Financial assets held with the objective to collect contractual cash flows.
- **hold to collect and sell:** Financial assets held with the objective of both collecting contractual cash flows and selling financial assets
- **other:** Financial assets held with trading intent or that do not meet criteria of either "hold to collect" or "hold to collect and sell"

For "hold to collect" instruments the primary objective is to collect the nominal value of the receivable and any interest payable on these instruments, they are measured at amortized cost.

The Group applies the business model "hold to collect and sell" for instruments where the primary objective is to both collect contractual cash flows and sell financial assets, the assigned debt instruments are measured at fair value through other comprehensive income. Interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the consolidated statement of income. The remaining fair value changes are recognised in other comprehensive income. Upon derecognition, the cumulative fair value change recognised in other comprehensive income is recycled to profit or loss.

The remaining Group's assets under IFRS 9 mainly comprises of consolidated funds under IFRS 10, co-investments and seed investment as well instruments to further diversify our liquidity and funding capabilities and these assets are considered as "other business model" measured at fair value through profit and loss.

Solely Payments of Principal and Interest (SPPI)

If a financial asset is held in either "hold to collect" or a "hold to collect and sell" business model, then an assessment to determine whether contractual cash flows are solely payments of principal and interest on the principle amount outstanding at initial recognition is required to determine the classification.

Contractual cash flows, that are SPPI on the principal amount outstanding, are consistent with a basic lending arrangement. Interest is considered for the time value of the money and the credit risk associated with the principal amount outstanding during a particular period of time. It can also include consideration for the other basic lending risks (e. g. liquidity risk) and costs (e. g. administrative costs) associated with holding the financial assets for a particular period of time; and a profit margin that is consistent with a basic lending arrangement.

Financial Liabilities

Financial liabilities are measured at amortized cost using the effective interest method except for financial liabilities at fair value through profit or loss.

Financial liabilities include long-term and short-term debt issued which are initially measured at fair value, which is the consideration received, net of transaction costs incurred.

Impairment

The impairment model in IFRS 9 is based on the concept of Expected Credit Losses (ECL) which are a probability-weighted estimate of credit losses.

IFRS 9 Impairment requirements applies to all financial assets measured at amortised cost and measured at Fair Value through Other Comprehensive Income (FVOCI) not classified and measured at Fair Value through Profit or Loss (FVTPL). The approach is summarized as follows:

- **Stage 1:** The Group recognizes a credit loss allowance at an amount equal to twelve-month expected credit losses. This represents the portion of lifetime expected credit losses (LTECL) from default events that are expected within twelve months of the reporting date, assuming that credit risk has not increased significantly after initial recognition.
- **Stage 2:** The Group recognizes a credit loss allowance at an amount equal to LTECL for those Financial Assets which are considered to have experienced a significant increase in credit risk since initial recognition. The assessment of significant increase in credit risk is based on measuring changes in counterparty probability of default (PD) or if contractual payments are 30 days past due. This requires the computation of ECL based on lifetime probability of default that represents the probability of default occurring over the remaining lifetime of the Financial Asset. Allowance for credit losses is higher in this stage because of an increase in credit risk and the impact of a longer time horizon being considered compared to twelve months in stage 1.
- **Stage 3:** The Group recognizes a loss allowance at an amount equal to lifetime expected credit losses, reflecting a probability of default of 100%, via the recoverable cash flows for the asset, for those financial assets that are credit-impaired. The Group's definition of default is aligned with the regulatory definition.

Determination of Fair Value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an arm's length transaction between market participants at the measurement date.

Goodwill and Other Intangible Assets

Goodwill arises on the acquisition of subsidiaries and associates and represents the excess of the aggregate of the cost of an acquisition and any non-controlling interests in the acquiree over the fair value of the identifiable net assets acquired at the date of the acquisition.

For the purpose of calculating goodwill, fair values of acquired assets, liabilities and contingent liabilities are determined by reference to market values or by discounting expected future cash flows to present value. This discounting is either performed using market rates or by using risk-free rates and risk-adjusted expected future cash flows. Any non-controlling interests in the acquiree is measured either at fair value or at the non-controlling interests' proportionate share of the acquiree's identifiable net assets (this is determined for each business combination).

Goodwill and intangible assets on acquisitions are capitalised on cash-generating unit (CGU) level. The Group has one CGU for the purpose of impairment testing of goodwill and intangible assets as the Group is managed as a single business segment on asset management for controlling and reporting purposes.

Goodwill is tested for impairment annually by comparing the recoverable amount of the goodwill with the carrying amount. In addition, in accordance with IAS 36 "Impairment of assets", the Group tests goodwill if there are indications that impairment may have occurred.

Intangible assets are recognized separately from goodwill when they are separable or arise from contractual or other legal rights and their fair value can be measured reliably. Intangible assets that have a finite useful life are stated at cost less any accumulated amortization and accumulated impairment losses. Customer-related intangible assets that have a finite useful life are amortized over periods of between 1 and 20 years on a straight-line basis based on their expected useful life. These assets are tested for impairment and their useful lives reaffirmed at least annually.

Indefinite life intangible assets have an indefinite useful life and hence are not amortized. These assets are tested for impairment and their indefinite useful lives reaffirmed at least annually. The Group reviews the useful life of an intangible asset that is not being amortized each reporting period to determine whether events and circumstances continue to support an indefinite useful life assessment for these assets. If they do not, the change in the useful life assessment from indefinite to finite life will be accounted for as a change in an accounting estimate in accordance with IAS 8 "Accounting policies, changes in accounting estimates and errors". Indefinite life intangibles are reviewed for impairment annually or more frequently if there are indications that the carrying value may be impaired. If any indicators exist, further assessment is made to determine if the carrying value may be impaired.

The Group assesses annually whether there is an indication that a previously recognized impairment loss has reversed. If there is such an indication and the recoverable amount of the impaired asset or CGU subsequently increases, then the impairment loss generally is reversed. In all cases the maximum amount of the reversal is the lower of (1) the amount necessary to bring the carrying amount of the asset to its recoverable amount and (2) the amount necessary to restore the assets to their pre-impairment carrying amounts less subsequent depreciation or amortization that would have been recognized.

Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. These contracts will mainly relate to office buildings and other leases for vehicles.

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

Right-of-use assets

The Group recognises right-of-use assets at the date the underlying asset is available for use (commencement date). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets. The right-of-use assets are also subject to an annual impairment review.

Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate.

Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e. g. changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption for short-term leases (i. e. those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

Employee Benefits

Share-Based Compensation Plans

In DWS Group there are two main categories of share-based compensation plans, which are described below:

DWS Share-Based Plans (cash-settled)

The Group made grants of share-based compensation under the DWS Equity Plan. This plan represents a contingent right to receive a cash payment by referencing to the value of DWS shares during a specified time period.

In September 2018, IPO related Awards were granted to selected employees within the Group. Both Awards (DWS Equity Plan and DWS Stock Appreciation Rights (SAR) Plan) are considered as share-based cash-settled awards.

All employees who are offered DWS Equity Plan Awards are subject to performance condition and forfeiture provision which need to be met for each tranche to be capable of settlement. In case such performance conditions are not met, the tranche will lapse.

Employees who are offered DWS SAR Plan Awards are also subject to specific performance and forfeiture provisions, as applicable under the SAR Plan.

Compensation expense is recorded on a straight-line basis over the period in which employees perform services to which the awards relate, or over the period of the tranches for those awards delivered in tranches. Estimates of expected forfeitures are periodically adjusted in the event of actual forfeitures or for changes in expectations. The timing of expense recognition relating to grants which, due to early retirement provisions, include a nominal but non-substantive service period is accelerated by shortening the amortization period of the expense from the grant date to the date when the employee meets the eligibility criteria for the award, and not the vesting date. For awards that are delivered in tranches, each tranche is considered a separate award and amortized separately.

The principal inputs for the fair value of the awards are the market value on reporting date, discounted for any dividends foregone over the holding periods of the award, and adjustment for expected and actual levels of vesting which includes estimating the number of eligible employees leaving the Group and number of employees eligible for early retirement.

The liabilities incurred are re-measured at the end of each reporting period until settlement with recognizing any gains and losses in profit and loss.

DB Share Based Plans (equity-settled)

Some Group employees continue to hold deferred awards granted under the DB Equity Plan, under the rules established for Deutsche Bank Group as applicable.

Share-based payment transactions where Deutsche Bank AG as parent company have granted Deutsche Bank AG shares to the employees of the Group are classified as equity-settled transactions reflected in the equity in the consolidated financial statements of the Group as Deutsche Bank AG has the obligation to settle the shares.

The substance of the Deutsche Bank's share award programs is that Deutsche Bank AG makes a capital contribution to the Group, which correspondingly makes a share-based payment to its employees in exchange for services. Compensation cost related to the grant of parent company awards to employees of the Group are recognized in the consolidated financial statements as compensation expense with a corresponding credit to equity. The compensation expense based on the fair value at grant date of the awards (and adjusted for expected forfeitures) is amortized over the requisite substantial service period of the award.

For share awards, the fair value is the quoted market price of the share reduced by the present value of the expected dividends from Deutsche Bank AG that will not be received by the employee and adjusted for the effect, if any, of restrictions beyond the vesting date. In case an award is modified such that its fair value immediately after modification exceeds its fair value immediately prior to modification, a re-measurement takes place and the resulting increase in fair value is recognized as additional compensation expense in the consolidated financials of the Group.

Compensation expense is recorded on a straight-line basis over the period in which employees perform services to which the awards relate or over the period of the tranches for those awards delivered in tranches. Estimates of expected forfeitures are periodically adjusted in the event of actual forfeitures or for changes in expectations. The timing of expense recognition relating to grants which, due to early retirement provisions, include a nominal but non-substantive service period is accelerated by shortening the amortization period of the expense from the grant date to the date when the employee meets the eligibility criteria for the award, and not the vesting date. For awards that are delivered in tranches, each tranche is considered a separate award and amortized separately.

If there are recharge arrangements in place to compensate Deutsche Bank AG for the cost of acquiring the shares to settle its obligation, the Group recognizes a corresponding liability that is accrued over the respective service/vesting period.

From the perspective of the Group, the recharge forms part of the determination of the net capital contribution received in respect of the share-based payment transaction. As the Group recognizes a capital contribution as part of the accounting for the share-based payment transaction, the Group recognizes its reimbursement of the contribution to DB Group Services Ltd. (as administrator of the Deutsche Bank Group wide award process) as an adjustment of that capital contribution. The Group therefore recognizes a recharge liability with a corresponding debit in equity.

The liabilities incurred are re-measured at the end of each reporting period until settlement, recognizing any gains and losses in equity.

Pension Benefits

The Group provides a number of pension plans. In addition to defined contribution plans, there are retirement benefit plans accounted for as defined benefit plans. The assets of all the Group's defined contribution plans are held in independently administered funds. Contributions are generally determined as a percentage of salary and are expensed based on employee services rendered, generally in the year of contribution.

All retirement benefit plans accounted for as defined benefit plans are valued using the projected unit-credit method to determine the present value of the defined benefit obligation and the related service costs. Under this method, the determination is based on actuarial calculations which include assumptions about demographics, salary increases and interest and inflation rates. Actuarial gains and losses are recognized in other comprehensive income and presented in equity in the period in which they occur. The majority of the Group's benefit plans is funded.

Other Post-Employment Benefits

In addition, the Group maintains unfunded contributory post-employment medical plans for a number of current and retired employees who are mainly located in the United States. These plans pay stated percentages of eligible medical and dental expenses of retirees after a stated deductible has been met. Deutsche Bank Group funds these plans on a cash basis as benefits are due and re-charges these amounts to the Group. Analogous to retirement benefit plans these plans are valued using the projected unit-credit method. The Group only pays for participation in these plans.

Refer to note '20 – Employee Benefits' for further information on the accounting for pension benefits and other post-employment benefits.

Termination Benefits

Termination benefits arise when employment is terminated by the Group before the normal retirement date or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognizes termination benefits as a liability and an expense if the Group is demonstrably committed to a detailed formal plan without realistic possibility of withdrawal. In the case of an offer made to encourage voluntary redundancy, termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due in more than twelve months after the end of the reporting period are discounted to their present value. The discount rate is determined by reference to market yields on high-quality corporate bonds.

Provisions and Contingent Liabilities

Provisions are recognized in accordance with IAS 37 and if the Group has a present legal or constructive obligation as a result of past events, if it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation as of the balance sheet date, taking into account the risks and uncertainties surrounding the obligation.

If the effect of the time value of money is material, provisions are discounted and measured at the present value of the expenditure expected to be required to settle the obligation, using a pre-tax rate that reflects the current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognized as interest expense.

When some or all the economic benefits required to settle a provision are expected to be recovered from a third party (for example, because the obligation is covered by an insurance policy), an asset is recognized if it is virtually certain that reimbursement will be received.

Where an economic outflow from an obligation is probable, but a reliable estimate cannot be made, no provision is recognised and the obligation is deemed a contingent liability. Contingent liabilities also include possible obligations for which the possibility of future economic outflow is more than remote but less than probable. Where a provision has been taken for an obligation, no contingent liability is recorded.

Income Taxes

The Group recognizes the current and deferred tax consequences of transactions that have been included in the consolidated financial statements using the provisions of the respective jurisdictions' tax laws. Current and deferred taxes are recognized in profit or loss except to the extent that the tax relates to items that are recognized directly in equity or other comprehensive income in which case the related tax is recognized directly in either equity or other comprehensive income accordingly.

Deferred tax assets and liabilities are recognized for future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, unused tax losses and unused tax credits. Deferred tax assets are recognized only to the extent that it is probable that sufficient taxable profit will be available against which those unused tax losses, unused tax credits and deductible temporary differences can be utilized.

Deferred tax assets and liabilities are measured based on the tax rates that are expected to apply in the period that the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date.

Current tax assets and liabilities are offset when
(1) they arise from the same tax reporting entity or tax group of reporting entities,
(2) the legally enforceable right to offset exists and
(3) they are intended to be settled net or realized simultaneously.

Deferred tax assets and liabilities are offset when the legally enforceable right to offset current tax assets and liabilities exists and the deferred tax assets and liabilities relate to income taxes levied by the same taxing authority on either the same tax reporting entity or tax group of reporting entities.

Deferred tax liabilities are provided on taxable temporary differences arising from investments in subsidiaries, branches and associates and interests in joint ventures except when the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the difference will not reverse in the foreseeable future. Deferred income tax assets are provided on deductible temporary differences arising from such investments only to the extent that it is probable that the differences will reverse in the foreseeable future and sufficient taxable income will be available against which those temporary differences can be utilized.

Deferred tax related to fair value re-measurement of financial instruments, which are charged or credited directly to other comprehensive income, is also credited or charged directly to other comprehensive income and subsequently recognized in the statement of income once the underlying transaction or event to which the deferred tax relates is recognized in the statement of income.

Statement of Cash Flows

The Group's assignment of cash flows to the operating, investing or financing category depends on the Group's primary operating activity which is to serve a range of active, passive and alternative investment capabilities to institutional and retail clients worldwide.

The amounts shown in the consolidated statement of cash flows do not precisely match the movements in the consolidated balance sheet from one period to the next as they exclude non-cash items such as movements due to foreign exchange translation and movements due to changes in the group of consolidated companies.

The Group's cash flow statement is prepared using the indirect method for cash flows from operating activities. The movements in balances carried at fair value through profit or loss shown in operating cash flows represent all changes impacting the carrying value. This includes the impact of market movements and cash inflows and outflows.

Use of Estimates and Assumptions in Preparing the Consolidated Financial Statements

Assumptions and estimates must be made in accordance with the relevant financial reporting standards and the application of the Group's accounting policy in order to determine the reported 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. Actual results may differ from these estimates and may prove to be significantly higher or lower than the estimate. Significant judgment is required in making these estimates and the Group’s final of assets, liabilities, income and expenses recognised in these consolidated financial statements may ultimately be materially different.

The Group's management has to make highly subjective or complex judgements and assumptions, often as a result of having to estimate the impact of matters that are inherently uncertain and susceptible to change. Management bases its estimates and assumptions on historical experience, where applicable and other factors believed to be reasonable under the circumstances. However, uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amount of the asset or liability affected in the future. Management cannot offer any assurance that the actual results will be consistent with these estimates and assumptions. Critical accounting estimates or assumptions could change from period to period or could involve estimates where management could have reasonably used another estimate in the relevant accounting period. Actual results could differ from the management estimate, especially in relation to potential impacts from the war in Ukraine and the Russia sanctions.

The Group has identified the following estimates and assumptions as significant:

Management Fee and Performance Fee

Performance-based remuneration components can be influenced, among other things, by market developments and thus by factors beyond the company’s control. The performance fee is material with a broad range of possible outcomes and although the Group has entered similar contracts, that experience is of little predictive value in determining the future performance of the product.

The Group updates its estimate for the management and performance fee at each reporting date.

Fair Values of Financial Assets and Financial Liabilities

The Group uses valuation techniques to establish the fair value of instruments where prices quoted in active markets are not available. Therefore, where possible, parameter inputs to the valuation techniques are based on observable data derived from prices of relevant instruments traded in an active market. These valuation techniques involve some level of management estimation and judgment, the degree of which will depend on the price transparency for the instrument or market and the instrument’s complexity. 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 reaching estimates of fair value management judgment needs to be exercised. The areas requiring significant management judgment are identified, documented and reported to senior management as part of the valuation control process and the standard monthly reporting cycle. The specialist model validation and valuation control groups focus attention on the areas of subjectivity and judgment.

Management judgement is generally required only to a limited extent to determine the fair value of financial instruments with quoted prices in an active market. Similarly, only a few subjective valuations or estimates are required for financial instruments that are valued using industry-standard models and all input parameters of which are quoted in active markets.

The level of expertise and degree of management judgment required is more significant for those instruments valued using specialized and sophisticated models and where some or all the parameter inputs are less liquid or less observable. In particular, where data are obtained from infrequent market transactions then extrapolation and interpolation techniques must be applied.

Where no market data are available for a particular instrument then pricing inputs are determined by assessing other relevant sources of information such as historical data, fundamental analysis of the economics of the transaction and proxy information from similar transactions, and making appropriate adjustment to reflect the actual instrument being valued and current market conditions. Where different valuation techniques indicate a range of possible fair values for an instrument then management has to decide what point within the range of estimates appropriately represents the fair value. Further, some valuation adjustments may require the exercise of management judgment to achieve fair value.

Financial assets and liabilities carried at fair value are required to be disclosed according to the inputs to the valuation method that are used to determine their fair value. Specifically, segmentation is required between those valued using quoted market prices in an active market (level 1), valuation techniques based on observable parameters (level 2) and valuation techniques using significant unobservable parameters (level 3). Management judgment is required in determining the category to which certain instruments should be allocated. This specifically arises when the valuation is determined by a number of parameters, some of which are observable and others are not. Further, the classification of an instrument can change over time to reflect changes in market liquidity and therefore price transparency.

The Group provides a sensitivity analysis of the impact upon the level 3 financial instruments of using a reasonably possible alternative for the unobservable parameter. The determination of reasonably possible alternatives requires significant management judgment.

Additional information and quantitative disclosures are provided in note '09 – Financial Instruments'.

Goodwill and Other Intangible Assets

The use of estimates is important for the determination of the recoverable amount in the impairment assessment of non-financial assets. It requires estimates based on quoted market prices, prices of comparable businesses, present value or other valuation techniques, or a combination thereof, necessitating management to make subjective judgments and assumptions and to determine the values for the key assumptions based on a combination of internal and external analysis.

Additional information and quantitative disclosures are provided in note '12 – Goodwill and Other Intangible Assets'.

Provisions and Contingent Liabilities

The Group operates in a legal and regulatory environment that exposes it to risk of litigation and regulatory enforcement. As a result, the Group may be involved in litigation, arbitration and regulatory proceedings and investigations. Where that is the case, in determining for which of these matters the possibility of a loss is probable, or less than probable but more than remote, and then estimating the possible loss for those claims, the Group takes into consideration a number of factors, including but not limited to the nature of the claim and its underlying facts, the procedural posture, available indemnities and the opinions and views of legal counsel and other experts. Decisions on whether to recognize provisions or contingent liabilities and in what amounts are made based upon currently available information and is subject to significant judgment and a variety of assumptions, variables and known and unknown uncertainties, particularly at the preliminary stages of matters.

The matters for which the Group determines that the possibility of a future loss is more than remote will change from time to time, as will the matters as to which a reliable estimate can be made and the estimated possible loss for such matters. Actual results may prove to be significantly higher or lower than the estimate of possible loss in those matters where such an estimate was made. In addition, loss may be incurred in matters with respect to which the Group believed the likelihood of loss was remote. In particular, the estimated aggregate possible loss does not represent the Group's potential maximum loss exposure for those matters.

Additional information and quantitative disclosures are provided in note '17 – Provisions'.

03 – Recently Adopted and New Accounting Pronouncements

Recently Adopted Accounting Pronouncements

Except as described below, the accounting policies applied in these consolidated financial statements are the same as those applied in the Group's consolidated financial statements as at and for the year ended 31 December 2021.

The Group has adopted the following accounting pronouncements effective 1 January 2022.

IFRS 3 "Business combinations"

In May 2020, the IASB issued amendments to IFRS 3 "Business combinations". The amendments update an outdated reference in IFRS 3 without significantly changing its requirements. The amendments are effective for annual periods beginning on or after 1 January 2022 with early adoption permitted. The amendments do not have any impact on the Group's consolidated financial statements. These amendments were endorsed by the EU on 28 June 2021.

IAS 37 "Provisions, contingent liabilities and contingent assets"

In May 2020, the IASB issued amendments to IAS 37 "Provisions, contingent liabilities and contingent assets" to clarify what costs an entity considers in assessing whether a contract is onerous. The amendments specify that the "cost of fulfilling" a contract comprises the "costs that relate directly to the contract". Costs that relate directly to a contract can either be incremental costs of fulfilling that contract (examples would be direct labour, materials) or an allocation of other costs that relate directly to fulfilling contracts (an example would be the allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract). The amendments are effective for annual periods beginning on or after 1 January 2022 with early adoption permitted. The amendments have no material impact on the Group's consolidated financial statements. These amendments were endorsed by the EU on 28 June 2021.

IAS 16 "Property, plant and equipment"

In May 2020, the IASB issued amendments to IAS 16 "Property, plant and equipment". The amendments prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

Instead, an entity recognizes the proceeds from selling such items, and the cost of producing those items, in profit or loss. The amendments are effective for annual periods beginning on or after 1 January 2022 with early adoption permitted. The amendments have no material impact on the Group's consolidated financial statements. These amendments were endorsed by the EU on 28 June 2021.

Improvements to IFRS 2018-2020 Cycles

In May 2020, the IASB issued amendments to multiple IFRS standards, which resulted from the IASB's annual improvement project for the 2018-2020 cycles. This comprises amendments that result in accounting changes for presentation, recognition or measurement purposes as well as terminology or editorial amendments related to IFRS 1 "Presentation of Financial Statements - First-time Adoption of International Financial Reporting Standards", IFRS 9 "Financial Instruments", IFRS 16 "Leases" and IAS 41 "Agriculture". The amendments to IFRS 9 clarify which fees an entity includes when it applies the 10 per cent test in paragraph B3.3.6 of IFRS 9 in assessing whether to derecognize a financial liability. An entity includes only fees paid or received between the entity (the borrower) and the lender, including fees paid or received by either the entity or the lender on the other's behalf. The amendments will be effective for annual periods beginning on or after 1 January 2022 with early adoption permitted. The amendments have no material impact on the Group's consolidated financial statements. These amendments were endorsed by the EU on 28 June 2021.

New Accounting Pronouncements

The following accounting pronouncements were not effective as of 31 December 2022 and therefore have not been applied as of 31 December 2022.

Classification of Liabilities as Current or Non-current (amendments to IAS 1 "Presentation of Financial Statements")

In January 2020, the IASB issued amendments to IAS 1 "Presentation of Financial Statements: Classification of Liabilities as Current or Non-Current". They clarify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period. The amendments also clarify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability and make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services. The amendments will be effective for annual periods beginning on or after 1 January 2023 with early adoption permitted. The amendments will not have a material impact on the Group's consolidated financial statements. These amendments were endorsed by the EU on 2 March 2022.

IAS 8 "Accounting policies, changes in accounting estimates and errors"

In February 2021, the IASB issued Definition of Accounting Estimates, which amended IAS 8 "Accounting Policies, changes in accounting estimates and errors". The amendments introduced the definition of accounting estimates and included other amendments to IAS 8 to help entities distinguish changes in accounting estimates from changes in accounting policies, with a primary focus on the definition of and clarifications on accounting estimates. The amendments introduce a new definition for accounting estimates by clarifying that they are monetary amounts in the financial statements that are subject to measurement uncertainty. The amendments also clarify the relationship between accounting policies and accounting estimates by specifying that a company develops an accounting estimate to achieve the objective set out by an accounting policy. The amendments are effective for periods beginning on or after 1 January 2023, with earlier application permitted, and will apply prospectively to changes in accounting estimates and changes in accounting policies occurring on or after the beginning of the first annual reporting period in which the company applies the amendments. The amendments will not have a material impact on the Group's consolidated financial statements. These amendments were endorsed by the EU on 2 March 2022.

IAS 1 "Presentation of Financial Statements"

On 12 February 2021 the IASB issued the amendments to IAS 1 "Presentation of Financial Statements" paragraphs 117–122 to require entities to disclose their material accounting policy information rather than their significant accounting policies. To support this amendment the IASB also amended IFRS Practice Statement 2 "Making Materiality Judgements" to help companies provide useful accounting policy disclosures. The key amendments to IAS 1 include:

- Requiring companies to disclose their material accounting policies rather than their significant accounting policies
- Clarifying that accounting policies related to immaterial transactions, other events or conditions are themselves immaterial and as such need not be disclosed
- Clarifying that not all accounting policies that relate to material transactions, other events or conditions are themselves material to a company's financial statements

The amendments are effective from 1 January 2023 but may be applied earlier. The amendments will not have a material impact on the Group's consolidated disclosures. These amendments were endorsed by the EU on 2 March 2022.

IFRS 17 "Insurance Contracts"

On 18 May 2017, the IASB issued IFRS 17, "Insurance contracts", which establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the standard. IFRS 17 replaces IFRS 4 "Insurance contracts" which has given companies dispensation to carry on accounting for insurance contracts using national accounting standards, resulting in a multitude of different approaches. IFRS 17 solves the comparison problems created by IFRS 4 by requiring all insurance contracts to be accounted for in a consistent manner, benefiting both investors and insurance companies. Insurance obligations will be accounted for using current values – instead of historical cost. The information will be updated regularly, providing more useful information to users of financial statements. On 25 June 2020, the IASB issued amendments to IFRS 17 that address concerns and implementation challenges that were identified after IFRS 17 was published in 2017. The amendments are effective for annual periods beginning on or after January 1, 2023 with early adoption permitted. Based on the Group's business activities it is expected that IFRS 17 will not have a material impact on the Group's consolidated financial statements. These amendments were endorsed by the EU on 19 November 2021.

IAS 12 "Income Taxes"

On 7 May 2021, the IASB issued amendments to IAS 12 "Income Taxes". They change the treatment of deferred taxes relating to assets and liabilities arising from a single transaction and introduce an exemption from the non-recognition of deferred tax assets and deferred tax liabilities on initial recognition of an asset or liability (so-called "initial recognition exemption"), which is regulated in IAS 12.15(b) and IAS 12.24. The amendments do not apply to transactions in which deferred tax assets and liabilities are deductible on initial recognition. Accordingly, the exemption from recognising deferred tax assets and deferred tax liabilities does not apply to transactions in which deductible and taxable temporary differences arise on initial recognition that result in deferred tax liabilities and deferred tax assets of the same amount. The amendments are effective for annual periods beginning on or after 1 January 2023. Early application is permitted. The implementation of the amendments will not have a material impact on the consolidated financial statements. These amendments were endorsed by the EU on 11 August 2022.

IFRS 16 "Leases"

On 22 September 2022, the IASB issued amendments to IFRS 16 "Leases" that clarify how a seller-lessee subsequently measures sale and leaseback transactions that satisfy the IFRS 15 requirements to be accounted for as a sale. The amendments are effective for annual periods beginning on or after January 1, 2024 with early adoption permitted. The amendment is not expected to have a material impact on the Group's consolidated financial statements. These amendments have yet to be endorsed by the EU.

04 – Acquisitions and Dispositions

Business Combinations

In the period 1 January 2022 to 31 December 2022 there were no acquisitions accounted for as business combinations.

Acquisitions and Dispositions

On 30 November 2022, the transfer of the digital investment platform into the newly established MorgenFund GmbH was closed. The Group holds a stake of 30% in this company accounted under the equity method.

05 – Business Segment and Related Information

The Group's segmental reporting has been prepared in accordance with the management approach, which requires presentation of segments on the basis of the internal management report that are regularly reviewed by the Chief Operating Decision Maker. The term "Chief Operating Decision Maker" identifies a function, not necessarily a manager with a specific title and it can be a group of persons. Generally, an operating segment has a segment manager who is directly accountable to and maintains regular contact with the Chief Operating Decision Maker to discuss operating activities, financial results, forecasts, or plans for the segment. The term "segment manager" also identifies a function, not necessary a single manager with a specific title.

Based on this management approach, the Group operates a single business segment for reporting and controlling purposes. The Executive Board will be responsible as Chief Operating Decision Maker for reviewing and monitoring the results of the Group and making strategic decisions around resources. The segment manager is the Executive Board.

The Group's operating activity is managed using one globally integrated investment group targeting the same client segments, distribution channels and asset classes. There is one centrally managed sales force servicing all products and negotiating prices with clients and the Group is using largely shared infrastructure (such as marketing, product strategy, product development and finance).

The Executive Board has responsibility for the steering and oversight of the entire Group including strategy, planning, major personnel decisions, organisation, risk management and compliance systems. Although revenues are monitored by the different asset classes - i. e. Active, Passive and Alternatives - all other direct and allocated costs, along with assets and liabilities, but also full-time employee and capital ratios, are analysed and monitored on an aggregated basis.

The following table presents total net interest and non-interest income by geographic area - based on the management approach of the Group.

Net Interest and non-interest income by geographic area

in € m.	2022	2021
Germany	1,278	1,387
Europe (excluding Germany), Middle East and Africa	638	626
Americas	663	545
Asia/Pacific	134	163
Total net interest and non-interest income	**2,712**	**2,720**

Notes to the Consolidated Income Statement

06 – Net Commissions and Fees from Asset Management

Split of net commissions and fees from asset management by type and product

in € m.	2022	2021
Management fees:		
Management fee income	3,719	3,590
Management fee expense	1,263	1,219
Net management fees	**2,456**	**2,371**
Thereof:		
Active Equity	756	772
Active Multi Asset	215	208
Active Systematic and quantitative investments	204	205
Active Fixed Income	249	281
Active Cash	25	19
Passive	383	378
Alternatives	609	498
Other[1]	15	10
Performance and transaction fees:		
Performance and transaction fee income	134	229
Performance and transaction fee expense	8	17
Net performance and transaction fees	**125**	**212**
Thereof:		
Alternatives	104	101
Active and Other	21	111
Total net commissions and fees from asset management	**2,582**	**2,583**

[1] Other recurring fees include ongoing fees not assigned to a product, for example, custody fees for client accounts.

Split of commission and fee income from asset management by region

in € m.	2022	2021
Commission and fee income from asset management:		
Germany	1,542	1,611
Europe (excluding Germany), Middle East and Africa	1,487	1,522
Americas	782	637
Asia/Pacific	41	49
Total commission and fee income from asset management	**3,853**	**3,819**
Commission and fee expense from asset management	**1,271**	**1,236**
Net commissions and fees from asset management	**2,582**	**2,583**

Revenue is recognized when performance obligations are satisfied. Performance obligation is satisfied by fund performance exceeding a hurdle rate, an agreed minimum annual return provided to investors. As of 31 December 2022, there were performance obligations to be satisfied of € 267 million with a time band of three years from 2024 to 2026 (as of 31 December 2021, € 244 million with a time band of five years from 2023 to 2027) from alternative funds. The increase of performance obligations to be satisfied was mainly driven by fund valuations and asset sales.

07 – General and Administrative Expenses

in € m.	2022	2021
Information technology	145	136
Professional services	92	80
Market data and research services	72	66
Occupancy, furniture and equipment expenses	49	51
Banking services and outsourced operations	230	224
Marketing expenses	37	29
Travel expenses	14	5
Charges from Deutsche Bank Group[1]	182	158
Other expenses	111	87
Total general and administrative expenses	**933**	**836**

[1] Thereof € 106 million related to infrastructure charges from Deutsche Bank Group for the year 2022 (€ 114 million for the year 2021) and € 76 million related to DWS functions in Deutsche Bank Group entities for the year 2022 (€ 44 million for the year 2021).

08 – Earnings per Common Share

Basic earnings per common share are computed by dividing net income (loss) attributable to DWS shareholders by the average number of common shares outstanding during the year. The average number of common shares outstanding is defined as the average number of common shares issued.

Diluted earnings per common share assumes the conversion into common shares of outstanding securities or other contracts to issue common stock. The Group does not have any dilution impact on earnings per common share as of 31 December 2022 and 31 December 2021.

Computation of basic and diluted earnings per common share

in € m. (unless stated differently)	2022	2021
Net income (loss) attributable to DWS shareholders – numerator for basic earnings per common share	594	780
Net income (loss) attributable to DWS shareholders after assumed conversions – numerator for diluted earnings per common share	594	780
Number of common shares (in million)	200	200
Weighted-average shares outstanding – denominator for basic earnings per common share (in million)	200	200
Adjusted weighted-average shares after assumed conversions – denominator for diluted earnings per common share (in million)	200	200

Earnings per common share

	2022	2021
Basic earnings per common share	€ 2.97	€ 3.90
Diluted earnings per common share	€ 2.97	€ 3.90

Notes to the Consolidated Balance Sheet

09 – Financial Instruments

Appropriate classification of financial instruments is determined at the time of initial recognition or when reclassified in the balance sheet. Financial instruments are recognised or derecognised on trade date, which is the date on which the Group commits to purchase or sell the asset or issue or repurchase the liability.

The major financial instruments and their valuation are described in the following:

Trading Assets and corresponding Payables held by Consolidated Funds

Trading assets held by consolidated guaranteed funds and consolidated seed investments –The valuation of these assets including equity instruments and debt instruments follows the valuation prepared by the fund and includes relevant IFRS adjustments if applicable.
Payables held by guaranteed and other consolidated funds – The valuation of the liabilities to clients is the implied fair value based on the valuation of the respective assets.

Derivative financial instruments

Positive market value from derivative financial instruments – This position mainly relates to short-term derivatives the Group entered into to manage the profit or loss volatility associated with our share price-linked, equity-based compensation. The fair value of the hedge options is calculated using a Black-Scholes option pricing model.
Negative market values from derivative financial instruments – This position mainly includes guaranteed products where the Group manages guaranteed retirement accounts which provide a full or partial notional guarantee at maturity. The Group provides partial notional guarantees to guaranteed funds. These guarantees are considered as derivatives. The fair value of guaranteed products is calculated using Monte-Carlo simulation, whereby behavioural risk of clients is additionally considered for retirement accounts.

Non-trading Assets

Seed investments and co-investments – The valuation of the Group's share is based on the valuation of the respective fund and include relevant IFRS adjustments if applicable.
Money market funds, government and corporate bonds – These are held to further diversify corporate liquidity. The valuation of money market funds is based on observable market data. The valuation of bonds is based on quoted prices.
Sub-sovereign bonds – These long-term German sub-sovereign bonds are held to manage the interest-rate exposure resulting from guaranteed retirement accounts and to further diversify corporate liquidity. The valuation of the bonds is based on observed market prices as well as broker quotes.

Unit-linked Life Insurance Financial Instruments

Investment contract assets and liabilities – The investment contract assets represent the fund shares held in the customer contracts which valuation is prepared by the fund and includes relevant IFRS adjustments if applicable. The investment contract obliges the Group to use these assets to settle the liabilities to the customers. Therefore, the fair value of investment contract liabilities is determined by the fair value of the underlying assets based on observable market data. As the liabilities are fully collateralised, credit risk does not need to be considered when determining their fair value.

Financial Instruments held at Amortized Cost

Cash and bank balances – The primary objective of cash and bank balances is to collect nominal value of the receivables, that are of a short-term nature, and any interest payable on the balances.
Other financial assets and liabilities – These are short-term receivables and payables from commissions and fees, from brokerage and other remaining settlement balances.

The following table shows the carrying value as well as the fair value hierarchy and total fair value if required. Fair value information for short-term financial instruments held at amortized cost are not reflected as the carrying value is a reasonable approximation of the fair value. Therefore, there is neither fair value nor fair value hierarchy required. For other financial assets and liabilities, please refer to note '16 – Other Assets and Other Liabilities'. Furthermore, financial assets and liabilities classified as held-for-sale are not included in the table below as their carrying value is a reasonable approximation of the fair value. For financial assets and liabilities as held-for-sale, see note '15 – Non-Current Assets and Disposal Groups Held for Sale'. All fair value measurements in the table below are recurring fair value measurements.

Carrying value and fair value by fair value hierarchy

	31 Dec 2022					31 Dec 2021				
	Carrying amount				Fair value	Carrying amount				Fair value
in € m.	Total	Level 1	Level 2	Level 3	Total	Total	Level 1	Level 2	Level 3	Total
Financial assets held at fair value:										
Trading assets:										
Debt instruments held by consolidated guaranteed funds	1,146	2	1,144	0	1,146	1,301	1	1,300	0	1,301
Debt instruments held by consolidated seed investments	25	7	18	0	25	7	0	7	0	7
Equity instruments held by consolidated guaranteed funds	94	94	0	0	94	173	173	0	0	173
Equity instruments held by consolidated seed investments	82	82	0	0	82	24	24	0	0	24
Total trading assets	**1,346**	**184**	**1,162**	**0**	**1,346**	**1,505**	**199**	**1,307**	**0**	**1,505**
Positive market values from derivative financial instruments	**21**	**0**	**20**	**2**	**21**	**26**	**0**	**26**	**0**	**26**
Non-trading financial assets mandatory at fair value through profit or loss:										
Debt instruments - co-investments	504	0	0	504	504	474	0	0	474	474
Debt instruments - seed investments	37	15	21	0	37	22	18	4	0	22
Debt instruments - money market funds	0	0	0	0	0	0	0	0	0	0
Debt instruments - government bonds	605	542	63	0	605	647	647	0	0	647
Debt instruments - corporate bonds	670	64	606	0	670	476	476	0	0	476
Debt instruments - other debt instruments	276	191	52	34	276	96	67	0	29	96
Thereof: liquidity positions	243	191	52	0	243	67	67	0	0	67
Equity instruments	29	0	0	29	29	30	0	0	30	30
Thereof: co-investments	2	0	0	2	2	3	0	0	3	3
Total non-trading financial assets mandatory at fair value through profit or loss	**2,122**	**813**	**742**	**567**	**2,122**	**1,745**	**1,209**	**4**	**533**	**1,745**
Debt instruments - investment contract assets mandatory at fair value through profit or loss	**469**	**0**	**469**	**0**	**469**	**562**	**0**	**562**	**0**	**562**
Total financial assets held at fair value through profit or loss	**3,959**	**997**	**2,393**	**568**	**3,959**	**3,838**	**1,407**	**1,899**	**533**	**3,838**
Debt instruments - sub-sovereign bond at fair value through other comprehensive income	80	0	80	0	80	154	0	154	0	154
Total financial assets at fair value through other comprehensive income	**80**	**0**	**80**	**0**	**80**	**154**	**0**	**154**	**0**	**154**
Total financial assets held at fair value	**4,038**	**997**	**2,473**	**568**	**4,038**	**3,992**	**1,407**	**2,052**	**533**	**3,992**
Financial assets held at amortized cost:										
Cash and bank balances	1,979					2,191				
Loans	6	0	6	0	6	5	0	5	0	5
Other financial assets	823					714				
Total financial assets held at amortized cost	**2,808**	**0**	**6**	**0**	**6**	**2,911**	**0**	**5**	**0**	**5**

	31 Dec 2022					31 Dec 2021				
	Carrying amount	Fair value				Carrying amount	Fair value			
in € m.	Total	Level 1	Level 2	Level 3	Total	Total	Level 1	Level 2	Level 3	Total
Financial liabilities held at fair value:										
Trading liabilities:										
Investment funds (short position)	38	38	0	0	38	28	28	0	0	28
Total trading liabilities	**38**	**38**	**0**	**0**	**38**	**28**	**28**	**0**	**0**	**28**
Negative market values from derivative financial instruments	**127**	**0**	**22**	**104**	**127**	**160**	**1**	**20**	**140**	**160**
Investment contract liabilities designated at fair value through profit or loss	469	0	469	0	469	562	0	562	0	562
Total financial liabilities designated at fair value through profit or loss	**469**	**0**	**469**	**0**	**469**	**562**	**0**	**562**	**0**	**562**
Total financial liabilities held at fair value through profit or loss	**634**	**39**	**491**	**104**	**634**	**750**	**29**	**582**	**140**	**750**
Payables from guaranteed and other consolidated funds	**1,281**	**0**	**1,281**	**0**	**1,281**	**1,511**	**0**	**1,511**	**0**	**1,511**
Total financial liabilities held at fair value	**1,916**	**39**	**1,773**	**104**	**1,916**	**2,261**	**29**	**2,093**	**140**	**2,261**
Financial liabilities held at amortized cost:										
Other short-term borrowings	21					75				
Other financial liabilities	1,121					972				
Thereof: payables from performance related payments	326					306				
Long-term debt	0					0				
Total financial liabilities held at amortized cost	**1,142**					**1,047**				

Trading assets decreased by € 159 million, mainly driven by a decrease of assets held by guaranteed funds in the amount of € 235 million resulting mainly from mark-to-market valuation losses and net disposals. This impact was partially offset by an increase of assets held by consolidated seed investments in the amount of € 75 million mainly resulting from consolidation of funds. The corresponding payables held by guaranteed and other consolidated funds decreased respectively.

Non-trading financial assets mandatory at fair value through profit or loss increased by € 376 million primarily driven by increased liquidity positions of € 328 million, co-investments of € 30 million, and seed investments of € 15 million. Corporate cash was invested into government bonds, corporate bonds, and other debt instruments. Co-investments increased mainly due to mark-to-market valuation gains and positive FX impact. Seed investments increased mainly resulting from deconsolidation of funds and net purchases.

The decrease of investment contract assets and corresponding liabilities of € 93 million is mainly driven by mark-to-market valuation losses of the related investments and by redemptions and maturities.

Positive market values from derivative financial instruments mainly include the equity compensation share price option.

The carrying value of sub-sovereign bonds as of 31 December 2022 was € 80 million while the amortised cost value as of 31 December 2022 was € 194 million.

Negative market values from derivative financial instruments mainly include the guaranteed products of level 3 of the fair value hierarchy (€ 104 million as of 31 December 2022, € 140 million as of 31 December 2021).

For further details on other financial assets and liabilities, please refer to note '16 – Other Assets and Other Liabilities'.

Fair Value Valuation Techniques and Controls

The valuation techniques and controls of the Group are noted below.

Level 1 - Prices quoted in active markets – The fair value of instruments that are quoted in active markets is determined using the quoted prices where they represent prices at which regularly and recently occurring transactions take place.

Level 2 - Valuation techniques using observable market data – The Group uses valuation techniques to establish the fair value of instruments where prices quoted in active markets are not available. Valuation techniques used for financial instruments include modelling techniques, the use of indicative quotes for proxy instruments, quotes from recent and less regular transactions and broker quotes.

For some instruments a rate or other parameter, rather than a price is quoted. Where this is the case then the market rate or parameter is used as an input to a valuation model to determine fair value. For some instruments, modelling techniques follow industry standard models, for example, discounted cash flow analysis and standard option pricing models. These models are dependent upon estimated future cash flows, discount factors and volatility levels.

Frequently, valuation models require multiple parameter inputs. Where possible, parameter inputs are based on observable data or are derived from the prices of relevant instruments traded in active markets. Where observable data is not available for parameter inputs, then other market information is considered. For example, indicative broker quotes and consensus pricing information are used to support parameter inputs where they are available.

Level 3 - Valuation techniques using unobservable market data – Where no observable information is available to support parameter inputs, then valuation models used they are based on other relevant sources of information such as prices for similar transactions, historic data, economic fundamentals, and research information, with appropriate adjustment to reflect the terms of the actual instrument being valued and current market conditions.

Significant unobservable inputs and valuation adjustments are subject to regular reviews. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation control group assesses the evidence obtained from the third parties to support the conclusion that these valuations meet the requirements of IFRS, including the level in the fair value hierarchy in which the valuations should be classified.

Validation and control – The Group has an established valuation control framework which governs internal control standards, methodologies, and procedures over the valuation process. The PVCC develops and governs the valuation control framework and ensures review and appropriateness of various detailed aspects of the controls such as independent price verification classification, testing thresholds and market data approvals. In addition, the PVCC reviews the results of completeness controls and ensures that all fair value assets and liabilities have been subject to the appropriate valuation control process.

An independent specialised valuation control group within Deutsche Bank Group´s Risk function executes the valuation control processes which covers the valuation of financial instruments across all levels of the fair value hierarchy. The mandate of this specialist function includes the performance of the independent valuation control processes for all businesses including DWS Group. A key focus of this independent valuation control group is directed to areas where management judgment forms part of the valuation process, including regular review of significant unobservable inputs and valuation adjustments mentioned above.

The PVCC oversees the valuation control processes performed by Deutsche Bank Group’s specialist valuation function on behalf of the Group. Results of the valuation control processes are collected and analysed as part of a standard monthly reporting cycle. Variances outside of pre-set and approved tolerance levels are escalated both within the Finance function and Senior Business Management for review, resolution and, if required, adjustment. This process is summarised in the Valuation Control Report and reviewed by the PVCC.

For instruments where fair value is determined from valuation models, the assumptions and techniques used within the models are validated by Deutsche Bank Group’s independent specialist model validation group.

Transfers

Transfers between levels take place when there is a change in the inputs that is relevant to categorization in the fair value hierarchy. Where applicable, transfers between levels 1, 2 and 3 are assumed to take place at the beginning of the year.

In 2022, there were transfers from level 1 into level 2 of € 73 million and from level 2 into level 1 of € 1 million. These were largely driven by corporate bonds denominated in EUR to reflect changes in current market liquidity and price transparency. There was a transfer from level 1 into level 2 of € 7 million during the year ending 31 December 2021 from a consolidated fund in US whose underlying investments changed from listed to unlisted where observable parameters are available.

There were no transfer into and out of level 3 during the year ending 31 December 2022. There were transfers out of level 3 in the amount of € 1 million during the year ending 31 December 2021 due to observable parameters for the derivative valuation.

Analysis of Financial Instruments in Fair Value Hierarchy Level 3

Financial instruments at fair value categorised in level 3 of the fair value hierarchy are valued based on one or more unobservable parameters.

Reconciliation of financial instruments in level 3

	Financial assets					Financial liabilities	
in € m.	Positive market values from derivative financial instrument	Debt instruments – Co-investments	Debt instruments – Other debt instruments	Equity instruments	Total	Negative market values from derivative financial instruments	Total
Balance as of 1 January 2021	**0**	**389**	**19**	**7**	**415**	**155**	**155**
Changes in the group of consolidated companies	0	(3)	3	(1)	0	0	0
Unrealized gains (losses) through profit or loss	0	66	1	(1)	66	15	15
FX gains (losses)	0	17	1	0	18	0	0
Purchases	0	39	5	27	70	0	0
Sales	0	0	0	1	1	0	0
Settlements	0	33	1	1	35	0	0
Transfers into Level 3	0	0	0	0	0	0	0
Transfers out of Level 3	0	0	0	0	0	1	1
Balance as of 31 December 2021	**0**	**474**	**29**	**30**	**533**	**140**	**140**
Balance as of 1 January 2022	**0**	**474**	**29**	**30**	**533**	**140**	**140**
Changes in the group of consolidated companies	0	0	0	0	0	0	0
Unrealized gains (losses) through profit or loss	2	34	0	1	36	35	35
FX gains (losses)	0	12	1	(1)	12	0	0
Purchases	0	53	4	0	57	0	0
Sales	0	1	0	0	1	0	0
Settlements	0	68	0	1	69	0	0
Transfers into Level 3	0	0	0	0	0	0	0
Transfers out of Level 3	0	0	0	0	0	0	0
Balance as of 31 December 2022	**2**	**504**	**34**	**29**	**568**	**104**	**104**

Sensitivity Analysis of Unobservable Parameters

The value of financial instruments is dependent on unobservable parameter inputs from a range of reasonably possible alternatives. Appropriate levels for these unobservable input parameters are selected to ensure consistency with prevailing market evidence. If the Group had used parameter values from the extremes of the range of reasonably possible alternatives for these financial instruments, then as of 31 December 2022 it could have increased fair value by as much as € 17 million or decreased fair value by as much as € 66 million. As of 31 December 2021, it could have increased fair value by as much as € 17 million or decreased fair value by as much as € 49 million.

The sensitivity calculation aligns to the approach used to assess valuation uncertainty for prudent valuation purposes. Prudent valuation is a mechanism for quantifying valuation uncertainty and assessing an exit price with a 90% certainty. Under EU regulation, the additional valuation adjustments (AVAs) would be applied as a deduction from Tier 1 capital (CET1).

The Group has limited potential impact from the relative uncertainty in the fair value of financial instruments for which valuation is dependent on unobservable parameters.

Sensitivity analysis of unobservable parameters

	31 Dec 2022		31 Dec 2021	
in € m.	Positive fair value movement from using reasonable possible alternatives	Negative fair value movement from using reasonable possible alternatives	Positive fair value movement from using reasonable possible alternatives	Negative fair value movement from using reasonable possible alternatives
Positive market values from derivative financial instruments	0	0	0	0
Debt instrument – co-investments	1	47	1	32
Debt instrument – other debt instrument	0	2	0	1
Equity instruments	0	3	2	3
Negative market values from derivative financial instruments	15	15	14	13
Total	**17**	**66**	**17**	**49**

Quantitative Information about the sensitivity of Significant Unobservable Inputs

The range of values shown below represents the highest and lowest inputs used to value the exposures.

Financial instruments in level 3 and quantitative information about unobservable inputs

	31 Dec 2022						31 Dec 2021					
	Fair value						Fair value					
in € m. (unless stated otherwise)	Assets	Liabilities	Valuation technique(s)	Significant unobservable input(s) (Level 3)	Range		Assets	Liabilities	Valuation technique(s)	Significant unobservable input(s) (Level 3)	Range	
Positive market values from derivative financial instruments	2	0	Market approach	Price per net asset value	100%	100%						
Debt instrument – Co-investments	502	0	Market approach	Price per net asset value	100%	100%	472	0	Market approach	Price per net asset value	100%	100%
	2	0	Intex model	Credit Spread	17%	22%	2	0	Intex model	Credit Spread	11%	16%
				Recovery rate	75%	75%				Recovery rate	75%	75%
				Default rate	1%	1%				Default rate	1%	1%
				Pre-payment rate	20%	20%				Pre-payment rate	25%	25%
Debt instrument – Other debt instruments	17	0	Market approach	Price per net asset value	100%	100%	13	0	Market approach	Price per net asset value	100%	100%
	16	0	Intex model	Credit Spread	2%	10%	16	0	Intex model	Credit Spread	2%	8%
				Recovery rate	75%	75%				Recovery rate	75%	75%
				Default rate	1%	1%				Default rate	1%	1%
				Pre-payment rate	20%	20%				Pre-payment rate	25%	25%
Equity Instrument	29	0	Market approach	Price per net asset value	100%	100%	30	0	Market approach	Price per net asset value	100%	100%
Negative market values from derivative financial instruments	0	104	Option pricing model	Cancellation rate	0%	15%	0	140	Option pricing model	Cancellation rate	1%	15%
Total	**568**	**104**					**533**	**140**				

Credit Risk

For the Group, credit risk exposure relates primarily to financial instruments held at amortized cost, corporate, government and sub-sovereign bonds, money market funds and other debt instruments as well as unfunded commitments within contingent liabilities. For unfunded commitments please refer to note '18 – Contractual Obligations and Commitments'.

The key driver of our credit risk is the credit quality of credit institutions in which overnight deposits and, potentially, term deposits (up to one year) are placed. For deposits, we established a maximum concentration limit per counterpart of 35% in relation to the total of our liquidity positions which comprises of cash and bank balances, money market funds, government, sub sovereign and corporate bonds and other debt instruments. In the table below we show the highest maximum concentration risk regarding our counterparties.

Cash and bank balances by rating of institution

in € m.	31 Dec 2022	31 Dec 2021
S&P A1	333	746
S&P A2	1,573	1,359
Other	73	85

Liquidity positions and concentration

	31 Dec 2022	31 Dec 2021
Liquidity positions (in € m.)	3,577	3,535
Max concentration (%) - limit 35%	23 %	24 %

The Group applied the IFRS 9 "Financial Instruments" requirement to recognize a loss allowance for ECL on financial assets that are measured at amortised cost and fair value through other comprehensive income as well as unfunded commitments. For details on the model please refer to note '02 – Significant Accounting Policies and Critical Accounting Estimates'.

The table below shows the maximum exposure to credit risk which is the carrying amount of financial assets and the respective ECL reflected in profit or loss statement or other comprehensive income. The calculation of ECL considers amongst others internal and external credit rating of the counterparts. No financial instruments were assigned to stage 3 as of 31 December 2022 respectively as of 31 December 2021.

Gross carrying value of financial assets subject to credit risk

	31 Dec 2022			31 Dec 2021		
in € m.	Carrying value gross	ECL Stage 1	ECL Stage 2	Carrying value gross	ECL Stage 1	ECL Stage 2
Cash and bank balances	1,979	0	0	2,191	0	0
Loans	6	0	0	5	0	0
Sub-sovereign bonds	80	0	0	154	0	0
Other financial assets	823	0	0	714	1	1
Contingent liabilities	111	0	0	120	0	0
Total	**2,999**	**0**	**0**	**3,184**	**1**	**1**

Market Risk

For the Group, market risk exposure relates to financial assets held at fair value through profit or loss, financial liabilities held at fair value through profit or loss and other financial liabilities which are shown in the table above. In addition, market risk exposure relates to strategic investments that are mainly equity method investments and structural foreign exchange which are not part of financial instruments but considered for market risk. For equity method investments, please refer to note '11 – Equity Method Investments'. For structural foreign exchange resulting in Currency Translation Adjustments that is part of accumulated other comprehensive income, please refer to 'Consolidated Changes in Equity'.

The Group's market risk exposure is mainly driven by the capital at risk especially deployed by the Group into seed investments and co-investments, and where a financial claim against us is inherent in the product, such as Guaranteed Products. As introduced for this note, trading assets from consolidated funds and investment contract assets are largely offset by their respective liabilities. Therefore, only limited market risk remains.

Seed Capital: The seed investments are exposed to the daily volatility of market prices. The risk is mitigated via typically short tenor and offsetting risk positions which are classified as derivatives. Therefore, a sensitivity analysis for this portfolio is not needed.

Co-Investments and strategic investments: These investments are subject to the risk of a potential event on their fair value resulting in significant decrease and the need to partially impair or even fully write-off.

The following assumptions are applied for the sensitivity analysis of co-investments:

The real estate sector represents the single largest contributor to the underlying assets of co-investments and, accordingly, the sensitivity analysis focuses on this market segment, applying blanket percentage value reductions to the component elements of our real estate fund portfolio. Two levels of market stress, 20% and 40%, have been assumed with the latter representing the peak depreciation in value seen in certain real estate markets during the global financial crisis. Using blanket market stresses is considered a highly conservative approach given that different sub-sectors and regions of the real estate market react to different degrees to any given market movement. In addition, it has been assumed that a movement in the value of the underlying assets has a commensurate and immediate impact on the value of our co-investment that is also a conservative assumption given the typical degree of diversification.

The other key assumption relates to leverage within the funds. The level of leverage varies by fund and depends on the risk profile of the individual funds. Since the global financial crisis, the leverage levels have reduced as investors are seeking sustainable performance.

The sensitivity analysis is performed based on the following methodology:

The Group´s co-investments are valued at least annually by fund administrators based on fundamental analysis of the underlying assets and their respective performance relative to when they were acquired. The valuation of the co-investments is based on the external valuation of the respective fund and include relevant IFRS adjustments if applicable. For the sensitivity analysis, a percentage stress factor is applied to the internal valuation, adjusting for fund leverage where necessary, to arrive at an estimated impact on our profit or loss.

Estimated net profit or loss impact from co-investments sensitivity for potential changes in real estate values

in € m.	31 Dec 2022	31 Dec 2021
Reduction in real estate value:		
20%	(74)	(64)
40%	(148)	(128)
Increase in real estate value:		
20%	74	64
40%	148	128

Estimated net profit or loss impact from guaranteed products sensitivity for potential changes in long-term interest rates

in € m.	31 Dec 2022	31 Dec 2021
Reduction in long-term interest rate:		
50 bp	(9)	(16)
100 bp	(20)	(37)
Increase in long-term interest rate:		
50 bp	7	12
100 bp	12	21

Guaranteed Products – The guaranteed products shortfall is primarily exposed to changing long-term interest rates.

The following assumption is applied for the sensitivity analysis of guaranteed products shortfall:

Long-term interest rates are the most significant out of various factors that can influence the guaranteed products shortfall. All other factors influencing the guaranteed products shortfall are assumed to remain static.

The sensitivity analysis is performed based on the following methodology:

The guaranteed products shortfall is calculated with option pricing model using Monte-Carlo simulation considering stochastic interest rates and equities for a Constant Proportion Portfolio Insurance strategy. This mechanism rebalances the asset allocation individually for each client account.

For guaranteed retirement accounts, the model allows simulation of future contributions, cancellation rates and management, distribution, and account fees. The current valuation calculates a shortfall value based on a representative sample of accounts which is scaled to the population size.

The sensitivity of the guaranteed products shortfall to long-term interest rates is not linear, with reductions in the long-term interest rates having a far greater impact on the shortfall value than increases of a similar magnitude.

Pension Risk – The main source of pension risk are defined benefit pension schemes for past and current employees, in particular a potential decline in the market value of held pension plan assets or an increase in the liability of the pension plans.

For details on the risks inherent in post-employment benefit plans, please refer to note ‘20 – Employee Benefits’ which includes a detailed sensitivity analysis.

Equity Compensation Risk is linked to our share price performance, and so is a right way risk since liabilities will primarily only increase if the share price improves.

For details on share-based compensation plans, please refer to note ‘20 – Employee Benefits’ which includes details on structure, terms and fair value of share-based awards.

Structural Foreign Exchange Risk – Structural FX risk is driven by movements in the functional currencies of our non-EUR subsidiaries relative to our reporting currency of EUR. The primary currencies to which structural FX risk is sensitive are USD and GBP, weakening of either relative to the EUR results in higher structural FX risk and associated capital requirements.

Following assumption is applied for the sensitivity analysis of structural FX risk:

The analysis assumes a range of percentage changes, 10% and 20% up and down change, to the USD/EUR rate and the GBP/EUR rate.

The sensitivity analysis is performed based on the following methodology:

Aggregated balance sheet exposures in the respective functional currencies are translated in EUR group currency whereby a 10% and 20% up and down change in the USD/EUR and GBP/EUR exchange rate is applied to estimate the impact on balance sheet.

Estimated balance sheet impact from structural FX risk sensitivity for potential specific FX moves

in € m.	31 Dec 2022	31 Dec 2021
USD weakens relative to EUR by:		
10%	(317)	(294)
20%	(581)	(538)
GBP weakens relative to EUR by:		
10%	(33)	(37)
20%	(60)	(68)
USD strengthens relative to EUR by:		
10%	387	359
20%	871	807
GBP strengthens relative to EUR by:		
10%	40	45
20%	91	102

Liquidity Risk

The following table presents an analysis of our contractual undiscounted cash flows of financial liabilities based upon earliest legally exercisable maturity as of 31 December 2022.

Maturity analysis of the earliest contractual undiscounted cash flow of financial liabilities

						31 Dec 2022						31 Dec 2021
in € m.	On demand	Due within 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total	On demand	Due within 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
Trading liabilities	38	0	0	0	0	38	28	0	0	0	0	28
Negative market values from derivatives financial instruments	127	0	0	0	0	127	160	0	0	0	0	160
Investment contract liabilities	0	0	469	0	0	469	0	0	562	0	0	562
Other short-term borrowings	7	13	0	0	0	21	1	74	0	0	0	75
Liabilities held for sale	0	0	0	0	0	0	0	0	252	0	0	252
Lease liabilities	1	5	17	76	61	159	1	4	14	70	66	156
Long-term debt	0	0	0	0	0	0	0	0	0	0	0	0
Other financial liabilities	2,399	0	3	0	0	2,402	2,482	0	1	0	0	2,483
Unfunded commitments	111	0	0	0	0	111	120	0	0	0	0	120
Total	**2,683**	**18**	**489**	**76**	**61**	**3,328**	**2,791**	**78**	**829**	**70**	**66**	**3,836**

Contractual undiscounted cash flows of investment contract liabilities, liabilities held for sale and payables from guaranteed and other consolidated funds of € 1,755 million as of 31 December 2022 (31 December 2021 € 2,326 million) are linked to offsetting assets and receivables of the nearly identical amount and with identical maturity. The residual contractual undiscounted cash flows of € 1,573 million as of 31 December 2022 (31 December 2021 € 1,510 million) are monitored and considered in our liquidity risk framework.

10 – Interest Rate Benchmark Reform

The following table shows the carrying values of non-derivative financial instruments and other commitments which reference IBORs where it is expected that there will no longer be a requirement to quote IBOR rates. The table includes those financial instruments with a maturity date past 30 June 2023 when the requirement to submit quotes is expected to end. The Group has no derivative financial instruments which reference IBORs. Other commitments reflect the contingent liabilities from co-investments in scope.

Non-derivative financial assets and other commitments

		31 Dec 2022		31 Dec 2021
in € m.	USD IBOR	Total	USD IBOR	Total
Non-derivative financial assets:				
Debt instruments – co-investments	32	32	38	38
Debt instruments – seed investments	1	1	0	0
Debt instruments – other debt instruments	14	14	17	17
Total non-derivative financial assets	**47**	**47**	**55**	**55**
Off-balance sheet exposure:				
Other commitments	14	14	13	13
Total off-balance sheet exposure	**14**	**14**	**13**	**13**

11 – Equity Method Investments

The Group holds interests in five (2021: five) associates and no (2021: none) joint ventures. One associate is considered to be significant for the Group, based on its net income and total assets.

Significant Investments

Investment	Principal place of business	Nature of relationship	Ownership percentage
Harvest Fund Management Co., Ltd.	Shanghai, China	Strategic investment	30%

The 2022 financial information is based on 2022 IFRS unaudited financial statements of Harvest Fund Management Co., Ltd., the 2021 financial information has been updated with the 2021 audited IFRS financial statements as provided by Harvest Fund Management Co., Ltd.

Summarised financial information on Harvest Fund Management Co., Ltd.

in € m.	2022	2021
Total net revenues	982	1,190
Net Income	234	305
Other comprehensive income (loss)	7	(2)
Total comprehensive income	**241**	**304**

in € m.	31 Dec 2022	31 Dec 2021
Current assets	1,319	1,372
Non-current assets	945	982
Total assets	**2,264**	**2,354**
Current liabilities	967	1,080
Non-current liabilities	169	207
Total liabilities	**1,136**	**1,287**
Non-controlling interest	47	40
Net assets of the equity method investee	**1,081**	**1,027**

Reconciliation of total net assets to the Group's carrying amount

in € m. (unless stated otherwise)	31 Dec 2022	31 Dec 2021
Net assets of the equity method investee	1,081	1,027
Group's ownership percentage on the investee's equity	30 %	30 %
Group's share of net assets	324	308
Goodwill	18	17
Intangible assets	15	15
Other adjustments	4	1
Carrying amount	**361**	**341**

The share in net income from Harvest Fund Management Co.,Ltd. alone was € 69 million in 2022 (2021: € 85 million). During the year, the Group received cash dividends from Harvest Fund Management Co., Ltd. amounting to € 45 million (2021: € 68 million).

There was no impairment loss in 2022 and 2021.

Non-significant Investments

Aggregated financial information on the Group's share in associates that are individually immaterial

in € m.	31 Dec 2022	31 Dec 2021
Carrying amount of all associates that are individually immaterial to the Group	**54**	**8**
Aggregated amount of the Group's share of profit (loss) from continuing operations	(3)	(4)
Aggregated amount of the Group's share of post-tax profit (loss) from discontinued operations	0	0
Aggregated amount of the Group's share of other comprehensive income	0	0
Aggregated amount of the Group's share of total comprehensive income (loss)	**(3)**	**(4)**

The increase in the carrying amount in 2022 is mainly driven by a new non-significant associate investment, please refer to note '04 – Acquisitions and Dispositions'.

The Group recognised an impairment loss of € 2 million in 2022 (2021: € 4 million).

12 – Goodwill and Other Intangible Assets

Goodwill

Changes in Goodwill

The changes in the carrying amount of goodwill, as well as gross amounts and accumulated impairment losses of goodwill, for the period ended 31 December 2022 and 31 December 2021, are shown.

Goodwill movement

in € m.	
Balance as of 1 January 2021	**2,739**
Reclassification from (to) asset held for sale	(40)
Disposals	0
Exchange rate changes	123
Balance as of 31 December 2021	**2,822**
Gross amount of goodwill	2,822
Accumulated impairment losses	0
Balance as of 1 January 2022	**2,822**
Reclassification from (to) assets held for sale	0
Disposals	0
Exchange rate changes	113
Balance as of 31 December 2022	**2,936**
Gross amount of goodwill	2,936
Accumulated impairment losses	0

As of 31 December 2022, changes relate to foreign exchange rate impacts of € 113 million (31 December 2021: € 123 million) and no reclassification to assets held for sale as of 31 December 2022 (€ 40 million as of 31 December 2021). For the reclassification to held for sale in 2021 please refer to note '15 – Non-Current Assets and Disposal Groups Held for Sale'.

Goodwill Impairment Test

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to the cash generated unit (CGU). During 2022 and 2021 respectively the Group did not acquire goodwill in a business combination.

The annual goodwill impairment test conducted in 2022 and 2021 respectively, did not result in an impairment loss on the Group's goodwill since the recoverable amount of the CGU was higher than the respective carrying amount.

A review of the Group's strategy, political or global risks for the asset management industry such as a return of the European sovereign debt crisis, uncertainties regarding the implementation of already adopted regulation as well as a slowdown of gross domestic product growth may negatively impact the performance forecasts and thus, could result in an impairment of goodwill in the future.

Carrying Amount

The carrying amount for the CGU is determined based on the Group's equity.

Recoverable Amount

The recoverable amount is the higher of the Group's fair value less costs of disposal and its value in use. The Group determines the recoverable amount based on value in use and employs the discounted cash-flow method (DCF) which reflects the specifics of the asset management business and its regulatory environment. The model calculates the present value of the estimated future earnings that are distributable to the shareholders after fulfilling the respective regulatory capital requirements.

The DCF uses earnings projections based on five-year strategic plans, which are discounted to their present value. Estimating future earnings involves judgment and the consideration of past and current performance as well as expected capital retention requirements/ contributions in line with the business plan, market expectations and commercial, legal or regulatory requirements.

Earnings projections beyond the initial five-year period are adjusted to derive a sustainable level. In case of a going concern, the cash flow to equity is assumed to increase by or converge towards a constant long-term growth rate of up to 2.0% in 2022 and 1.7% in 2021. This is based on the revenue forecast as well as expectations for the development of gross domestic product and inflation and is captured in the terminal value.

Key Assumptions and Sensitivities

Key Assumptions: The DCF value of a CGU is sensitive to the earnings projections, to the discount rate (cost of equity) applied and to the long-term growth rate. The discount rates applied have been determined based on the capital asset pricing model and comprise a risk-free interest rate, a market risk premium and a factor covering the systematic market risk (beta factor). The values for the risk-free interest rate, the market risk premium and the beta factors are determined using external sources of information. CGU-specific beta factors are determined based on a respective group of peer companies. Variations in all of these components might impact the discount rates. The Group use a discount rate (after tax) of 10.3% in 2022 (2021: 9.1%).

Management determined the values for the key assumptions based on a combination of internal and external analysis. Estimates for efficiency and the cost reduction program are based on progress made to date and scheduled future projects and initiatives

Key Management Assumptions are:

- Maintaining leadership in mature markets (e.g., Equity, Multi-Asset and Fixed income)
- Expanding true areas of strength like Xtrackers and Alternatives
- Further build out digital capabilities
- Expand distribution partnerships to expand our global business and reach a higher-margin wholesale segment
- Standalone operating and governance model while leveraging divisional capabilities

Uncertainty associated with key assumptions and potential events/circumstances that could have a negative effect:

- Challenging and continued uncertainty around the market environment and volatility unfavourable to our investment strategies
- Unfavourable margin development and adverse competition levels in key markets and products beyond expected levels
- Business/execution risks, e.g., under achievement of net flow targets from market uncertainty, loss of high quality client facing employees, unfavourable investment performance, lower than expected efficiency gains
- Uncertainty around regulation and its potential implications not yet anticipated

Sensitivities: To test the resilience of the recoverable amount, key assumptions used in the DCF model (for example, the discount rate and the earnings projections) are sensitized. Management believes that no reasonable changes in key assumptions could cause an impairment loss.

Other Intangible Assets

Changes in Other Intangible Assets

	Purchased intangible assets							Internally generated intangible assets	
	Unamortized			Amortized				Amortized	
in € m.	Retail Investment Management Agreements	Other	Total unamortized purchased intangible assets	Customer-related intangible assets	Contract- based intangible assets	Software and other	Total amortized purchased intangible assets	Software	Total other intangible assets
Cost of acquisition/manufacture:									
Balance as of 1 January 2021	**945**	**0**	**945**	**104**	**20**	**89**	**213**	**242**	**1,401**
Additions	0	0	0	0	0	0	0	35	35
Disposals	0	0	0	0	0	0	0	0	0
Reclassifications from (to) held for sale	0	0	0	0	0	0	0	(40)	(40)
Exchange rate changes	71	0	71	8	0	(1)	7	6	84
Balance as of 31 December 2021	**1,017**	**0**	**1,017**	**112**	**20**	**88**	**221**	**242**	**1,479**
Additions	0	0	0	0	0	0	0	39	39
Disposals	0	0	0	0	0	0	0	19	19
Reclassifications from (to) held for sale	0	0	0	0	0	0	0	(30)	(30)
Exchange rate changes	67	0	67	7	0	(1)	7	(2)	72
Balance as of 31 December 2022	**1,083**	**0**	**1,083**	**120**	**20**	**88**	**227**	**230**	**1,541**
Accumulated amortization and impairment:									
Balance as of 1 January 2021	**239**	**0**	**239**	**104**	**20**	**89**	**213**	**137**	**590**
Amortization for the year	0	0	0	0	0	0	0	40	40
Disposals	0	0	0	0	0	0	0	0	0
Reclassifications from (to) held for sale	0	0	0	0	0	0	0	(9)	(9)
Impairment losses	0	0	0	0	0	0	0	0	0
Exchange rate changes	18	0	18	8	0	(1)	7	4	29
Balance as of 31 December 2021	**257**	**0**	**257**	**112**	**20**	**88**	**221**	**172**	**650**
Amortization for the year	0	0	0	0	0	0	0	28	28
Disposals	0	0	0	0	0	0	0	19	19
Reclassifications from (to) held for sale	0	0	0	0	0	0	0	(23)	(23)
Impairment losses	68	0	68	0	0	0	0	3	71
Exchange rate changes	17	0	17	7	0	(1)	7	(1)	22
Balance as of 31 December 2022	**342**	**0**	**342**	**120**	**20**	**88**	**227**	**158**	**728**
Carrying amount:									
As of 1 January 2021	**706**	**0**	**706**	**0**	**0**	**0**	**0**	**105**	**811**
As of 31 December 2021	**760**	**0**	**760**	**0**	**0**	**0**	**0**	**70**	**830**
As of 31 December 2022	**741**	**0**	**741**	**0**	**0**	**0**	**0**	**72**	**813**

As of 31 December 2022, there was an impairment loss on internally generated software amounting to € 3 million (31 December 2021: impairment loss of € 0 million) reflected under general and administrative expenses in the consolidated statement of income which is mainly due to the decommissioning and divestment of applications that the Group no longer uses.

Amortizing Intangible Assets

In 2022, amortizing other intangible assets increased by a net € 39 million (2021: € 35 million), mainly from the internally generated intangible assets.

The total amortization of intangibles amounting to € 28 million (2021: € 40 million) is reflected under general and administrative expenses in the consolidated Statement of Income. The disposals of € 19 million relates to legacy software assets which were decommissioned as of 31 December 2022. The reclassification to assets held for sale of € 6 million as of 31 December 2022 mainly relates to additions in 2022 and correction of gross amounts from 2021 which were subsequently released with the closing of the transaction as of 30 November 2022. For the reclassification to assets held for sale of € 31 million as of 31 December 2021 please refer to note '15 – Non-Current Assets and Disposal Groups Held for Sale'.

Useful life of other amortized intangible assets by asset class

	Useful life in years
Internally generated intangible assets:	
Software	up to 10
Purchased intangible assets:	
Customer-related intangible assets	up to 20
Contract-based intangible assets	up to 8
Other	up to 80

Unamortized Intangible Assets

Within this asset class, the Group recognizes certain contract-based intangible assets, which are deemed to have an indefinite useful life.

The asset class comprises the below detailed investment management agreements related to retail mutual funds. Due to the specific nature of these intangible assets, market prices are ordinarily not observable and, therefore, the Group values such assets based on the income approach, using a post-tax DCF methodology.

Retail investment management agreements – These assets, amounting to € 741 million, relate to the Group's US retail mutual fund business. Retail investment management agreements are contracts that give the Group the exclusive right to manage a variety of mutual funds for a specified period. Since these contracts have a long history of renewal at minimal cost, these agreements are not expected to have a foreseeable limit on the contract period. Therefore, the rights to manage the associated assets under management are expected to generate cash flows for an indefinite period of time. This intangible asset was recorded at fair value based upon a valuation provided by a third party at the date of acquisition of Zurich Scudder Investments, Inc. in 2002.

The recoverable amount was calculated as fair value less costs of disposal using the multi-period excess earnings method and the fair value measurement was categorized as Level 3 in the fair value hierarchy. The key assumptions in determining the fair value less costs of disposal include the asset mix, the flows forecast, the effective fee rate and discount rate as well as the terminal value growth rate. The discount rate (cost of equity) applied in the annual calculation was 10.6% in 2022 (9.8% in 2021). The terminal value growth rate was 3.8% (for 2021 4.1%). The annual review of the valuation neither resulted in any impairment nor a reversal of prior impairments (2021 respectively).

Due to net outflows and change in the discount rate to 10.9% in the fourth quarter, this triggered an indication of impairment and the impairment test was reassessed at year-end. The reassessment resulted in an impairment loss of € 68 million recognized in the Group's income statement within impairment of goodwill and other intangible assets.

13 – Property and Equipment

in € m.	Furniture and equipment	Leasehold improvements	Construction in progress	Total
Cost of acquisition:				
Balance as of 1 January 2021	**20**	**70**	**0**	**91**
Additions	2	7	0	9
Disposals	1	10	0	11
Transfers in (out)	0	0	0	0
Exchange rate changes	0	5	0	6
Balance as of 31 December 2021	**23**	**72**	**0**	**95**
Balance as of 1 January 2022	**23**	**72**	**0**	**95**
Additions	1	0	0	1
Disposals	0	1	0	1
Transfers in (out)	0	0	(1)	0
Exchange rate changes	0	4	0	5
Balance as of 31 December 2022	**24**	**76**	**0**	**100**
Accumulated depreciation and impairment:				
Balance as of 1 January 2021	**15**	**46**	**0**	**62**
Depreciation	2	3	0	5
Disposals	0	1	0	2
Transfers in (out)	0	0	0	0
Exchange rate changes	0	4	0	4
Balance as of 31 December 2021	**17**	**51**	**0**	**69**
Balance as of 1 January 2022	**17**	**51**	**0**	**69**
Depreciation	2	3	0	5
Disposals	0	0	0	0
Transfers in (out)	0	0	0	0
Exchange rate changes	0	3	0	4
Balance as of 31 December 2022	**20**	**57**	**0**	**77**
Carrying amount:				
As of 31 December 2021	**5**	**21**	**0**	**26**
As of 31 December 2022	**4**	**19**	**0**	**23**

Furniture and equipment consist primarily of IT equipment and furniture within the Group premises.

Leasehold improvements consist primarily of fixtures and fittings and the cost of any structural improvements to leased properties.

Construction in progress represent expenditure incurred during an asset's construction which has been capitalised. These will be transferred to the respective asset class once construction has been completed.

There are no items of property and equipment subject to restrictions on title or which have been pledged as security against liabilities and no commitments for acquisition of property and equipment as of 31 December 2022.

All classes of property and equipment are initially recognised on the balance sheet at cost. Subsequent measurement follows as cost less depreciation and any accumulated impairment losses. Depreciation occurs on a straight-line basis over the asset's useful economic life.

Useful economic life of property and equipment by asset class

	Useful life in years
Furniture and equipment	7 to 10 years
Leasehold improvements	shorter of 10 years or the remaining lease term

The carrying amounts of property and equipment are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. If any such indication exists, the asset's recoverable amount is estimated. Impairment losses are recognised in the Consolidated Statement of Income. As of 31 December 2022 and 31 December 2021, there were no impairment losses of property and equipment.

14 – Leases

Leases as Lessee

Right-of-use assets

in € m.	Properties	Other	Total right-of-use assets
Cost value:			
Balance as of 1 January 2021	**150**	**1**	**150**
Additions	18	0	18
Disposals	13	0	13
Exchange rate changes	7	0	7
Balance as of 31 December 2021	**161**	**1**	**162**
Balance as of 1 January 2022	**161**	**1**	**162**
Additions	19	0	19
Disposals	4	0	4
Exchange rate changes	5	0	5
Balance as of 31 December 2022	**181**	**1**	**182**
Accumulated depreciation and impairment:			
Balance as of 1 January 2021	**34**	**0**	**35**
Depreciation	17	0	17
Disposals	11	0	11
Impairment losses	0	0	0
Exchange rate changes	1	0	1
Balance as of 31 December 2021	**42**	**0**	**43**
Balance as of 1 January 2022	**42**	**0**	**43**
Depreciation	19	0	19
Disposals	2	0	2
Impairment losses	0	0	0
Exchange rate changes	1	0	1
Balance as of 31 December 2022	**60**	**1**	**60**
Carrying amount:			
Balance as of 31 December 2021	**119**	**0**	**119**
Balance as of 31 December 2022	**121**	**0**	**121**

The Group’s right-of-use assets consist primarily of premises leased under long-term rental agreements. Some lease agreements include options to extend the lease by a defined amount of time, price adjustment clauses and escalation clauses in line with general office rental market conditions. The lease agreements do not include any clauses that impose any restriction on Group’s ability to pay dividends, engage in debt financing transactions or enter into further lease agreements and do not include any residual value guarantees.

The right-of-use assets are depreciated on a straight-line basis until the end of the useful economic life of the asset or the end of the lease term and are reviewed at the end of each reporting period to determine if there is any impairment. For 2022 and 2021 respectively, there was no impairment loss.

The additions and disposals during 2022 and 2021 mainly reflect office movements as part of the Group’s location strategy. The additions in 2022 mainly reflect additional spaces.

Amounts recognised in consolidated statement of income

in € m.	2022	2021
Interest expense on lease liabilities	4	3
Income from sub-leasing right-of-use assets presented in other income	0	0
Expenses relating to short-term leases	0	0

The Group has not used the exemption for short-term leases and low-value assets under IFRS 16 for 2022 and 2021 respectively.

Amounts recognised in consolidated statement of cash flows

in € m.	2022	2021
Cash outflows for leases	23	21
Thereof: principal portion	19	18
Thereof: interest portion	4	3
Thereof: leases not reflected on balance sheet	0	0

Extension options and leases not yet commenced but committed

in € m.	31 Dec 2022	31 Dec 2021
Future cash outflows not reflected in lease liabilities:		
Not later than one year	0	0
Later than one year and not later than five years	23	8
Later than five years	167	149
Total future cash outflows not reflected in lease liabilities	**191**	**158**

Most property leases contain extension options exercisable by the Group by providing prior written notice to the landlord before the end of the lease. This notice period ranges from 18 months to 90 days before the end of the non-cancellable contract period. In certain rare instances, leases will renew automatically unless prior written notice is provided.

Where practical, the Group will seek to include extension options in its leases for operational flexibility.

All options are exercisable by the Group and not the lessors. At commencement date, the Group assess whether it is reasonably certain to exercise any extension options. If so, these are included in the initial measurement of associated lease liabilities.

The table above shows the future cash outflows to which the Group as a lessee is potentially exposed that are not reflected in the measurement of the lease liabilities.

Leases as Lessor

Finance lease

The Group reflects finance lease contracts within loans at amortized costs. As of 31 December 2022 there was one contract with a net investment of € 2 million (as of 31 December 2021: € 2 million). During 2022, the Group reflected rental income in the amount of € 0.2 million (2021: € 0.3 million) shown within general and administrative expenses.

15 – Non-Current Assets and Disposal Groups Held for Sale

The transaction to transfer the digital investment platform into the newly established company MorgenFund GmbH closed as of 30 November 2022. As part of the consideration, the Group received a 30% stake in that company which is accounted under the equity method. As of 31 December 2022, the Group had no assets and liabilities under a disposal group held for sale.

Assets and liabilities held for sale

in € m.	31 Dec 2022	31 Dec 2021
Cash and bank balances	0	6
Goodwill and other intangible assets	0	71
Other financial assets	0	247
Total assets held for sale	**0**	**324**
Other financial liabilities	0	252
Total liabilities held for sale	**0**	**252**

16 – Other Assets and Other Liabilities

in € m.	31 Dec 2022	31 Dec 2021
Other assets:		
Other financial assets:		
Receivables from commissions/fees	194	187
Remaining other financial assets	629	527
Total other financial assets	**823**	**714**
Other non-financial assets:		
Other tax receivables	12	14
Remaining other non-financial assets	42	34
Total other non-financial assets	**54**	**47**
Total other assets	**877**	**762**

in € m.	31 Dec 2022	31 Dec 2021
Other liabilities:		
Other financial liabilities:		
Payables from commissions/fees	146	158
Payables from performance related payments	326	306
Remaining other financial liabilities	649	508
Payables from guaranteed and other consolidated funds[1]	1,281	1,511
Total other financial liabilities	**2,402**	**2,483**
Other non-financial liabilities:		
Other tax payables	18	21
Remaining other non-financial liabilities	80	119
Total other non-financial liabilities	**98**	**140**
Total other liabilities	**2,500**	**2,623**

[1] Payables from guaranteed and other consolidated funds carried at amortized cost and reflected with their implied fair value of the respective trading assets through profit or loss (please refer to note '09 – Financial Instruments').

The Group has no contract liabilities as of 31 December 2022 and as of 31 December 2021 respectively which arise from the Group's obligation to provide future services to a customer for which it has received consideration from the customer prior to completion of the services.

The balances of receivables and liabilities do not vary significantly from period to period reflecting the fact that they predominately relate to short-term recurring receivables and liabilities resulting from service contracts customer payment in exchange for services provided is generally subject to performance by the Group over the specific service period such that the Group's right to payment arises at the end of the service period when its performance obligations are fully completed.

17 – Provisions

Movements by class of provision

in € m.	Operational risk	Civil litigations	Restructuring - staff related	Other	Total
Balance as of 1 January 2021	**9**	**0**	**1**	**7**	**17**
New provisions	6	1	0	0	7
Amounts used	0	0	1	1	2
Unused amounts reversed	0	0	0	6	6
Effects from exchange rate fluctuations/unwind of discount	0	0	0	0	0
Transfers	0	0	0	0	0
Balance as of 31 December 2021	**14**	**1**	**0**	**1**	**16**
Balance as of 1 January 2022	**14**	**1**	**0**	**1**	**16**
New provisions	8	7	0	20	35
Amounts used	1	0	0	12	13
Unused amounts reversed	2	0	0	0	2
Effects from exchange rate fluctuations/unwind of discount	0	0	0	0	0
Transfers	0	0	0	1	1
Balance as of 31 December 2022	**19**	**8**	**0**	**9**	**36**

Classes of Provisions

Operational risk is the risk of loss resulting from an inadequate or failed internal processes, people and systems, or from external events. The definition used to determine provisions from operational risk differs from the risk management definition, as it excludes risk of loss resulting from civil litigations or regulatory enforcement matters.

Civil litigation provisions arise out of current or potential claims or proceedings alleging non-compliance with contractual, other legal or regulatory responsibilities, that have resulted or may result in demands from customers, counterparties, or other parties in civil litigations.

Restructuring provisions arise out of restructuring activities and cover termination benefits.

Other provisions include provisions for regulatory enforcement and several specific items arising from a variety of different circumstances not covered under the named classes above.

The provisions recognized by the Group are considered short-term nature with the expectation of usage over the next year.

Current Individual Proceedings

By the nature of our business, the Group is involved in litigation and arbitration proceedings and regulatory investigations, but none of such proceedings is currently expected to have a significant impact on the Group's financials. For the matters for which a reliable estimate can be made, as of 31 December 2022 respectively as of 31 December 2021, the Group has not recognized material provisions or contingent liabilities in connection with its individual proceedings. The provisions the Group has recognized for civil litigation and regulatory enforcement matters as of 31 December 2022 and 31 December 2021 are set forth in the table above.

Material individual proceedings are described below:

The Group has received requests for information from various regulatory and law enforcement agencies concerning certain ESG related matters. The Group continues to provide information to and otherwise cooperate with the investigating agencies. These investigations are ongoing and the outcome is as yet to be determined.

18 – Contractual Obligations and Commitments

Contractual obligations result from purchase obligations which include future payments mainly for technology services and asset management services.

Commitments cover contingent receivables and contingent liabilities. The Group had no contingent receivables to report as of 31 December 2022 and 31 December 2021. Contingent liabilities mainly relate to unfunded commitments given to funds, for which the Group acts as an investor.

Purchase obligations decreased by € 127 million compared to 31 December 2021 primarily due to renegotiation of contracts, offset by new agreements related to the transformation project and contract extension. Contingent liabilities decreased by € 9 million compared to 31 December 2021 due to lower unfunded commitments for co-investments.

Contractual obligations and commitments by maturity buckets

in € m.	31 Dec 2022	31 Dec 2021
Purchase obligations:		
< 1 year	42	54
1–3 years	111	102
3–5 years	77	227
> 5 years	38	12
Total purchase obligations	**268**	**395**
Contingent liabilities:		
< 1 year	111	120
1–3 years	0	0
3–5 years	0	0
> 5 years	0	0
Total contingent liabilities	**111**	**120**

19 – Equity

Common Shares

The company's share capital consists of common shares issued in registered form without par value. As of 31 December 2022 the share capital of the company amounts to € 200 million and is divided into up to 200,000,000 ordinary bearer shares. Under German law, each share represents an equal stake in the subscribed capital. Therefore, each share has a nominal value of € 1.00, derived by dividing the total amount of share capital by the number of shares.

There are no issued ordinary shares that have not been fully paid.

Number of shares	
Common shares as at 31 December 2021	**200,000,000**
Changes	0
Common shares as at 31 December 2022	**200,000,000**

Authorized Capital

The General Partner is authorized to increase the share capital of the company on or before 8 June 2025 once or more than once, by up to a total of € 20 million through the issuance of new shares against cash payment or contribution in kind ("Authorized Capital 2022/I"). The General Partner is further authorized to increase the share capital of the company on or before 8 June 2025 once or more than once, by up to a total of € 60 million through the issuance of new shares against cash payment ("Authorized Capital 2022/II"). Further details are governed by Section 4 of the Articles of Association.

Authorized capital	General Description	Expiration date
€ 20,000,000	Authorized Capital 2022/I	8 June 2025
€ 60,000,000	Authorized Capital 2022/II	8 June 2025

Dividends

	2022 (proposal)	2021
Cash dividend (in € m.)	410	400
Cash dividend per common share (in €)	2.05	2.00

The Executive Board and Supervisory Board will propose a dividend payment of € 2.05 per share for the financial year 2022 at the Annual General Meeting on 15 June 2023.

Additional Notes

20 – Employee Benefits

Share-Based Compensation Plans

There are two categories of share-based compensation plans, which are described below: DWS Share-Based Plans (cash-settled) and the DB Equity Plan (equity settled).

DWS Share-Based Plans (Cash-Settled)

The Group made grants of share-based compensation under the DWS Equity Plan. This plan represents a contingent right to receive a cash payment by referencing to the value of DWS shares during a specified time period.

In September 2018 one-off IPO related awards under the **DWS Stock Appreciation Rights Plan** were granted to all DWS employees. A limited number of DWS senior managers were granted a one-off IPO related Performance Share Unit under the **DWS Equity Plan** instead. For members of the Executive Board, one-off IPO related awards under the DWS Equity Plan were granted in January 2019.

The DWS Stock Appreciation Rights Plan represents a contingent right to receive a cash payment equal to any appreciation (or gain) in the value of a set number of notional DWS shares over a fixed period of time. This award does not provide any entitlement to receive DWS shares, voting rights or associated dividends.

The DWS Equity Plan is a phantom share plan representing a contingent right to receive a cash payment by referencing to the value of DWS shares during a specified period of time.

The award recipient for any share-based compensation plan is not entitled to receive dividends during the vesting period of the award. The share awards granted under the terms and conditions of any share-based compensation plan are forfeited fully or partly if the recipient voluntarily terminates employment before the end of the relevant vesting period (or the end of the retention period for Upfront Awards). Vesting usually continues after termination of employment in cases such as redundancy or retirement.

Basic terms of the DWS share-based plans

Grant year(s)	Award Type	Vesting schedule	Eligibility
2021-2022 DWS Equity Plan	Annual Awards	1/4: 12 months, 1/4: 24 months, 1/4: 36 months, 1/4: 48 months[1]	Selected employees as annual performance-based compensation (InstVV MRTs)
	Annual Awards	1/3: 12 months, 1/3: 24 months, 1/3: 36 months[1]	Selected employees as annual performance-based compensation (non-InstVV MRTs)
	Annual Awards (Senior Management)	1/5: 12 months, 1/5: 24 months, 1/5: 36 months, 1/5: 48 months, 1/5: 60 months[1]	Members of the Executive Board
	Annual Award - Upfront	Vesting immediately at grant[1]	Regulated employees
	Severance	Individual specification	Regulatory requirement for certain employees to defer severance payments
	Retention/New hire/Off-Cycle [4]	Individual specification	Selected employees to attract and retain the best talent
2019-2020 DWS Equity Plan	Annual Awards	1/3: 12 months, 1/3: 24 months, 1/3: 36 months[1]	Selected employees as annual performance-based compensation
	Annual Awards (Senior Management)	1/5: 12 months, 1/5: 24 months, 1/5: 36 months, 1/5: 48 months, 1/5: 60 months[1]	Members of the Executive Board
	Annual Award - Upfront	Vesting immediately at grant[1]	Regulated employees
	Retention/New hire/Off-Cycle [4]	Individual specification	Selected employees to attract and retain the best talent
	Performance Share Unit Award (one-off IPO related award granted in 2019)	1/3: March 2022, 1/3: March 2023, 1/3: March 2024[1]	Members of the Executive Board
2018 DWS Equity Plan	Retention/New hire	Individual specification	Selected employees to attract and retain the best talent
	Performance Share Unit Award (one-off IPO related award)[1]	1/3: March 2022, 1/3: March 2023, 1/3: March 2024[1]	Selected Senior Managers
2018 DWS Stock Appreciation Rights Plan	Stock Appreciation Rights Award (one-off IPO related award)	For non-MRTs: 1 June 2021[3] For MRTs: 1 March 2023[1,3]	all DWS employees[2]

[1] Depending on their individual regulatory status, a six months retention period (AIFMD/UCITS MRTs) or a 12-months retention period (InstVV MRTs) applies after vesting.
[2] Unless the employee received Performance Share Unit Award.
[3] For outstanding awards, a 4-year exercise period applies following vesting/retention period.
[4] Off-Cycle awards to non-InstVV regulated employees only.

Movements in share award units

	DWS Equity Plan		DWS SAR Plan			
	2022	2021	2022		2021	
Share units (in thousands)	Number of awards[1]	Number of awards	Number of awards[1]	Weighted-average exercise price	Number of awards	Weighted-average exercise price
Outstanding at beginning of year	**1,890**	**2,422**	**910**	**€ 24.65**	**1,239**	**€ 24.65**
Granted	863	704	0	€ 0.00	0	€ 0.00
Released or exercised	(910)	(582)	(42)	€ 24.65	(252)	€ 24.65
Forfeited	(78)	(100)	(1)	€ 24.65	(19)	€ 24.65
Expired	0	0	(15)	€ 0.00	(28)	€ 0.00
Other movements	50	(43)	(1)	€ 24.65	(3)	€ 24.65
Outstanding at end of year	**1,816**	**2,401**	**850**	**€ 24.65**	**937**	**€ 24.65**
Of which exercisable	0	0	652	€ 0.00	734	€ 0.00

[1] Brought forward numbers from 2021 have been amended based on updated information.

Key information regarding awards granted, released and remaining in the year

	2022			2021		
	Weighted average fair value per award granted in year	Weighted average share price at exercise / release in year	Weighted average remaining contractual life in years	Weighted average fair value per award granted in the year	Weighted average share price at exercise / release in year	Weighted average remaining contractual life in years
DWS Equity Plan	€ 27.96	€ 28.96	1.3	€ 30.47	€ 37.24	1.7
DWS Stock Appreciation Rights Plan	€ 0.00	€ 31.88	3.0	€ 0.00	€ 39.51	4.4

The fair value of outstanding share-based awards recognised in the income statement up to the period ending 2022 and 2021 was € 46 million and € 56 million respectively, of which € 20 million (2021: € 24 million) relate to fully vested awards.

The fair value of the DWS Stock Appreciation Rights Plan awards have been measured using the generalised Black-Scholes model. The liabilities incurred are re-measured at the end of each reporting period until settlement. The principal inputs being the market value on reporting date, discounted for any dividends foregone over the holding periods of the award, and adjustment for expected and actual levels of vesting which includes estimating the number of eligible employees leaving Deutsche Bank Group and number of employees eligible for early retirement. The inputs used in the measurement of the fair values at grant date and measurement date of the DWS SAR Plan awards were as follows:

	Measurement date 31 Dec 2022	Measurement date 31 Dec 2021
	SAR	SAR
Units (in thousands)	850	937
Fair value (weighted average)	€ 7.64	€ 10.95
Share price	€ 30.36	€ 35.48
Exercise price	€ 24.65	€ 24.65
Expected volatility (weighted-average) in %	32	32
Expected life (weighted-average) in years	3.0	4.4
Expected dividends (% of income)	66	65

Given there is no liquid market for implied volatility of DWS shares, the calculation of DWS share price volatility is based on 5-year historical data for DWS and a comparable peer group.

DB Share Based Plans (Equity-Settled)

Some Group employees continue to hold deferred awards granted under the DB Equity Plan, under the rules established for Deutsche Bank Group.

Share-based payment transactions where Deutsche Bank Group AG have granted Deutsche Bank AG shares to the employees of the Group are classified as equity-settled transactions reflected in the equity in the consolidated financial statements of the Group as Deutsche Bank AG has the obligation to settle the shares. The award recipient is not entitled to receive dividends during the vesting period of the award.

The share awards granted under the terms and conditions of the DB Equity Plan may be forfeited fully or partly if the recipient voluntarily terminates employment before the end of the relevant vesting period. Vesting usually continues after termination of employment in cases such as redundancy or retirement.

In countries where legal or other restrictions hinder the delivery of shares, a cash plan variant of the DB Equity Plan was used for granting awards.

Basic terms of these share plans of Deutsche Bank Group

Grant year(s)	Deutsche Bank Equity Plan	Vesting schedule	Eligibility
2019-2022	Annual Award	1/4: 12 months, 1/4: 24 months, 1/4: 36 months, 1/4: 48 months[1]	Selected employees as annual performance-based compensation (InstVV MRTs and employees in certain DB business division)
	Annual Award	1/3: 12 months, 1/3: 24 months, 1/3: 36 months[1]	Selected employees as annual performance-based compensation
	Annual Award	1/5: 12 months, 1/5: 24 months, 1/5: 36 months, 1/5: 48 months, 1/5: 60 months[1]	Selected employees as annual performance-based compensation (Senior Management)
	Retention/New hire	Individual specification	Selected employees to attract and retain the best talent
	Annual Award – Upfront	Vesting immediately at grant[2]	Regulated employees
2017-2018	Annual Award	1/4: 12 months, 1/4: 24 months, 1/4: 36 months, 1/4: 48 months[1]	Select employees as annual performance-based compensation
		Or cliff vesting after 54 months[1]	Members of Senior Management
	Retention/New hire	Individual specification	Select employees to attract and retain the best talent

1 For InstVV-regulated employees (and Senior Management) a further retention period of twelve months applies (six months for awards granted from 2017-2018).
2 Share delivery takes place after a further retention period of twelve months.

In addition, the Group participates in a broad-based employee share ownership plan offered by Deutsche Bank Group and known as the Global Share Purchase Plan (GSPP). The rules are the same as those established for Deutsche Bank Group. The GSPP offers employees in specific countries the opportunity to purchase Deutsche Bank shares in monthly instalments over one year. At the end of the purchase cycle, the acquired stock is matched in a ratio of one to one up to a maximum of ten free shares, provided that the employee remains at Deutsche Bank Group for another year. In total, 501 Group staff from 8 countries enrolled in the fourteenth cycle that began in November 2022.

Movements in share award units, including grants under the cash plan variant of the DB Equity Plan

	2022	2021
Share units (in thousands)	Number of awards[1]	Number of awards
Outstanding at beginning of year	**627**	**1,916**
Granted	5	6
Released or exercised	(386)	(843)
Forfeited	(1)	(9)
Expired	0	0
Other movements	26	150
Outstanding at end of year	**271**	**1,220**
Of which exercisable	0	0

[1] Brought forward numbers from 2021 have been amended based on updated information.

Key information regarding awards granted, released and remaining in the year

	2022			2021		
	Weighted average fair value per award granted in year	Weighted average share price at exercise / release in year	Weighted average remaining contractual life in years	Weighted average fair value per award granted in the year	Weighted average share price at exercise / release in year	Weighted average remaining contractual life in years
DB Equity Plan	€ 10.55	€ 9.09	0.6	€ 9.84	€ 10.57	1.7

As of 31 December 2022, the grant value of outstanding share awards was approximately € 3 million (31 December 2021: € 11 million).

In addition, approximately 0.4 million shares were issued to plan participants in 2022 following the vesting of DB Equity Plan awards granted in prior years.

Post-Employment Benefit Plans

Nature of Plans

The Group participates in a number of post-employment benefit plans on behalf of its employees. These plans are sponsored either by the Group directly or by other entities of Deutsche Bank Group and include both defined contribution plans and defined benefit plans. These plans are accounted for based on the nature and substance of the plan. Generally, for defined benefit plans the value of a participant's accrued benefit is based on each employee's remuneration and length of service; contributions to defined contribution plans are typically based on a percentage of each employee's remuneration. The remainder of this note focuses predominantly on the Group's defined benefit plans.

The defined benefit plans are described on a geographical basis, reflecting differences in the nature and risks of benefits, as well as in the respective regulatory environments. In particular, the requirements set by local regulators can vary significantly and broadly determine the design and financing of the benefit plans. Key information is also shown based on participant status, which provides an indication of the maturity of the Group's obligations.

Key information regarding the participant status of the defined benefit obligations

				31 Dec 2022				31 Dec 2021
in € m. (unless stated otherwise)	Germany	EMEA (excluding Germany)	APAC	Total	Germany	EMEA (excluding Germany)	APAC	Total
Defined benefit obligation related to:								
Active plan participants	172	26	6	204	231	29	5	266
Participants in deferred status	106	3	0	109	130	3	0	134
Participants in payment status	98	2	0	100	116	2	0	118
Total defined benefit obligation	**376**	**31**	**6**	**413**	**478**	**35**	**5**	**518**
Fair value of plan assets	**378**	**38**	**3**	**419**	**429**	**39**	**1**	**469**
Funding ratio (in %)	**100**	**124**	**46**	**101**	**90**	**110**	**23**	**91**

The majority of the Group's defined benefit plan obligations relate to Germany. Outside of Germany, the largest obligations relate to Switzerland and Luxembourg. In Germany, post-employment benefits are usually agreed on a collective basis with respective employee workers councils. The Group's main pension plans are governed by boards of trustees, fiduciaries or their equivalent.

Post-employment benefits can form an important part of an employee's total remuneration. The Group follows the approach that their design shall be attractive to employees in the respective market, but sustainable over the longer term. At the same time, the Group tries to limit its risks related to provision of such benefits. Consequently, the Group has moved to offer defined contribution plans in many locations over recent years.

Historically, pension plans were typically based on final pay prior to retirement. These types of benefits still form a significant part of the pension obligations for participants in deferred and payment status. Currently, in Germany, Switzerland and Luxembourg, the main defined benefit pension plans for active staff are cash account type plans where the Group credits an annual amount to individuals' accounts based on an employee's current salary. Dependent on the plan rules, the accounts increase either at a fixed interest rate or participate in market movements of certain underlying investments to limit the associated investment risk. Sometimes, in particular in Germany, there is a guaranteed benefit amount within the plan rules, e. g. payment of at least the amounts contributed. Upon retirement, beneficiaries may usually opt for a lump sum or for conversion of the accumulated account balance into an annuity. This conversion is often based on market conditions and mortality assumptions at retirement.

The following amounts of expected benefit payments by the Group in respect of defined benefit plans include benefits attributable to employees' past and estimated future service and include both amounts paid from external pension trusts and paid directly by the Group in respect of unfunded plans.

Expected future benefit payments

in € m. (unless stated otherwise)	Germany	EMEA (excluding Germany)	APAC	Total
Actual benefit payments 2022	14	1	0	15
Benefits expected to be paid 2023	12	2	1	15
Benefits expected to be paid 2024	12	2	1	15
Benefits expected to be paid 2025	12	2	1	14
Benefits expected to be paid 2026	13	2	1	16
Benefits expected to be paid 2027	15	2	1	19
Benefits expected to be paid 2028-2032	97	12	5	113
Weighted average duration of defined benefit obligation (in years)	11	11	7	11

Multi-Employer Plans

Mainly in the United Kingdom (UK) and the US, some employees participate in defined benefit plans sponsored by another entity within the wider Deutsche Bank Group, for example retirement benefit plans in the UK as well as post-employment medical plans in the US. Generally the risk associated to the plan is within the sponsoring entity while the Group entities are obliged to pay for costs incurred for their respective employees within the sponsoring entity.

Selected legal entities of the Group are member of the BVV Versicherungsverein des Bankgewerbes a.G. (BVV) together with other financial institutions. The BVV, pension provider for Germany's financial industry, offers retirement benefits to eligible employees in Germany and Luxembourg as a complement to post-employment benefit commitments of the Group. Both employers and employees contribute on a regular basis to the BVV. The BVV provides annuities of a fixed amount to individuals on retirement and increases these fixed amounts if surplus assets arise within the plan. Under legislation in Germany, the employer is ultimately liable for providing the benefits to its employees. An increase in benefits may also arise due to additional obligations to retirees for the effects of inflation. BVV is a multi-employer defined benefit plan. In line with industry practice, the Group accounts for these benefits as a defined contribution plan since insufficient information is available to identify assets and liabilities relating to the Group's current and former employees because the BVV does not fully allocate plan assets to beneficiaries or to member companies. According to the BVV's most recent disclosures, there is no current deficit in the plan that may affect the amount of future Group contributions. Furthermore, any plan surplus emerging in the future will be distributed to the plan members, hence it cannot reduce future Group contributions.

Oversight and Risk Management

Oversight for the Group's pension plans and related risks is performed by the RCC, as mandated by the Executive Board. The RCC is supported by the Pension Working Group. This mandate covers oversight with regards to guidelines for funding, asset allocation, actuarial assumption setting and risk management. Risk management includes the management and control of risks for the Group related to market developments, asset investment, regulatory or legislative requirements, as well as monitoring demographic changes leveraging Deutsche Bank Group's pension oversight and operative control mechanism implemented. During and after acquisitions or changes in the external environment (e. g. legislation, taxation), topics such as the general plan design or potential plan amendments are considered. To the extent that pension plans are funded, the assets held mitigate some of the liability risks, but introduce investment risk.

The Group's largest post-employment benefit plan risk exposures relate to potential changes in credit spreads, interest rates, price inflation and longevity, although these have been partially mitigated through the investment strategy adopted.

Overall, the Group is seeking to minimize the impact of pensions on its financial position from market movements, subject to balancing the trade-offs involved in financing post-employment benefits, regulatory capital and constraints from local funding or accounting requirements. Deutsche Bank Group measures pension risk exposures on a regular basis using specific metrics developed for this purpose. This process covers Deutsche Bank Group overall including the oversight of the Group's exposures.

Funding

Various external pension trusts are maintained to fund the majority of the Group's defined benefit plan obligations. The Group's funding principle is to maintain coverage of the defined benefit obligation by plan assets within a range of 80% to 100% of the obligation, subject to meeting any local statutory requirements. The Group has also determined that certain plans should remain unfunded, although their funding approach is subject to periodic review, e. g. when local regulations or practices change. Obligations for any unfunded plans are accrued on the balance sheet.

For externally funded defined benefit plans local minimum funding requirements may apply. However, for defined benefit plans in Germany which are externally funded by a Contractual Trust Agreement, no regulatory minimum funding requirements exist. In most countries the Group expects to receive an economic benefit from any plan surpluses of plan assets compared to defined benefit obligations, typically by way of reduced future contributions. Given the broadly fully funded position and the investment strategy adopted in the Group's key funded defined benefit plans, any minimum funding requirements that may apply are not expected to impact the Group's liquidity position. The Group considers not re-claiming benefits paid from the Group's assets as an equivalent to making cash contributions into the external pension trusts during the year.

During 2022, the funding status for pension plans in Germany and Luxembourg moved into surplus due to significant market movements. The Group has claimed € 14 million from the trust accounting for all the benefits paid during 2022.

Actuarial Methodology and Assumptions

31 December is the measurement date for all plans. All plans are valued by independent qualified actuaries using the projected unit credit method.

The key actuarial assumptions applied in determining the defined benefit obligations at 31 December are presented below in the form of weighted averages.

Applied actuarial assumptions

	31 Dec 2022			31 Dec 2021		
	Germany	EMEA (excluding Germany)	APAC	Germany	EMEA (excluding Germany)	APAC
Discount rate (in %)	3.80	2.63	3.61	1.12	0.57	1.19
Rate of price inflation (in %)	2.63	1.86	1.60	2.20	1.48	1.60
Rate of nominal increase in future compensation levels (in %)	2.82	2.20	4.25	2.43	1.79	3.63
Rate of nominal increase for pensions in payment (in %)	2.97	0.77	N/A	2.09	0.75	N/A
Assumed life expectancy at age 65:						
For a male aged 65 at measurement date	21.3	21.8	N/A	21.3	21.7	N/A
For a female aged 65 at measurement date	23.6	23.7	N/A	23.5	23.6	N/A
For a male aged 45 at measurement date	22.6	23.6	N/A	22.6	23.4	N/A
For a female aged 45 at measurement date	24.7	25.4	N/A	24.6	25.2	N/A
Mortality tables applied	modified Richttafeln Heubeck 2018G	Country specific tables	N/A	modified Richttafeln Heubeck 2018G	Country specific tables	N/A

For the Group's most significant plans the discount rate used at each measurement date is set based on a high-quality corporate bond yield curve – sourced from reputable third-party index and data providers and rating agencies – reflecting the timing, amount and currency of the future expected benefit payments for the respective plan.

The price inflation assumptions in the Eurozone are set with reference to market measures of inflation based on inflation swap rates in those markets at each measurement date. For other countries, the price inflation assumptions are typically based on long-term forecasts by Consensus Economics Inc. The assumptions for the increases in future compensation levels and for increases to pension payments are developed separately for each plan, where relevant. Each is set based on the price inflation assumption and reflecting the Group's reward structure or policies in each market, as well as relevant local statutory and plan-specific requirements.

Mortality assumptions can be significant in measuring the Group's obligations under its defined benefit plans. These assumptions have been set in accordance with current best estimate in the respective countries. Future potential improvements in longevity have been considered and included where appropriate.

A general review of the mortality assumptions was conducted in 2022 and confirmed that the longevity assumptions are still valid. Additionally, the review has confirmed that COVID-19 does not have an impact on the mortality assumption of the Group's population. As a consequence, there has been no change in the long-term mortality assumptions and no application of any allowance for the impact of COVID-19 in 2021 and 2022.

Reconciliation in movement of liabilities and assets – Impact on Financial Statements

				2022				2021
in € m.	Germany	EMEA (excluding Germany)	APAC	Total	Germany	EMEA (excluding Germany)	APAC	Total
Change in the present value of the defined benefit obligation:								
Balance, beginning of year	**478**	**35**	**5**	**518**	**481**	**35**	**5**	**520**
Defined benefit cost recognized in profit or loss:								
Current service cost	13	2	1	15	13	2	1	16
Interest cost	5	0	0	6	3	0	0	3
Past service cost and gain or loss arising from settlements	2	0	0	2	2	0	0	2
Defined benefit cost recognized in other comprehensive income:								
Actuarial gain or loss arising from changes in financial assumptions	(116)	(7)	0	(124)	(19)	(1)	0	(20)
Actuarial gain or loss arising from changes in demographic assumptions	9	0	0	9	0	(1)	0	(1)
Actuarial gain or loss arising from experience	0	1	0	1	4	2	0	6
Cash flow and other changes:								
Contributions by plan participants	0	1	0	1	0	1	0	1
Benefits paid	(14)	(1)	0	(15)	(9)	(3)	(1)	(12)
Payments in respect to settlements	0	0	0	0	0	0	0	0
Acquisitions/divestitures	(5)	(1)	0	(6)	0	0	0	0
Exchange rate changes	0	1	0	1	0	1	0	1
Other[1]	4	0	2	6	2	0	0	3
Balance, end of year	**376**	**31**	**6**	**413**	**478**	**35**	**5**	**518**
thereof:								
Unfunded	0	1	3	5	0	1	4	5
Funded	376	30	3	408	478	34	1	513
Change in fair value of plan assets:								
Balance, beginning of year	**429**	**39**	**1**	**469**	**415**	**36**	**1**	**452**
Defined benefit cost recognized in profit or loss:								
Interest income	5	0	0	5	3	0	0	3
Defined benefit cost recognized in other comprehensive income:								
Return from plan assets less interest income	(52)	(3)	0	(56)	11	2	0	13
Cash flow and other changes:								
Contributions by plan participants	0	1	0	1	0	1	0	1
Contributions by the employer	6	1	0	8	7	1	0	8
Benefits paid[2]	(14)	(1)	0	(15)	(9)	(3)	0	(12)
Payments in respect to settlements	0	0	0	0	0	0	0	0
Acquisitions/divestitures	0	0	0	0	0	0	0	0
Exchange rate changes	0	1	0	1	0	1	0	1
Other[1]	4	0	2	6	2	0	0	2
Plan administration costs	0	0	0	0	0	0	0	0
Balance, end of year	**378**	**38**	**3**	**419**	**429**	**39**	**1**	**469**
Funded status, end of year	**2**	**7**	**(3)**	**6**	**(49)**	**3**	**(4)**	**(49)**

				2022				2021
in € m.	Germany	EMEA (excluding Germany)	APAC	Total	Germany	EMEA (excluding Germany)	APAC	Total
Change in irrecoverable surplus (asset ceiling):								
Balance, beginning of year	**0**	**(5)**	**0**	**(5)**	**0**	**(3)**	**0**	**(3)**
Interest cost	0	0	0	0	0	0	0	0
Changes in irrecoverable surplus	0	(1)	0	(1)	0	(2)	0	(2)
Exchange rate changes	0	0	0	0	0	0	0	0
Balance, end of year	**0**	**(6)**	**0**	**(6)**	**0**	**(5)**	**0**	**(5)**
Net asset (liability) recognized	**2**	**2**	**(3)**	**0**[3]	**(49)**	**(1)**	**(4)**	**(54)**[4]

1 Transfers between other subsidiaries of Deutsche Bank Group.
2 For funded plans only.
3 Thereof € 10 million recognized in other assets and € 10 million in other liabilities.
4 Thereof € 2 million recognized in other assets and € 56 million in other liabilities.

Investment Strategy

The Group participates in DB Group’s overall investment strategy. The investment objective is to protect against adverse impacts of changes in the funding position of its defined benefit pension plans on key financial metrics, with a primary focus on protecting the plans’ IFRS funded status, while taking into account the plans’ impact on other metrics, such as regulatory capital and local profit or loss accounts. In 2021, there has been a shift in the investment strategy in selected markets to balance competing key financial metrics. Investment managers manage pension assets in line with investment mandates or guidelines as agreed with the pension plans’ trustees and investment committees.

For key defined benefit plans for which the Group aims to protect the IFRS funded status, a liability driven investment (LDI) approach is applied. Risks from mismatches between fluctuations in the present value of the defined benefit obligations and plan assets due to capital market movements are minimized, subject to balancing relevant trade-offs. This is achieved by allocating plan assets closely to the market risk factor exposures of the pension liability to interest rates, credit spreads and inflation such that plan assets broadly reflect the underlying risk profile and currency of the pension obligations.

Where the desired hedging level as defined in DB Group’s overall investment strategy for these risks cannot be achieved with physical instruments (i. e. corporate and government bonds), derivatives are employed. Derivatives mainly include interest rate, inflation swaps and credit default swaps. Other derivative instruments are also used, such as interest rate futures and options. In practice, a completely hedged approach is impractical because of insufficient market depth for ultra-long-term corporate bonds, as well as liquidity and cost considerations. Therefore, plan assets contain further asset categories to create long-term return enhancement and diversification benefits such as equity, real estate, high yield bonds or emerging markets bonds. Furthermore, the above mentioned shift in the investment strategy in 2021 allows for actively taken market risk exposures from interest rates and credit spreads within defined limits. As a result, the market risk from plan assets has been reduced.

Plan Asset Allocation to Key Asset Classes

The following table shows the asset allocation of the Group’s funded defined benefit plans to key asset classes, i. e. exposures include physical securities in discretely managed portfolios and underlying asset allocations of any commingled funds used to invest plan assets.

Asset amounts in the following table include both “quoted” (i. e. level 1 assets in accordance with IFRS 13 “Fair Value Measurement” – amounts invested in markets where the fair value can be determined directly from prices which are quoted in active, liquid markets) and “other” (i. e. level 2 and 3 assets in accordance with IFRS 13) assets.

Plan asset allocation to key asset classes

				31 Dec 2022				31 Dec 2021
in € m.	Germany	EMEA (excluding Germany)	APAC	Total	Germany	EMEA (excluding Germany)	APAC	Total
Cash and cash equivalents	3	2	2	7	33	2	1	36
Equity instruments[1]	41	9	0	49	44	8	0	52
Investment-grade bonds[2]:								
Government	69	5	1	75	87	7	0	93
Non-government bonds	139	11	0	150	181	11	0	192
Non-investment-grade bonds:								
Government	3	0	0	4	5	0	0	5
Non-government bonds	11	1	0	12	14	2	0	16
Structured products	0	0	0	1	29	1	0	30
Alternatives:								
Real estate	24	6	0	30	17	5	0	22
Commodities	2	0	0	2	1	0	0	1
Private equity	0	0	0	0	0	0	0	0
Other[3]	37	2	0	39	(1)	2	0	1
Derivatives (market value):								
Interest rate	47	1	0	48	17	1	0	18
Credit	0	0	0	0	2	0	0	2
Inflation	0	0	0	0	0	0	0	0
Foreign exchange	2	0	0	2	0	0	0	0
Other	0	0	0	0	0	0	0	0
Total fair value of plan assets	**378**	**38**	**3**	**419**	**429**	**39**	**1**	**469**

1 Allocation of equity exposure is broadly in line with the typical index in the respective market.
2 Investment-grade means BBB and above based on average credit ratings which are determined on the basis of the ratings of the rating agencies Fitch, Moody's and S&P. The average credit rating exposure for the Group's main plans is around A.
3 Amongst others this position contains commingled funds which could not be segregated into the other asset categories.

The following table sets out the Group's funded defined benefit plan assets only invested in "quoted" assets, i. e. level 1 assets in accordance with IFRS 13.

Plan asset allocation of level 1 assets

				31 Dec 2022				31 Dec 2021
in € m.	Germany	EMEA (excluding Germany)	APAC	Total	Germany	EMEA (excluding Germany)	APAC	Total
Cash and cash equivalents	(4)	1	0	(3)	27	2	0	28
Equity instruments[1]	30	1	0	31	36	1	0	37
Investment-grade bonds[2]:								
Government	26	3	0	28	31	4	0	35
Non-government bonds	0	0	0	0	0	0	0	0
Non-investment-grade bonds:								
Government	0	0	0	0	0	0	0	0
Non-government bonds	0	0	0	0	0	0	0	0
Structured products	0	0	0	0	0	0	0	0
Alternatives:								
Real estate	0	0	0	0	0	0	0	0
Commodities	0	0	0	0	0	0	0	0
Private equity	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Derivatives (market value):								
Interest rate	0	0	0	0	0	0	0	0
Inflation	0	0	0	0	0	0	0	0
Total fair value of quoted plan assets	**52**	**5**	**0**	**56**	**93**	**6**	**0**	**100**

1 Allocation of equity exposure is broadly in line with the typical index in the respective market.
2 Investment-grade means BBB and above based on average credit ratings which are determined on the basis of the ratings of the rating agencies Fitch, Moody's and S&P. The average credit rating exposure for the Group's main plans is around A.

Geographical allocation of invested plan assets

							31 Dec 2022							31 Dec 2021
in € m. (unless stated otherwise)	Germany	United Kingdom	United States	Other Eurozone	Other developed countries	Emerging markets	Total	Germany	United Kingdom	United States	Other Eurozone	Other developed countries	Emerging markets	Total
Cash and cash equivalents	0	0	2	2	1	2	7	0	0	1	33	1	1	36
Equity instruments	1	1	27	12	6	1	49	1	1	31	10	8	1	52
Government bonds (investment-grade and above)	13	0	3	39	4	15	75	30	0	2	38	7	17	93
Government bonds (non-investment-grade)	0	0	0	0	0	4	4	0	0	0	0	0	5	5
Non-government bonds (investment-grade and above)	10	9	50	65	15	1	150	14	9	65	87	15	1	192
Non-government bonds (non-investment-grade)	0	0	0	11	0	0	12	0	0	2	14	0	0	16
Structured products	0	0	0	0	0	0	1	0	0	0	0	30	0	30
Subtotal	**25**	**10**	**82**	**129**	**28**	**23**	**296**	**45**	**11**	**100**	**181**	**61**	**26**	**425**
Share (in %)	8	3	28	44	9	8	100	11	3	24	43	14	6	100
Other asset categories							122							44
Fair value of plan assets							**419**							**469**

Plan assets include derivative transactions with other Deutsche Bank Group entities with a market value of positive € 46 million and positive € 19 million at 31 December 2022 and 31 December 2021, respectively. There is neither a material number of securities issued by the Group nor other claims against the Group assets included in the fair value of plan assets. The plan assets do not include any real estate which is used by the Group.

In addition, the Group estimates and allows for uncertain income tax positions which may have an impact on the Group's plan assets. Significant judgment is required in making these estimates and the Group's final liabilities may ultimately be materially different.

Key Risk Sensitivities

The Group's defined benefit obligations are sensitive to changes in capital market conditions and actuarial assumptions. Sensitivities to capital market movements and key assumption changes are presented in the following table. Each market risk factor or assumption is changed in isolation. Sensitivities of the defined benefit obligations are approximated using geometric extrapolation methods based on plan durations for the respective assumption. Duration is a risk measure that indicates the broad sensitivity of the obligations to a change in an underlying assumption and provides a reasonable approximation for small to moderate changes in those assumptions.

For example, the interest rate duration is derived from the change in the defined benefit obligation to a change in the interest rate based on information provided by the local actuaries of the respective plans. The resulting duration is used to estimate the remeasurement liability loss or gain from changes in the interest rate. For other assumptions, a similar approach is used to derive the respective sensitivity results.

For defined benefit pension plans, changes in capital market conditions will impact the plan obligations via actuarial assumptions – mainly interest rate and inflation rate – as well as the plan assets. Where the Group applies a Liability Driven Investment (LDI) approach, the overall exposure to such changes is reduced. To help readers gain a better understanding of the Group's risk exposures to key capital market movements, the net impact of the change in the defined benefit obligations and plan assets due to a change of the related market risk factor or underlying actuarial assumption is shown. Where changes in actuarial assumptions do not affect the plan assets, only the impact on the defined benefit obligations is reported.

Asset-related sensitivities are derived for major plans which are applicable to the Group by using risk sensitivity factors determined by Deutsche Bank Group's Market Risk Management function. These sensitivities are calculated based on information provided by the plans' investment managers and extrapolated linearly to reflect the approximate change of the plan assets' market value in case of a change in the underlying risk factor.

The sensitivities illustrate plausible variations over time in capital market movements and key actuarial assumptions. The Group is not in a position to provide a view on the likelihood of these capital market or assumption changes. While these sensitivities illustrate the overall impact on the funded status of the changes shown, the significance of the impact and the range of reasonable possible alternative assumptions may differ between the different plans that comprise the aggregated results. Even though plan assets and plan obligations are sensitive to similar risk factors, actual changes in plan assets and obligations may not fully offset each other due to imperfect correlations between market risk factors and actuarial assumptions. Caution should be used when extrapolating these sensitivities due to non-linear effects that changes in capital market conditions and key actuarial assumptions may have on the overall funded status. Any management actions that may be taken to mitigate the inherent risks in the post-employment defined benefit plans are not reflected in these sensitivities.

Sensitivity analysis of changes in actuarial assumptions

	31 Dec 2022			31 Dec 2021		
in € m.	Germany	EMEA (excluding Germany)	APAC	Germany	EMEA (excluding Germany)	APAC
Interest rate (–50 bp):						
(Increase) in DBO	(20)	(1)	0	(31)	(2)	0
Interest rate (+50 bp):						
Decrease in DBO	19	1	0	29	2	0
Rate of price inflation (–50 bp):[1]						
Decrease in DBO	7	0	0	7	0	0
Rate of price inflation (+50 bp):[1]						
(Increase) in DBO	(7)	0	0	(7)	0	0
Rate of real increase in future compensation levels (–50 bp):						
Decrease in DBO, net impact on funded status	1	0	0	1	0	0
Rate of real increase in future compensation levels (+50 bp):						
(Increase) in DBO, net impact on funded status	(1)	0	0	(1)	0	0
Longevity improvements by 10%:[2]						
(Increase) in DBO, net impact on funded status	(4)	0	0	(6)	0	0

[1] Incorporates sensitivity to changes in nominal increase for pensions in payment to the extent linked to the price inflation assumption.
[2] Estimated to be equivalent to an increase of around 1 year in overall life expectancy.

Expected Cash Flows

The following table shows expected cash flows for post-employment benefits in 2023, including contributions to the Group's external pension trusts in respect of funded plans, direct payment to beneficiaries in respect of unfunded plans, as well as contributions to defined contribution plans.

Expected cash flow for post-employment benefits

in € m.	2023
Expected contributions to:	
Group internal defined benefit plan assets	13
Defined benefit plan assets sponsored by another company of Deutsche Bank Group	0
BVV	4
Other defined contribution plans	19
Expected benefit payments for unfunded defined benefit plans	0
Expected total cash flow related to post-employment benefits	**36**

Expense of Employee Benefits

The following table presents a breakdown of specific expenses according to the requirements of IAS 19 "Employee Benefits" and IFRS 2 "Share-based payment" respectively.

Expense of employee benefits

in € m.	2022	2021
Expenses for defined benefit plans:		
Service cost	17	17
Net interest cost (income)	1	0
Total expenses defined benefit plans	**18**	**18**
Expenses for defined contribution plans:		
BVV[1]	4	3
Other defined contribution plans	19	17
Total expenses for defined contribution plans	**23**	**21**
Total expenses for post-employment benefit plans	**41**	**38**
Employer contributions to mandatory German social security pension plan	15	14
Expenses for share-based payments, equity settled	5	4
Expenses for share-based payments, cash settled	13	32
Expenses for cash retention plans	44	42
Expenses for severance payments	25	19

[1] Including BVV contributions of € 1 million for DWS entities in Luxembourg in 2022, whilst 2021 comparative number is included in Other defined contribution plans.

21 – Income Taxes

in € m.	2022	2021
Current tax expense (benefit):		
Tax expense (benefit) for current year	267	300
Adjustments for prior years	2	2
Total current tax expense (benefit)	**269**	**302**
Deferred tax expense (benefit):		
Origination and reversal of temporary differences, unused tax losses and tax credits	(7)	6
Effect of changes in tax law and/or tax rate	2	(3)
Adjustments for prior years.	6	(1)
Total deferred tax expense (benefit)	**1**	**2**
Total income tax expense (benefit)	**271**	**304**

Income tax expense in 2022 was € 271 million (2021: € 304 million). The effective tax rate of 31.3% (2021: 28.0%) was mainly impacted by non-deductible expenses, partly offset by tax-exempt income.

Total current tax expense was not impacted by benefits from previously unrecognized tax losses in 2022. In 2021 these effects reduced the current tax expense by € 1 million.

In 2022 the total deferred tax expense was reduced by € 2 million due to benefits from previously unrecognized tax losses and deductible temporary differences, partially offset by expenses arising from write-downs of deferred tax assets. In 2021 these effects increased the deferred tax expense by € 4 million.

The domestic income tax rate including corporate tax, solidarity surcharge, and trade tax used for calculating deferred tax assets and liabilities was 31.9% for 2022 and 2021.

Difference between applying German statutory (domestic) income tax rate and actual income tax expense (benefit)

in € m.	2022	2021
Expected tax expense (benefit) at domestic income tax rate of 31.9% (31.9% for 2021)	**276**	**347**
Foreign rate differential	(32)	(33)
Tax-exempt gains on securities and other income	(9)	(11)
Loss (income) on equity method investments	(12)	(15)
Non-deductible expenses	26	9
Changes in recognition and measurement of deferred tax assets	(3)	4
Effect of changes in tax law and/or tax rate[1]	2	(3)
Effect related to share-based payments	0	0
Other[1]	23	6
Actual income tax expense (benefit)	**271**	**304**

[1] Current and deferred tax expense (benefit) relating to prior years are mainly reflected in the line items Changes in recognition and measurement of deferred tax assets and Other.

Income taxes charged or credited to equity (other comprehensive income/additional paid-in capital)

in € m.	2022	2021
Actuarial gains/losses related to defined benefit plans	(19)	(8)
Financial assets mandatory at fair value through other comprehensive income:		
Unrealized net gains/losses arising during the period	23	14
Realized net gains/losses arising during the period (reclassified to profit or loss)	0	0
Other equity movement:		
Unrealized net gains/losses arising during the period	0	0
Realized net gains/losses arising during the period (reclassified to profit or loss)	0	0
Income taxes (charged) credited to other comprehensive income	**5**	**6**
Other income taxes (charged) credited to equity	**1**	**(1)**

Major components of the Group's gross deferred tax assets and liabilities

in € m.	31 Dec 2022	31 Dec 2021
Deferred tax assets:		
Unused tax losses	8	0
Unused tax credits	1	0
Deductible temporary differences:		
Employee benefits, including equity settled share-based payments	82	107
Trading activities, including derivatives	144	128
Leases	33	32
Intangible assets	4	5
Accrued interest expense	4	3
Fair value OCI (IFRS 9)	37	13
Other assets	10	11
Total deferred tax assets pre offsetting	**323**	**299**
Deferred tax liabilities:		
Taxable temporary differences:		
Employee benefits, including equity settled share-based payments	8	11
Trading activities, including derivatives	155	123
Leases	30	29
Intangible assets	197	195
Fair value OCI (IFRS 9)	0	0
Other assets	15	14
Total deferred tax liabilities pre offsetting	**405**	**372**

Deferred tax assets and liabilities, after offsetting

in € m.	31 Dec 2022	31 Dec 2021
Presented as deferred tax assets	131	145
Presented as deferred tax liabilities	213	218
Net deferred tax liabilities	**82**	**73**

The change in the balance of deferred tax assets and deferred tax liabilities does not equal the deferred tax expense/(benefit). This is due to deferred taxes that are booked directly to equity and the effects of exchange rate changes on tax assets and liabilities denominated in currencies other than euro.

Items for which no deferred tax assets were recognized[1]

in € m.	31 Dec 2022	31 Dec 2021
Not expiring	(237)	(200)
Expiring in subsequent period	0	0
Expiring after subsequent period	(20)	(26)
Unused tax losses	**(257)**	**(226)**

[1] Amounts in the table refer to unused tax losses for federal income tax purposes.

Deferred tax assets were not recognized on these items because it is not probable that future taxable profit will be available against which the unused tax losses, unused tax credits and deductible temporary differences can be utilized.

As of 31 December 2022, DWS Group recognized deferred tax assets of € 4 million (2021: € 6 million), that exceed deferred tax liabilities in entities which have suffered a loss in either the current or preceding period. This is based on management's assessment that it is probable that the respective entities will have taxable profits against which the unused tax losses, unused tax credits and deductible temporary differences can be utilized.

Generally, in determining the amounts of deferred tax assets to be recognized, management uses historical profitability information and, if relevant, forecasted operating results, based upon approved business plans, including a review of the eligible carry-forward periods, tax planning opportunities and other relevant considerations.

As of 31 December 2022, DWS Group had temporary differences associated with the Group's parent company's investments in subsidiaries, branches and associates and interests in joint ventures of € 136 million (2021: € 124 million), in respect of which no deferred tax liabilities were recognized.

22 – Related Party Transactions

Related parties are considered as a person or entity who has the ability to directly or indirectly control the other party or exercise significant influence over the other party in making financial or operational decisions. The Group’s related parties include:

- Key management personnel, close family members of key management personnel and entities which are controlled, significantly influenced by, or for which significant voting power is held by key management personnel or their close family members. The Group considers the members of the Executive Board and the Supervisory Board to constitute key management personnel.
- Deutsche Bank AG and its subsidiaries including DB Beteiligungs-Holding GmbH, joint ventures, associates and their respective subsidiaries
- Post-employment benefit plans for the benefit of DWS KGaA and its related party entities employees

Transactions with Related Party Persons

Related party persons are key management personnel who have directly or indirectly authority and responsibility for planning, directing and controlling the activities of the Group as well as their close family members. The Group considers the members of the Executive Board and the Supervisory Board to constitute key management personnel.

As of 31 December 2022, transactions with related party persons were loans and commitments of € 13 million and deposits of € 6 million. As of 31 December 2021, transactions with related party persons were loans and commitments of € 5 million and deposits of € 7 million.

Transactions with Related Party Entities

Transactions between DWS KGaA and its subsidiaries meet the definition of related party transactions. If these transactions are eliminated on consolidation, they are not disclosed as related party transactions. Transactions between DWS Group and Deutsche Bank Group entities, including its associates and joint ventures and their respective subsidiaries also qualify as related party transactions.

The decrease in assets with Deutsche Bank AG is mainly related to decreased bank balances resulting from the Group's cash management activities.

DWS KGaA incurred expenses for key management personnel services to DWS Management GmbH, a wholly owned subsidiary of Deutsche Bank AG, of € 40 million for the fiscal year 2022 (€ 15 million for the fiscal year 2021).

On 14 June 2022, DWS KGaA paid a dividend of € 318 million for the fiscal year 2021 to DB Beteiligungs-Holding GmbH, a wholly owned subsidiary of Deutsche Bank AG (on 14 June 2021, € 288 million for the fiscal year 2020 respectively).

The Group has no transactions as of 31 December 2022 and 31 December 2021 respectively with joint ventures and associates of Deutsche Bank Group.

Transactions with Deutsche Bank AG and other Deutsche Bank Group entities

	2022				2021			
in € m.	Net interest and non-interest income	Non-interest expenses	Assets	Liabilities	Net interest and non-interest income	Non-interest expenses	Assets	Liabilities
Deutsche Bank AG	(300)	98	862	233	(288)	115	888	275
Other Deutsche Bank Group entities	(47)	112	113	116	(54)	78	90	76

Transactions with Related Party Pension Plans

Under IFRS, certain post-employment benefit plans are considered related parties. The Group has business relationships with a number of its pension plans pursuant to which it provides financial services to these plans, including investment management services. The Group's pension funds may hold or trade Deutsche Bank AG and its related parties' shares or securities.

Transactions with Related Party Pension Plans

in € m.	31 Dec 2022	31 Dec 2021
Other assets	1	1
Fees paid from plan assets to asset managers of the Group	1	1
Market value of derivatives with a counterparty of the Group/Deutsche Bank Group	46	19
Notional amount of derivatives with a counterparty of the Group/Deutsche Bank Group	506	458

23 – Information on Subsidiaries and Shareholdings

Composition of the Group

DWS Group GmbH & Co. KGaA is the direct or indirect holding company for the Group's subsidiaries.

The Group consists of 75 consolidated entities, thereof 49 subsidiaries and 26 consolidated structured entities.

47 of the entities controlled by the Group are directly or indirectly held by the Group at 100% of the ownership interests (share of capital). Third parties also hold ownership interest in 28 of the consolidated entities (non-controlling interest). As of 31 December 2022 the non-controlling interests are neither individually nor cumulatively material to the Group.

Shareholdings

The following tables show the shareholdings of DWS Group pursuant to Section 313 (2) of the German Commercial Code (HGB).

Subsidiaries

Serial No.	Name of company	Domicile of company	Footnote	Share of capital in %
1	DWS Group GmbH & Co. KGaA	Frankfurt		
2	DB Immobilienfonds 5 Wieland KG i.L.	Frankfurt		93.6
3	DB Vita S.A.	Luxembourg		84.0
4	DBRE Global Real Estate Management IB, Ltd.	George Town		100.0
5	DBX Advisors LLC	Wilmington		100.0
6	Deutsche Alternative Asset Management (UK) Limited	London		100.0
7	Deutsche Capital Partners China Limited	Camana Bay		100.0
8	Deutsche Cayman Ltd.	Camana Bay		100.0
9	Deutsche Grundbesitz-Anlagegesellschaft mit beschränkter Haftung	Frankfurt		99.8
10	DI Deutsche Immobilien Treuhandgesellschaft mbH	Frankfurt		100.0
11	DIP Management GmbH	Frankfurt		100.0
12	DWS Alternatives France	Paris		100.0
13	DWS Alternatives Global Limited	London		100.0
14	DWS Alternatives GmbH	Frankfurt		100.0
15	DWS Asset Management (Korea) Company Limited	Seoul		100.0
16	DWS Beteiligungs GmbH	Frankfurt		98.7
17	DWS CH AG	Zurich		100.0
18	DWS Distributors, Inc.	Wilmington		100.0
19	DWS Far Eastern Investments Limited	Taipei		60.0
20	DWS Global Business Services Inc.	Taguig City		100.0
21	DWS Group Services UK Limited	London		100.0
22	DWS Grundbesitz GmbH	Frankfurt		99.9
23	DWS India Private Limited	Mumbai		100.0
24	DWS International GmbH	Frankfurt		100.0
25	DWS Investment GmbH	Frankfurt		100.0
26	DWS Investment Management Americas, Inc.	Wilmington		100.0
27	DWS Investment S.A.	Luxembourg		100.0
28	DWS Investments Australia Limited	Sydney		100.0
29	DWS Investments Hong Kong Limited	Hong Kong		100.0
30	DWS Investments Japan Limited	Tokyo		100.0
31	DWS Investments Shanghai Limited	Shanghai		100.0
32	DWS Investments Singapore Limited	Singapore		100.0
33	DWS Investments UK Limited	London		100.0
34	DWS Real Estate GmbH	Frankfurt		89.9
35	DWS Service Company	Wilmington		100.0
36	DWS Shanghai Private Equity Fund Management Limited	Shanghai		100.0
37	DWS Trust Company	Concord		100.0
38	DWS USA Corporation	Wilmington		100.0
39	Elizabethan Holdings Limited	George Town		100.0

Serial No.	Name of company	Domicile of company	Footnote	Share of capital in %
40	Elizabethan Management Limited	George Town		100.0
41	European Value Added I (Alternate G.P.) LLP	London		100.0
42	Leonardo III Initial GP Limited	London		100.0
43	RoPro U.S. Holding, Inc.	Wilmington		100.0
44	RREEF America L.L.C.	Wilmington		100.0
45	RREEF European Value Added I (G.P.) Limited	London		100.0
46	RREEF Fund Holding Co.	George Town		100.0
47	RREEF Management L.L.C.	Wilmington		100.0
48	Treuinvest Service GmbH	Frankfurt		100.0
49	WEPLA Beteiligungsgesellschaft mbH	Frankfurt		100.0

Consolidated Structured Entities

Serial No.	Name of company	Domicile of company	Footnote	Share of capital in %
50	DB Immobilienfonds 2 KG i.L.	Frankfurt		74.0
51	DB Impact Investment (GP) Limited	London		100.0
52	db PBC	Luxembourg	1	
53	DBRE Global Real Estate Management US IB, L.L.C.	Wilmington		100.0
54	DBX ETF Trust	Wilmington	1	
55	DWS Access S.A.	Luxembourg	1	
56	DWS Alternatives (IE) ICAV	Dublin		
57	DWS Funds	Luxembourg	1	
58	DWS Garant	Luxembourg	1	
59	DWS Invest	Luxembourg	1	
60	DWS Invest (IE) ICAV	Dublin		
61	DWS Zeitwert Protect	Luxembourg		
62	DWS-Fonds Treasury Liquidity (EUR)	Frankfurt		100.0
63	Dynamic Infrastructure Securities Fund LP	Wilmington		
64	G.O. IB-US Management, L.L.C.	Wilmington		100.0
65	Infrastructure Debt Fund S.C.Sp. SICAV-RAIF	Luxembourg		
66	PEIF II SLP Feeder 2 LP	Edinburgh		100.0
67	PEIF III SLP Feeder GP, S.à r.l.	Senningerberg		
68	PEIF III SLP Feeder, SCSp	Senningerberg	2	55.1
69	PES Carry and Employee Co-Investment Feeder SCSp	Luxembourg	2	1.1
70	PES Carry and Employee Co-Investment GP S.à r.l.	Luxembourg		
71	Property Debt Fund S.C.Sp. SICAV-RAIF	Luxembourg		
72	RREEF DCH, L.L.C.	Wilmington		100.0
73	Vermögensfondmandat Flexible (80% teilgeschützt)	Luxembourg		
74	Xtrackers (IE) Public Limited Company	Dublin	1	0.1
75	Xtrackers II	Luxembourg	1	0.1

Companies Accounted for at Equity

Serial No.	Name of company	Domicile of company	Footnote	Share of capital in %
76	Arabesque AI Ltd	London		24.9
77	Deutscher Pensionsfonds Aktiengesellschaft	Cologne		25.1
78	G.O. IB-SIV Feeder, L.L.C.	Wilmington		15.7
79	Harvest Fund Management Co., Ltd.	Shanghai		30.0
80	MorgenFund GmbH	Frankfurt		30.0

Other Companies where the Holding Exceeds 20%

Serial No.	Name of company	Domicile of company	Footnote	Share of capital in %
81	DB Real Estate Global Opportunities IB (Offshore), L.P.	Camana Bay	3	33.6
82	Deutsches Institut für Altersvorsorge GmbH	Frankfurt	4	22.0
83	DWS Offshore Infrastructure Debt Opportunities Feeder LP	George Town	3	26.3

Other Companies with Status as Shareholder with Unlimited Liability pursuant to Section 313 (2) Number 6 HGB

Serial No.	Name of company	Domicile of company	Footnote	Share of capital in %
84	DEBEKO Immobilien GmbH & Co Grundbesitz OHG	Eschborn	2	0.1
85	RREEF European Value Added Fund I L.P.	London	2	0.0

Footnotes:

1 Only specified assets and related liabilities (silos) of this entity were consolidated.
2 Status as shareholder with unlimited liability pursuant to Section 313 (2) Number 6 HGB.
3 Classified as structured entity not to be accounted for at equity under IFRS (please refer to note '24 – Structured Entities').
4 No significant influence; classified as non-trading financial assets mandatory at fair value through profit or loss.

Significant Restrictions to Access or Use the Group's Assets

Statutory, contractual or regulatory requirements as well as protective rights of non-controlling interests might restrict the ability of the Group to access and transfer assets freely to or from other entities within the Group and to settle liabilities of the Group.

The following restrictions impact the Group's ability to use assets:

- The assets of consolidated structured entities, which mainly consist of guaranteed funds, are held for the benefit of the parties that have bought the shares issued by these entities.
- Investment contract related financial assets held to back unit linked contracts offered by DB Vita S.A. (the Group's specialist for unit-linked products).

Restricted Assets

	31 Dec 2022		31 Dec 2021	
in € m.	Total assets	Restricted assets	Total assets	Restricted assets
Interest earning deposits with banks	1,779	84	1,942	68
Financial assets at fair value through profit or loss	3,959	1,822	3,838	2,075
Financial assets at fair value through other comprehensive income	80	0	154	0
Loans at amortized cost	6	0	5	0
Other	5,588	25	5,672	24
Total	**11,412**	**1,931**	**11,611**	**2,167**

The table above excludes assets that are not encumbered at an individual entity level but which may be subject to restrictions in terms of their transferability within the Group. Regulatory and central bank requirements or corporate laws may restrict the Group's ability to transfer assets to or from other entities within the Group in certain jurisdictions. Referring to this the US Federal Reserve Board required certain commitments with respect to the DWS Group operations in the US that are grouped under DWS USA Corporation (DWS Intermediate Holding Company) in accordance with Regulation YY. That includes restrictions on capital distributions that could arise from non-compliance by DWS Intermediate Holding Company with applicable regulatory requirements. Capital distribution restrictions would also be imposed on DWS Intermediate Holding Company in an event that Deutsche Bank's Intermediate Holding Company became subject to such restrictions.

24 – Structured Entities

Nature, Purpose and Extent of the Group's Interests in Structured Entities

The Group engages in various business activities with structured entities which are designed to achieve a specific business purpose. A structured entity is one that has been set up so that any voting rights or similar rights are not the dominant factor in deciding who controls the entity. An example is when voting rights relate only to administrative tasks and the relevant activities are directed by contractual arrangements.

A structured entity often has some or all of the following features or attributes:

- Restricted activities
- A narrow and well defined objective
- Insufficient equity to permit the structured entity to finance its activities without subordinated financial support.
- Financing in the form of multiple contractually linked instruments to investors that create concentration of credit or other risks (tranches).

As part of its business, the Group is responsible for the set up and management of various entities that are used to manage portfolios of assets on behalf of its clients. These entities are classified as structured entities. Structured entities may be established as corporations, trusts or partnerships. Structured entities generally finance the purchase of assets by issuing debt or equity securities that are collateralised by and/or indexed to the assets held by the structured entities.

DWS Group is considered a fund's sponsor if market participants associate this structured entity with the Group. This is assumed to be the case if the term "DWS" is used in a fund's name. Investment funds managed by group-internal asset managers can be reasonably associated with the Group. As a sponsor, the Group is involved in the legal set-up and marketing of internally managed funds. This may include providing seed capital to the funds and providing administrative services to ensure the investment funds' operation.

Income Derived from Involvement with Structured Entities

The Group earns management fees and, occasionally, performance-based fees for its investment management service in relation to funds. The majority of the net commission and fees from asset management activities and most of the net gains (losses) on financial assets/ liabilities at fair value through profit or loss relates to structured entities.

Financial Support

During 2022 and 2021 respectively, the Group did not provide non-contractual support to consolidated and unconsolidated structured entities.

Consolidated Structured Entities

The Group has the following consolidated structured entities and considers the net asset value of the consolidated structured entities as the size and maximum exposure at risk.

Consolidated structured entities

in € m.	31 Dec 2022	31 Dec 2021
Assets:		
Guaranteed funds	1,278	1,513
Seed investments	108	33
Co-investments	7	10
Liquidity positions	1,020	717
Total assets	**2,412**	**2,273**
Liabilities:		
Guaranteed funds	1,277	1,512
Seed investments	11	2
Co-investments	2	11
Liquidity positions	0	0
Total liabilities	**1,289**	**1,524**
Net income (loss) attributable to DWS shareholders:		
Guaranteed funds	0	0
Seed investments	(3)	1
Co-investments	5	(7)
Liquidity positions	(2)	(3)
Total net income (loss) attributable to DWS shareholders	**(1)**	**(8)**

Unconsolidated Structured Entities

These are structured entities which are not consolidated because the Group does not control them through voting rights, contract, funding agreements, or other means.

Interests in Unconsolidated Structured Entities

The Group's interests in unconsolidated structured entities refer to contractual involvement that exposes the Group to variability of returns from the performance of the structured entities. Examples of interests in unconsolidated structured entities include debt or equity investments (seed capital, co-investments), receivables from asset management fees (shown in other assets) and certain derivative instruments in which the Group is absorbing variability of returns from the structured entities.

Below is a description of the Group's interest in unconsolidated structured entities by type:

Securitization

The Group set up structured note vehicles with the primary objective to realize investment returns by investing in the debt of US infrastructure companies. The debt securitization assets held are classified as non-trading financial assets mandatory at fair value through profit or loss.

Funds

The Group sets up and manages various structured entities to accommodate client requirements to hold investments in specific assets. Those assets including seed and co-investments are classified as non-trading financial assets mandatory at fair value through profit and loss as the Group's business model assessment under IFRS 9 "Financial Instruments" resulted in "other business model".

Where we have an institutional mandate which is structured as a fund (e.g. German "Spezialfonds") these have been considered as structured entities.

Maximum Exposure to Unconsolidated Structured Entities

The maximum exposure to loss is determined by considering the nature of the interest in the unconsolidated structured entities. The maximum exposure for financial assets at fair value through profit and loss, loans and other assets is reflected by their carrying value in the consolidated balance sheet. The maximum exposure for derivatives under IFRS 12 "Disclosure of Interests in Other Entities", as interpreted by the Group, is reflected by the notional amounts of € 6,947 million as of 31 December 2022 (31 December 2021 € 8,604 million).

Such amounts or their development do not reflect the economic risks faced by DWS Group because they do not take into account the effects of collateral or economic hedges nor the probability of such losses being incurred. Contingent liabilities (unfunded commitments to funds) are reflected with their outstanding committed amount at reporting date. The total maximum exposure is calculated by adding total assets, total contingent liabilities and notional amounts of derivatives.

The following table shows, by type of structured entity, the carrying amounts of the Group's interests recognized in the consolidated financial statement and the maximum exposure. The decrease in non-trading financial assets mandatory at fair value through profit or loss is mainly driven by mark-to-market valuation losses, redemptions and maturities of the investment contract assets offset by higher investments into seed and co-investments.

Carrying amounts and maximum exposure relating to the Group's interests

			31 Dec 2022			31 Dec 2021
in € m.	Securitizations	Funds	Total	Securitizations	Funds	Total
Assets:						
Financial assets at fair value through profit or loss – non-trading financial assets mandatory at fair value through profit or loss:						
Debt instruments - co-investments	0	467	467	0	436	436
Debt instruments - seed investments	0	37	37	0	22	22
Debt instruments - money market funds	0	0	0	0	0	0
Debt instruments - other debt instruments	16	16	32	16	12	27
Equity instruments	0	0	0	0	0	0
Investment contract assets	0	469	469	0	562	562
Total financial assets at fair value through profit or loss	**16**	**989**	**1,005**	**16**	**1,031**	**1,047**
Other assets	0	246	246	0	282	282
Total assets	**16**	**1,235**	**1,252**	**16**	**1,313**	**1,329**
Liabilities:						
Financial liabilities at fair value through profit or loss:						
Negative market values from derivative financial instruments	0	1	1	0	1	1
Total financial liabilities at fair value through profit or loss	**0**	**1**	**1**	**0**	**1**	**1**
Total liabilities	**0**	**1**	**1**	**0**	**1**	**1**
Notional amount of derivatives	**0**	**6,947**	**6,947**	**0**	**8,604**	**8,604**
Contingent liabilities	**0**	**111**	**111**	**0**	**120**	**120**
Maximum exposure	**16**	**8,295**	**8,310**	**16**	**10,037**	**10,053**

25 – Events after the Reporting Period

After 31 December 2022, there were no reportable events of particular significance for the net assets, financial positions and results of operations of the Group.

26 – Additional Disclosures

Staff Costs

in € m.	2022	2021
Staff costs:		
Wages and salaries	721	679
Other benefits including social security	124	118
thereof: those relating to pensions	67	62
Total staff costs	**846**	**797**

Staff

As of 31 December 2022 the effective staff employed (full-time equivalent - FTE) was 3,657 (31 December 2021: 3,422). Part-time staff is included in these figures proportionately.

The average number of effective staff employed (full-time equivalent) in 2022 was 3,579 (2021: 3,361). An average 1,879 (2021: 1,728) staff members worked outside Germany.

Executive Board and Supervisory Board Remuneration

	2022		2021	
	in €	Share units[1]	in €	Share units[1]
Executive Board:				
Total compensation	**21,467,462**	**N/A**	**17,170,370**	**N/A**
Thereof:				
DWS share-based compensation granted by DWS Management GmbH	4,422,769	144,064	4,710,024	138,547
DWS share-based compensation granted by DWS Group	1,086,962	35,406	1,184,771	34,851
Total DWS share-based compensation	**5,509,731**	**179,470**	**5,894,795**	**173,397**
Provision for pension obligations to former members of the Executive Board	**1,387,477**	**N/A**	**1,483,315**	**N/A**
Supervisory Board:				
Total compensation[2]	**1,062,500**	**N/A**	**1,017,500**	**N/A**

[1] Units were calculated by dividing the respective amounts in euro by the average share price of DWS share over the last ten trading days prior to 1 March 2023, prior to 1 March 2022 respectively.
[2] Excluding value added tax.

The members of the Supervisory Board receive fixed annual compensation according to the provisions of the Articles of Association. The annual base compensation amounts to € 85,000 for each Supervisory Board member. The Supervisory Board Chairman receives twice that amount and the Deputy Chairperson one and a half times that amount. Members and chairs of the committees of the Supervisory Board are paid additional fixed annual compensation. The compensation determined is disbursed to each Supervisory Board member within the first three months of the following year. In case of a change in Supervisory Board membership during the year, compensation for the financial year will be paid on a pro rata basis, rounded up/down to full months. Deutsche Bank Group shareholder representatives and one independent shareholder representative on the Supervisory Board have waived their Supervisory Board Compensation in line with applicable policies and procedures.

Declaration on the German Corporate Governance Code

The Managing Directors of DWS Management GmbH, representing the general partner of DWS Group GmbH & Co. KGaA, and the Supervisory Board issued the Declaration of Conformity in accordance with Section 161 of the German Stock Corporation Act (AktG). The declaration is published on DWS's website (https://group.dws.com/corporate-governance/).

Principal Accountant Fees and Services

Breakdown of the fees charged by the auditor of the consolidated financial statements for the financial year, broken down into the fee by category

Fee category in € m	2022	2021
Audit fees	5	4
Thereof: to KPMG AG	2	2
Audit-related fees	1	0
Thereof: to KPMG AG	1	0
All other fees	0	0
Thereof: to KPMG AG	0	0
Total fees	**6**	**5**

The audit fees include fees for auditing the annual financial statements and the consolidated financial statements of DWS KGaA and various audits of the annual financial statements of subsidiaries. The fees for audit-related services include fees for other certification services required by law or statutory regulations and fees for voluntary certification services, such as voluntary audits for internal management purposes and the issue of audit certificates.

Confirmations

Responsibility Statement by the Executive Board

The Executive Board of DWS Group GmbH & Co. KGaA, Frankfurt, is responsible for preparing the consolidated financial statements and the summarized management report of the Group.

The Group's consolidated financial statements for 2022 were prepared according to the International Financial Reporting Standards (IFRS), which are published by the International Accounting Standards Board (IASB), London, and have been endorsed by the European Union. The Group's application of IFRS results in no differences between IFRS as issued by the IASB and IFRS as endorsed by the EU.

The Group has established effective internal control and steering systems in order to ensure that our summarized management report and consolidated financial statements comply with applicable accounting rules and to ensure proper corporate reporting.

The risk management system set up is designed such that the Executive Board can identify material risks early on and take appropriate defensive measures as necessary. The reliability and effectiveness of the internal control and risk management system are continually audited throughout the Group by our internal audit department.

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the summarized management report includes a fair review of the development and performance of the business and the position of the Group and DWS Group GmbH & Co. KGaA, together with a description of the principal opportunities and risks associated with the expected development of the Group and DWS Group GmbH & Co. KGaA.

Frankfurt am Main, 10 March 2023

DWS Group GmbH & Co. KGaA,
represented by: DWS Management GmbH, its general partner
The Managing Directors (Executive Board)

Dr Stefan Hoops	Manfred Bauer	Dirk Goergen	Dr Karen Kuder	Angela Maragkopoulou	Claire Peel

Independent Auditor's Report

Note: The English language text below is a translation provided for information purposes only. The original German text shall prevail in the event of any discrepancies between the English translation and the German original. We do not accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may arise from the translation.

Based on the results of our audit, we have issued the following unqualified audit opinion:

To DWS Group GmbH & Co. KGaA, Frankfurt am Main

Report on the Audit of the Consolidated Financial Statements and of the Summarized Management Report

Opinions

We have audited the consolidated financial statements of DWS Group GmbH & Co. KGaA and its subsidiaries (the Group), which comprise the consolidated balance sheet as of December 31, 2022, the consolidated statement of income, the consolidated statement of comprehensive income, the consolidated changes in equity and the consolidated statement of cash flows for the financial year from January 1, 2022 to December 31, 2022, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the summarized management report of DWS Group GmbH & Co. KGaA including the section "Compensation Report" which contains the remuneration report as part of the summarized management report for the financial year from January 1, 2022 to December 31, 2022.

In accordance with German legal requirements, we have not audited the content of those components of the summarized management report specified in the "Other Information" section of our auditor's report.

The summarized management report contains unaudited sections which are cross references that are not required by law. Those cross references as well as the information therein were in accordance with German legal requirements not audited.

In our opinion, on the basis of the knowledge obtained in the audit,

– the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as of December 31, 2022, and of its financial performance for the financial year from January 1, 2022 to December 31, 2022, and

– the accompanying summarized management report as a whole provides an appropriate view of the Group's position. In all material respects, this summarized management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the summarized management report does not cover the content of those components of the summarized management report specified in the "Other Information" section of the auditor's report.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the summarized management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the summarized management report in accordance with Section 317 HGB and EU Audit Regulation No 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German

Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Summarized Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the summarized management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1, 2022 to December 31, 2022. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

Impairment testing of goodwill

Please refer to note 2 in the notes to the consolidated financial statements for information on the accounting policies applied and the assumptions used. Disclosures on the amount of goodwill can be found under note 12 and information on the economic development of the asset management industry is presented in the section "Operating and Financial Review" in the summarized management report.

THE FINANCIAL STATEMENT RISK

As of December 31, 2022, goodwill amounted to EUR 2,936 million and, at 26% of total assets, accounts for a substantial share of assets.

Goodwill is tested for impairment annually at the level of the single operating segment. For this purpose, the carrying amount is compared with the recoverable amount of the business segment. If the carrying amount exceeds the recoverable amount, an impairment loss is recognized. The recoverable amount is the higher of fair value less costs to sell and the value in use of the business segment. The effective date for the impairment test is October 1, 2022.

Impairment testing of goodwill is complex and based on a range of assumptions that require judgment. These include the expected business and earnings development of the business segment for the next five years, the assumed long-term growth rates and the discount rate used.

Competition in the asset management industry continued to intensify in financial year 2022. Future business prospects continue to be negatively affected in particular by the continued compression of margins globally and rising costs of market entry. Nevertheless, DWS Group GmbH & Co. KGaA did not identify any need for impairment as a result of the impairment test carried out.

There is the risk for the consolidated financial statements that impairment existing as of the reporting date was not identified due to improper determination of the parameters relevant for the evaluation. This includes the risk that improper application of the factors used to identify a single business segment led to an existing need to recognize impairment losses not being identified. There is also the risk that the related disclosures in the notes are not appropriate.

OUR AUDIT APPROACH

Based on our risk assessment of material misstatements we have performed audit procedures to assess the design and implementation as well as test of operating effectiveness of the Company’s processes and controls. Furthermore, we have performed substantive audit procedures. Hence, we have performed the following audit procedures:

We assessed the proper application of the factors used to identify the individual business segment, in particular with regard to the management and reporting structures of the Group, the structure of the variable remuneration components of all the members of the Executive Board as well as a peer group analysis of other listed asset managers. We also assessed, with the help of our valuation specialists, the appropriateness of the significant assumptions and the calculation method used by the Company. To this end, we discussed the expected development of business and earnings as well as the assumed long-term growth rates with those responsible for planning. In addition, we reconciled this information with other internally available forecasts, e.g. the budget prepared by the Executive Board and approved by the Supervisory Board. Furthermore, we evaluated the consistency of assumptions with external market assessments.

Further, we satisfied ourselves of the quality of the Company's forecasts to date by comparing the budgets from previous financial years with the actual results achieved and by analyzing deviations. Since even minor changes to the discount rate can have a material effect on the results of the impairment test, we compared the assumptions and parameters underlying the discount rate, in particular the risk-free rate, the market risk premium and the beta factor, with our own assumptions and publicly available data.

We verified the computational accuracy of the valuation model used by the Company.

In order to take account of the existing forecast uncertainty and the earlier deadline selected for impairment testing, we examined the effects of possible changes in the discount rate, the earnings trend and the long-term growth rates on the recoverable amount (sensitivity analysis), by calculating alternative scenarios and comparing them with the values stated by the Company.

Furthermore, we scrutinized the final analysis of the measurement results made by the Company, including the assessment of the relation between the recoverable amount as well as the carrying amount of equity and the market capitalization.

Finally, we assessed whether the disclosures in the notes regarding impairment of goodwill are appropriate.

OUR OBSERVATIONS

The calculation method used for impairment testing of goodwill is appropriate and in line with the accounting policies to be applied. The Company's assumptions and parameters used for measurement are appropriately derived overall. The factors used to identify a single business segment were applied appropriately. The related disclosures in the notes are appropriate.

Impairment testing of the "Scudder" intangible asset

Please refer to note 2 in the notes to the consolidated financial statements for information on the accounting policies applied and the assumptions used. Disclosures on the amount of other intangible assets can be found under note 12 and information on the economic development of the asset management industry is presented in the section "Economic and Competitive Environment" in the summarized management report.

THE FINANCIAL STATEMENT RISK

As of December 31, 2022, other intangible assets of EUR 741 million consist of contractual agreements granting temporary exclusive rights to manage American mutual funds. These contractual arrangements can be extended without significant costs and, moreover, have a long history of extensions. The Company therefore recognized an intangible asset with an indefinite useful life and reviews annually this assessment.

The "Scudder" intangible asset is tested for impairment annually. In addition, it is tested whenever there is an indication that the intangible asset may be impaired. The test was performed as of September 30, 2022. For this purpose, the carrying amount is compared with the recoverable amount of the contractually agreed exclusive rights. If the recoverable amount is below the carrying amount, an impairment loss is recognized. If the recoverable amount exceeds the carrying amount, an assessment if an indication that an impairment loss recognised may no longer exist or may have decreased and if that results from a change in the estimates used to determine the recoverable amount. The recoverable amount is the higher of the fair value less costs to sell and the value in use of the contractually agreed exclusive rights.

The impairment test of the "Scudder" intangible asset is complex and is based on a number of assumptions that require judgment. These include the asset mix, the expected net changes in cash flows of the managed mutual funds, the effective fee rate, the assumed long-term growth rates and the discount rate used.

As a result of the annual impairment test performed, the Company did not identify any impairment nor reversal of impairment. The Company has identified an indication that the intangible asset may be impaired as of December 31, 2022. As a result, an additional impairment test has been performed. The test resulted in a recoverable amount which was below the carrying amount and for that reason an impairment has been recognized.

There is the risk for the consolidated financial statements that an impairment or reversal of impairment existing at the reporting date was not identified because the valuation method was not implemented appropriately and in accordance with the applicable valuation principles and the assumptions and parameters underlying the valuation were not appropriately derived. There is also the risk that the related disclosures in the notes are not appropriate.

OUR AUDIT APPROACH

Based on our risk assessment of material misstatements we have performed audit procedures to assess the design and implementation as well as test of operating effectiveness of the Company’s processes and controls. Furthermore, we have performed substantive audit procedures. Hence, we have performed the following audit procedures:

We obtained an understanding of the Company's process for deriving assumptions requiring judgment, identifying indications of impairment or reversal of impairment and determining recoverable amounts based on explanations provided by DWS accounting staff.

With the help of our valuation specialists, we assessed, among other things, the appropriateness of the Company's calculation method. To this end, we discussed the assumed long-term growth rates with those responsible for planning and assessed the consistency of the assumptions with external market assessments.

Further, we satisfied ourselves of the quality of the Company's forecasts to date by comparing the budgets from previous financial years with the results actually achieved and by analyzing deviations. We compared the assumptions and parameters underlying the discount rate, in particular the risk-free rate, the market risk premium and the beta factor, with our own assumptions and publicly available data.

In order to take into account the existing forecasting uncertainty for the impairment test, we examined the effects of possible changes in expected net changes in cash flows of the managed mutual funds, the effective fee rate and the assumed long-term growth rates, or the discount rate used, on the recoverable amount by calculating alternative scenarios and comparing them with the Company's figures (sensitivity analysis).

Finally, we assessed whether the disclosures in the notes on the recoverability of the "Scudder" intangible assets are appropriate.

OUR OBSERVATIONS

The valuation methodology underlying the impairment test of the "Scudder" intangible assets is appropriate and consistent with the accounting policies to be applied. The Company's assumptions and parameters on which the valuation is based are generally appropriate. The related disclosures in the notes are appropriate.

Other Information

Management respectively the supervisory board are responsible for the other information. The other information comprises the following components of the summarized management report, whose content was not audited:

- the corporate governance statement, to which reference is made in the summarized management report
- the integrated non-financial group statement, whose disclosures are marked as unaudited, and
- the information that is not typically included in management reports and marked as unaudited

The other information also includes the remaining parts of the annual report. The other information does not include the audited consolidated financial statements, the summarized management report information audited for content and our auditor's report thereon.

Our opinions on the consolidated financial statements and on the summarized management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the summarized management report information audited for content or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If we conclude in the course of our audit that the information included in the other information contains a material misstatement, we are required to report on that. We have nothing to report in this regard.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Summarized Management Report

Management is responsible for the preparation of consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the summarized management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the summarized management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the summarized management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Summarized Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatements, whether due to fraud or error, and whether the summarized management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the summarized management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this summarized management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

– Identify and assess the risks of material misstatement of the consolidated financial statements and of the summarized management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

– Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the summarized management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.

– Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.

– Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the summarized management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

– Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the summarized management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.

- Evaluate the consistency of the summarized management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

- Perform audit procedures on the prospective information presented by management in the summarized management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in the internal control system that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other Legal and Regulatory Requirements

Report on the Assurance in accordance with Section 317 (3b) HGB on the Electronic Reproduction of the Consolidated Financial Statements and the Summarized Management Report Prepared for Publication Purposes

We have performed assurance work in accordance with Section 317 (3b) HGB to obtain reasonable assurance about whether the reproduction of the consolidated financial statements and the summarized management report (hereinafter the “ESEF documents”) contained in the file “DWSGroup-2022-12-31-de.zip” (SHA256-Hashwert: 2425121F702A85CD4FB0AB68C08A075734883996CB27477C15FFC312E1E35E2A) and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format (“ESEF format”). In accordance with German legal requirements, this assurance only extends to the conversion of the information contained in the consolidated financial statements and the summarized management report into the ESEF format and therefore relates neither to the information contained in this reproduction nor any other information contained in the above-mentioned electronic file.

In our opinion, the reproduction of the consolidated financial statements and the summarized management report contained in the above-mentioned electronic file and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format. We do not express any opinion on the information contained in this reproduction nor on any other information contained in the above-mentioned file beyond this reasonable assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying summarized management report for the financial year from January 1, 2022 to December 31, 2022 contained in the “Report on the Audit of the Consolidated Financial Statements and the Summarized Management Report” above.

We conducted our assurance work on the reproduction of the consolidated financial statements and the summarized management report contained in the above-mentioned electronic file in accordance with Section 317 (3b) HGB and the Exposure Draft of the IDW Assurance Standard: Assurance in accordance with Section 317 (3b) HGB on the Electronic Reproduction of Financial Statements and Management Reports Prepared for Publication Purposes (ED IDW AsS 410) and the International Standard on Assurance Engagements 3000 (Revised)]. Accordingly, our responsibilities are further described below. Our audit firm has applied the IDW Standard on Quality Management 1: Requirements for Quality Management in Audit Firms (IDW QS 1).

The company's management is responsible for the preparation of the ESEF documents including the electronic reproduction of the consolidated financial statements and the summarized management report in accordance with Section 328 (1) sentence 4 item 1 HGB and for the tagging of the consolidated financial statements in accordance with Section 328 (1) sentence 4 item 2 HGB.

In addition, the company's management is responsible for the internal controls they consider necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB for the electronic reporting format.

The company's management is also responsible for the submission of the ESEF documents together with the auditor's report and the attached audited consolidated financial statements and audited summarized management report as well as other documents to be published to the operator of the German Federal Gazette [Bundesanzeiger].

The Supervisory Board is responsible for overseeing the preparation of the ESEF documents as part of the financial reporting process.

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB. We exercise professional judgement and maintain professional scepticism throughout the assurance work. We also:

– Identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.

– Obtain an understanding of internal control relevant to the assurance of the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.

– Evaluate the technical validity of the ESEF documents, i. e. whether the electronic file containing the ESEF documents meets the requirements of Commission Delegated Regulation (EU) 2019/815 on the technical specification for this electronic file.

– Evaluate whether the ESEF documents enable an XHTML reproduction with content equivalent to the audited consolidated financial statements and the audited summarized management report.

– Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as auditor at the annual general meeting on June 9, 2022, and engaged by the chairperson of the Audit Committee on February 3, 2023. We have audited DWS Group GmbH & Co. KGaA since its initial public offering in financial year 2018

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

Miscellaneous – Use of this Auditor's Report

Our Auditor's Report must be read in connection with the audited annual financial statements and the audited summarized management report as well as the audited ESEF documents. The annual financial statements and summarized management report transferred to the ESEF format including the version for publishing in the German Federal Gazette are merely electronical reproductions of the audited annual financial statements and audited summarized management report and do not replace them. Especially the ESEF Report and the included opinion therein must be read in connection with the electronic ESEF documents.

German Public Auditor Responsible for the Engagement

The German public auditor responsible for the engagement is Markus Fox.

Frankfurt am Main, March 13, 2023

KPMG AG
Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

[Signature] Fox	[Signature] Anders
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Note: The English language text below is a translation provided for information purposes only. The original German text shall prevail in the event of any discrepancies between the English translation and the German original. We do not accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may arise from the translation.

Limited Assurance Report of the Independent Auditor regarding the Integrated Nonfinancial Group Statement

To DWS Group GmbH & Co. KGaA, Frankfurt am Main

We have performed an independent limited assurance engagement on the integrated non-financial group statement of DWS Group GmbH & Co. KGaA, Frankfurt am Main (further "DWS" or "Company") for the period from January 1 to December 31, 2022.

References made to the Global Reporting Initiative ("GRI") within the integrated non-financial group statement are not subject to our assurance engagement.

Management's Responsibility

The legal representatives of the Company are responsible for the preparation of the integrated non-financial group statement accordance with §§ 315b, 315c in conjunction with 289c to 289e HGB and with Article 8 of REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (further „EU Taxonomy Regulation") and the supplementing Delegated Acts as well as the interpretation of the wordings and terms contained in the EU Taxonomy Regulation and in the supplementing Delegated Acts by the Company as disclosed in Section "[Disclosures on Taxonomy Eligibility in Accordance with Article 8 Taxonomy Regulation and Delegated Act]" of the integrated non-financial group statement.

This responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the integrated non-financial group statement and the use of assumptions and estimates for individual disclosures which are reasonable under the given circumstances. Furthermore, the legal representatives are responsible for the internal controls they deem necessary for the preparation of the integrated non-financial group statement that is free of – intended or unintended – material misstatements.

The EU Taxonomy Regulation and the supplementing Delegated Acts contain wordings and terms that are still subject to substantial uncertainties regarding their interpretation and for which not all clarifications have been published yet. Therefore, the legal representatives have included a description of their interpretation in Section "[Disclosures on Taxonomy Eligibility in Accordance with Article 8 Taxonomy Regulation and Delegated Act]" of the integrated non-financial group statement. They are responsible for its tenability. Due to the innate risk of diverging interpretations of vague legal concepts, the legal conformity of these interpretations is subject to uncertainty.

Independence and Quality Assurance on the Part of the Auditing Firm

In performing this engagement, we applied the legal provisions and professional pronouncements regarding independence and quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

Practitioner's Responsibility

It is our responsibility to express a conclusion on the integrated non-financial group statement for the period from January 1 to December 31, 2022 based on our work performed within a limited assurance engagement.

We conducted our work in the form of a limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information", published by IAASB. Accordingly, we have to plan and perform the assurance engagement in such a way that we obtain limited assurance as to whether any matters have come to our attention that cause us to believe that the integrated non-financial group statement of the Company for the period from January 1 to December 31, 2022 has not been prepared, in all material respects, in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB and with the EU Taxonomy Regulation and the supplementing Delegated Acts as well as the interpretation of the wordings and terms contained in the EU Taxonomy Regulation and in the supplementing Delegated Acts by the legal representatives as disclosed in Section "[Disclosures on Taxonomy Eligibility in Accordance with Article 8 Taxonomy Regulation and Delegated Act]" of the integrated non-financial group statement.

We do not, however, issue a separate conclusion for each disclosure. As the assurance procedures performed in a limited assurance engagement are less comprehensive than in a reasonable assurance engagement, the level of assurance obtained is substantially lower. The choice of assurance procedures is subject to the auditor's own judgement.

Within the scope of our engagement we performed, amongst others, the following procedures for a selection of items:

- Inquiries of group-level personnel who are responsible for the materiality analysis in order to understand the processes for determining material topics and respective reporting boundaries for DWS Group GmbH & Co. KGaA
- A risk analysis, including media research, to identify relevant information on DWS Group GmbH & Co. KGaA's sustainability performance in the reporting period
- Evaluation of the design of systems and processes for the collection, processing and monitoring of disclosures, including data consolidation, on environmental, employee and social matters, respect for human rights, and anti-corruption and bribery as well as on further reported matters
- Inquiries of group-level personnel who are responsible for the design of systems and processes for the collection, processing and monitoring of disclosures, including data consolidation, on environmental, employee and social matters, respect for human rights, and anti-corruption and bribery as well as on further reported matters
- Inquiries of group-level personnel who are responsible for determining disclosures on concepts, due diligence processes, results and risks, performing internal control functions and consolidating disclosures
- Inspection of selected internal and external documents
- Assessment of the overall presentation of the disclosures

In our opinion, we obtained sufficient and appropriate evidence for reaching a conclusion for the assurance engagement.

The legal representatives have to interpret vague legal concepts in order to be able to compile the relevant disclosures according to Article 8 of the EU Taxonomy Regulation. Due to the innate risk of diverging interpretations of vague legal concepts, the legal conformity of these interpretations and, correspondingly, our assurance thereof are subject to uncertainty.

Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the integrated non-financial group statement of DWS Group GmbH & Co. KGaA for the period from January 1 to December 31, 2022 has not been prepared, in all material respects, in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB and with the EU Taxonomy Regulation and the supplementing Delegated Acts as well as the interpretation disclosed in Section "[Disclosures on Taxonomy Eligibility in Accordance with Article 8 Taxonomy Regulation and Delegated Act]" of the integrated non-financial group statement.

References made to the Global Reporting Initiative ("GRI") within the integrated non-financial group statement are not covered by our conclusion.

Restriction of Use/General Engagement Terms

This assurance report is addressed to DWS Group GmbH & Co. KGaA for information purposes and may not be used in any other context than to inform the company about the result of the assurance engagement. In particular, disclosure of this audit opinion to third parties or its use in sales prospectuses or other similar public documents or media is excluded.

Our assignment for the Supervisory Board of DWS Group GmbH & Co. KGaA, Frankfurt am Main, and professional liability as described above was governed by the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 (https://www.kpmg.de/bescheinigungen/lib/aab_english.pdf). By reading and using the information contained in this assurance report, each recipient confirms notice of the provisions contained therein including the limitation of our liability as stipulated in No. 9 and accepts the validity of the General Engagement Terms with respect to us.

Frankfurt am Main, March 13, 2023

KPMG AG
Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

Fox	ppa. Seidel
Wirtschaftsprüfer	

[German Public Auditor]

Compensation Report

Compensation Report

GRI 102-36; 102-37; 102-38; 102-39

The 2022 compensation report for the members of the Executive Board of DWS Management GmbH as the General Partner of the DWS KGaA and the Supervisory Board of the DWS KGaA was prepared jointly by the members of the Executive Board and the Supervisory Board in accordance with Section 162 German Stock Corporation Act.

The compensation report sets out the broad lines of the compensation systems for the members of the Executive Board and the Supervisory Board and provides clear and comprehensible information on the compensation granted and due by DWS KGaA and subsidiaries of the Group to each current and former member of the Executive Board and the Supervisory Board in the 2022 financial year.

The compensation report complies with the current legal and regulatory requirements of the German Stock Corporation Act (AktG), in particular Section 162 (1) and (2) AktG, the Remuneration Regulation for Institutions (Institutsvergütungsverordnung – InstVV) as well as the Investment Firm Directive and its transposition into national law in the German Investment Firm Act (Wertpapierinstitutsgesetz) – WpIG) as applicable. It also takes into account the recommendations of the German Corporate Governance Code and complies with the relevant requirements of the applicable accounting rules for capital market-oriented companies.

Based on Section 162 AktG, the compensation report also provides clear and comprehensible information on the compensation granted and due to each current and former member of the Joint Committee in the 2022 financial year.

Executive Board Compensation

Compensation Governance

DWS Management GmbH is the General Partner of the DWS KGaA. As such, it is responsible for the management of the business of the DWS KGaA. The subject of this section of the compensation report is the compensation for the members of the Executive Board, who represent the General Partner and fulfil its task of managing the business.

Due to DWS Management GmbH's legal form, its shareholders’ meeting is responsible for the structure of the compensation system of the Executive Board of DWS Management GmbH and for the determination of the specific structure as well as the individual amount of compensation. The Joint Committee of DWS KGaA has a right of proposal with respect to the determination of the amount of individual variable compensation. The Joint Committee consists of two members delegated by the shareholders’ meeting (currently two members of the Management Board of Deutsche Bank) and two members delegated by the shareholder representatives on the Supervisory Board.

The shareholders' meeting may resolve to amend the compensation system if necessary. In the case of significant changes, but at least every four years, the compensation system is submitted to the General Meeting of DWS KGaA for approval.

Due to regulatory requirements, the three Executive Board members with responsibility for the Investment, Coverage and Product division each have, in addition to their service contracts with DWS Management GmbH, an additional service contract with a subsidiary of the Group, DWS Investment GmbH. The shareholders’ meeting is solely responsible for the structure of the compensation system and the determination of the individual compensation relating to DWS Management GmbH. However, the total compensation of the Executive Board members includes both the compensation determined by DWS Management GmbH as well as by the subsidiary of the Group consolidated in the Group financial statements, DWS Investment GmbH. For reasons of transparency, the compensation system on which compensation from the subsidiary is based is explained in broad lines in section ‘Executive Board Compensation – Application of the Compensation System in the Financial Year 2022’.

Alignment of Executive Board Compensation with DWS's Strategy

The Executive Board of the Group is responsible for steering and controlling the entire Group. The compensation system for the Executive Board plays a vital role in promoting and implementing the Group's long-term strategy and developing a value-based, sustainable management system aligned with shareholder interests. An additional objective of the compensation system is to offer Executive Board members a market-oriented, competitive compensation package in balance with statutory and regulatory conditions and the principles of good corporate governance.

The following principles in particular have been taken into consideration in the development of the compensation system and the determination of individual variable compensation:

General principles of the compensation

Promoting DWS Group's strategy	The strategy of the Group forms the basis for the definition of the relevant and at the same time ambitious objectives. The level of target achievement determines the level of compensation. Excellent performance can thus be rewarded appropriately, while a failure to achieve objectives results in the reduction of variable compensation, up to and including complete forfeiture (pay for performance).
Focus on long-term group performance	Long-term objectives and performance parameters as well as variable compensation granted on a largely deferred basis guarantee a forward-looking, sustainable work to promote further success and positive business development.
Sustainability: the focus of action	Responsible and sustainable action are of paramount strategic importance. For that reason, the performance parameters of the compensation system are closely linked with DWS's ESG/sustainability strategy.
Consideration of the shareholders' interests	Clearly defined key financials that are aligned with the performance of the DWS Group, which directly determine the setting of the variable compensation and the granting of variable compensation in the form of share-based components ensures that variable compensation is closely aligned with the performance of DWS shares and shareholder interests.
Motivating collective and individual performance	Ambitious and motivating individual objectives in the Executive Board member's area of responsibility and consideration of the performance of the Executive Board as a whole promote a successful and dynamic environment.

Compensation-related Events in 2022

Annual General Meeting 2022 approval of the compensation report for the previous financial year

The compensation report prepared in accordance with the requirements of Section 162 of the AktG on the compensation granted and owed in the financial year 2021 to the current and former members of the Executive Board and the Supervisory Board by DWS KGaA and group companies was approved by the Annual General Meeting of DWS KGaA on 9 June 2022 by a majority of 97,61% pursuant to Section 120a (4) AktG. The format of the report will therefore also be maintained in principle for this compensation report for the financial year 2022. The section 'Executive Board Compensation – Application of the Compensation System in the Financial Year 2022 – Long-Term Award' has been revised in the presentation with the aim of better comprehensibility and transparency.

Composition of the Executive Board

In the 2022 financial year, the following changes in personnel occurred: Dr Asoka Woehrmann resigned as Chairman of the Executive Board with effect from the end of the Annual General Meeting on 9 June 2022. Dr Stefan Hoops has been appointed Chairman of the Executive Board for a period of three years from 10 June 2022. As of 1 November 2022, Dr Karen Kuder was appointed as a member of the Executive Board and Chief Administrative Officer for a period of three years. The new CAO division consists of Legal, AFC and Compliance and all control functions previously located in the COO division. Mark Cullen resigned as a member of the Executive Board and Chief Operating Officer with effect from end of 31 December 2022. Angela Maragkopoulou has been appointed as new COO and member of the Executive Board as of 1 January 2023. The new COO division will focus on Technology and Operations, Data, and Business Services. Stefan Kreuzkamp resigned as a member of the Executive Board and Chief Investment Officer as well as Head of the Investment Division with effect from end of 31 December 2022. Dr Stefan Hoops has taken over responsibility for the Investment Division since 1 January 2023. The Executive Board thus comprised six members in the 2022 financial year from January to October and seven members from November to December. From 1 January 2023, it will be composed of six members. The number of woman in the Executive Board was one until October and from November there were two. From 1 January 2023 there will be three women, equal to 50% of the total board members. The mandate of Manfred Bauer was extended for a further three years from 1 July 2023 until 30 June 2026.

Compensation decisions in 2022

For the two new members of the Executive Board, Dr. Stefan Hoops and Dr. Karen Kuder, appointed in 2022, the shareholders' meeting has set a target total compensation in accordance with the compensation system. Both the market environment taking into account comparable companies (peer groups) and the scope of responsibility as well as the positioning of the respective role within the Executive Board were included in the analysis. In addition, due to the change of the two new members from Deutsche Bank AG, the previous compensation conditions were also taken into account.

An external and independent compensation consultant was consulted to review the appropriateness of the overall compensation for the respective roles. Based on compensation market data of international asset managers, which is also used in the regular review of the appropriateness of the overall compensation, the shareholders' meeting determined the compensation as follows: The target total compensation of the Chairman of the Executive Board was set at € 6,800,000 per year. This amount consists of a base salary of € 2,800,000 and a target variable compensation of € 4,000,000 per year. The target total compensation for the new role of CAO is € 1,450,000. This sum consists of the base salary of € 950,000 per year and a target variable compensation of € 500,000.

Approval of the Compensation System by the 2021 Annual General Meeting

The current compensation system for the members of the Executive Board was submitted for approval to the Annual General Meeting of DWS Group on 9 June 2021, in accordance with Section 120a (1) AktG and approved by a majority of 99.21%.

Detailed information on the compensation system is published on the DWS's website (Compensation system for the Managing Directors of the General Partner.pdf).

The compensation system was implemented within the framework of the Executive Board service contracts and applied to all members of the Executive Board active in the 2022 financial year.

Deviations from the Compensation System

The shareholders' meeting in the 2022 financial year did not make use of the possibility provided for in the compensation system pursuant to Section 87a (2) sentence 2 AktG to temporarily deviate from individual components of the system in special, extraordinary situations.

Principles of Compensation Determination

Compensation Structure

Compensation for Executive Board members consists of non-performance-related (fixed) and performance-related (variable) components. The fixed and variable compensation together constitute an Executive Board member's total compensation. The shareholders' meeting defines target and maximum amounts for all compensation components. The total compensation of all Executive Board members is furthermore subject to additional caps.

Non-performance related component (fixed compensation)

The fixed compensation comprises a base salary, contributions to a pension plan and fringe benefits.

Base salary

Base salary is determined based on the position held by an Executive Board member and the associated shared responsibility for management. In addition, the duration of membership in the Executive Board is taken into account by the ability to set a higher base salary for Executive Board members upon reappointment. Furthermore, the amount of the base salary offered depends on the relevant market conditions. In the light of regulatory requirements, a cap for variable compensation amounting to 200% of fixed compensation is factored in; therefore, fixed compensation is determined in such a way that a competitive and market-oriented total compensation can be ensured even while taking these requirements into account.

The base salary currently amounts to € 2,800,000 per year for the Chairman of the Executive Board and between € 950,000 and € 1,250,000 per year for the other Executive Board members. It is paid in twelve equal monthly instalments.

Fringe benefits

Furthermore, all Executive Board Members are entitled to receive “fringe benefits”. They consist on the one hand of contractually agreed regularly recurring benefits such as contributions to insurance policies, coverage of costs for participation in medical check-ups and – for Executive Board members based in Germany – a company car option on the basis of the applicable Company Car Policy of Deutsche Bank Group. In addition, Executive Board members not resident in Germany may be granted certain ad-hoc benefits, such as reimbursement of costs for preparing income tax returns.

The availability and individual utilization of fringe benefits may vary depending on location and personal situation, which is why the amount of fringe benefits cannot be precisely determined at the beginning of a year. However, the cap on total compensation (maximum compensation) pursuant to Section 87a (1) sentence 2 number 1 AktG (maximum compensation) may in total not be exceeded by these benefits.

Company pension plan

In addition, Executive Board members receive a commitment to pension benefits under the defined contribution pension plan offered to DWS employees in Germany.

For each of the Executive Board members a fixed annual value in the amount of € 90,000 and € 300,000 for the Chairman of the Executive Board is contributed to the pension plan. The annual contribution is invested in selected investment funds. Furthermore, an additional risk contribution of € 10,000 is provided to cover the risk of early pension events. The sum of the market values of the investments forms the pension amount available to be paid as pension benefit in case of a pension event (age limit, invalidity or death).

Executive Board members domiciled outside of Germany who pay taxes on their income outside Germany may opt for a pension allowance in lieu of the pension plan commitment; the allowance is equivalent to the annual contribution to the pension provision.

Performance-related component (variable compensation)

Variable compensation is performance-related and is granted as either the Short-Term Award or the Long-Term Award, depending on the tenure of the relevant objectives. For variable compensation, the objectives and performance parameters are defined at the beginning of a fiscal year; the extent to which the objectives are achieved determines the amount of variable compensation. This always ensures a close link between performance and compensation.

Short-Term Award

The Short-Term Award is used to reward the achievement of individual and divisional objectives of an Executive Board member. The performance criteria on which the Short-Term Award is based are short-term objectives for a financial year. The agreed objectives support DWS's business and strategic objectives and are aligned with the individual Executive Board members' areas of responsibility and the specific challenges associated with it.

The Short-Term Award is determined based on the objectives listed in the individual Balanced Scorecard as well as on up to three further individual objectives. The portion of the Short-Term Award determined by the Balanced Scorecard accounts for 20% of the performance evaluation. The additional individual objectives account for an equivalent share of the Short-Term Award. The sum of the Balanced Scorecard and the additional individual objectives amounts to 40% of the total reference variable compensation.

The target amounts of the Short-Term Award based on a year-round full-time employment at 100% achievement grade are currently between € 200,000 and € 1,600,000. The maximum possible level of target achievement is capped uniformly at 150%.

Long-Term Award

The focus of assessment of variable compensation lies on the achievement of long-term and strategic objectives. The Long-Term Award, which covers the long-term strategic targets, uniformly comprising 60% of the total reference variable compensation.

The Long-Term Award consists mainly of the DWS Group component linked in accordance with the strategy of the Group to three selected performance indicators as key metrics for the success and growth of the business: Adjusted cost-income ratio (CIR), net flows (as a percentage of assets under management (AuM)), and Environmental, Social and Governance (ESG) footprint. Each of the three aforementioned objectives is weighted at a fixed percentage of the reference size for the DWS Group component by the shareholders' meeting. This reference size amounts to a total of 50% of the total reference variable compensation.

Due to regulatory requirements, the overall performance of Deutsche Bank Group must also be taken into account when determining the variable compensation. For this reason, collective objectives are linked additionally to the Deutsche Bank Group strategy and performance. In accordance with this strategy, four performance metrics of the Deutsche Bank Group form the reference value for the **Deutsche Bank Group component** of the Long-Term Award: Two of them, the Common Equity Tier 1 (CET1) capital ratio and post-tax return on tangible equity are unchanged compared to 2021 financial year. New objectives are the cost-income ratio (CIR) and a sustainable finance volume metric. The four aforementioned objectives specified are equally weighted within the Deutsche Bank Group component. The Deutsche Bank Group component accounts for 10% of the total reference variable compensation.

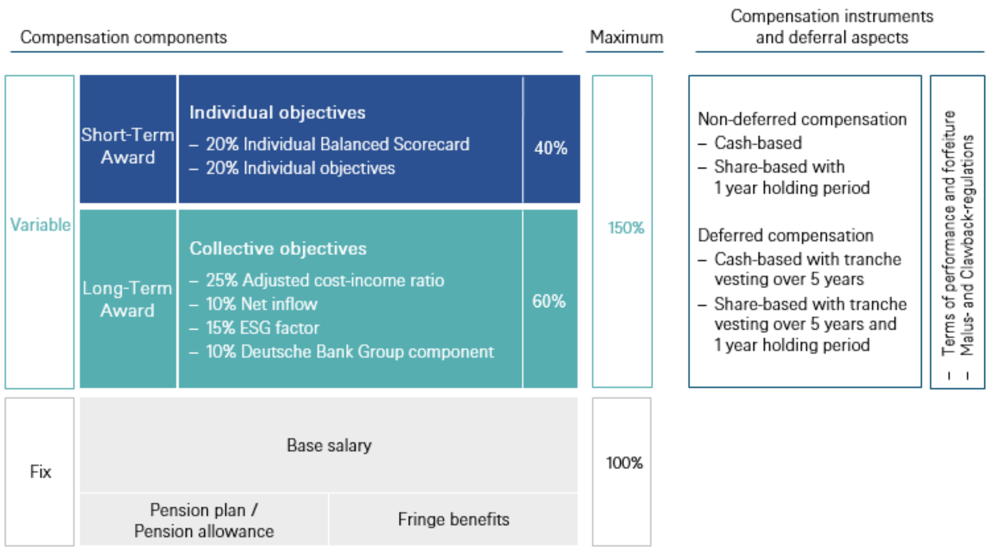
The target amounts of the Long-Term Award based on a year-round full-time employment at 100% achievement grade are currently between € 300,000 and € 2,400,000. The maximum possible level of target achievement is uniformly capped at 150%.

Compensation instruments and deferral periods

The defined variable compensation for Executive Board members can be granted entirely on a deferred basis, subject to a minimum deferral of 60%; this ensures that the sustainability of success is adequately taken into account in the business and risk strategy and leads to a long-term incentive effect of variable compensation. Moreover, more than half of the total variable compensation is granted in the form of share-based instruments, the value of which is linked to DWS's share price performance.

The deferred compensation instruments are subject to additional performance and forfeiture conditions which can result in the full or partial forfeiture (malus). In addition, the shareholders' meeting may reclaim already paid variable compensation under certain circumstances (clawback). Variable compensation awarded for a fiscal year is disbursed over a period of one up to six years.

Overview of the compensation system



Further rules: Maximum compensation as well as commitments and benefits in connection with the start and end of the activity.

Composition of the Target Total Compensation and Compensation Caps

In accordance with the compensation system, the shareholders' meeting defines a target total compensation for each Executive Board member.

In order to take appropriate account of factors such as competition and the market environment as well as the various areas of responsibility and the requirements of the respective position and duration of membership in the Executive Board, the compensation system allows for differentiation with respect to the amount of the target total compensation and the ratio of fixed to variable compensation components. The relative shares of the compensation components in the annual target total compensation are determined in the following ranges due to the differentiation:

Compensation components and relative share

	Relative share of total compensation in %	
Compensation components	CFO, COO, CAO[1] and Head of Product Division	CEO, Head of Investment and Head of Coverage Division
Long-term award	19 - 32%	29 – 35%
Short-term award	13 - 21%	19 - 24%
Base salary	42 - 63%	38 - 48%
Pension contribution/pension allowance	3 - 6%	1 - 5%
Regular fringe benefits	1%	1%
Reference total compensation	**100%**	**100%**

[1] New function since November 2022.

The total compensation is furthermore subject to additional caps which are to be reviewed when determining the compensation:

Pursuant to Section 87a (1) sentence 2 number 1 AktG, the shareholders' meeting set a limit (maximum compensation) for total compensation for the Executive Board members amounting to € 9.85 million each. This cap comprises not only base salary and variable compensation but also regular and ad-hoc fringe benefits and pension service costs for company pension plan or pension allowances.

Pursuant to the Capital Requirements Directive applicable to the financial sector as implemented by Section 25a (5) of the German Banking Act (Kreditwesengesetz – KWG) and Section 6 InstVV, the ratio of fixed to variable compensation is capped at 1:1, i. e., the amount of variable compensation may not exceed the fixed compensation. The shareholders' meeting has utilized the option provided by law and resolved to increase the upper limit for the ratio of fixed to variable compensation to 1:2.

The shareholders' meeting defines a target and a maximum amount for variable components. The maximum possible level of target achievement for short-term as well as long-term variable compensation components is limited uniformly to 150% of the respective target amount. If the level of target achievement exceeds that amount, short-term as well as long-term variable compensation determined at the end of the year is limited to 150% of the reference variable compensation.

If, after determining target achievement, variable or total compensation is calculated to exceed one of the above-mentioned caps, the variable compensation will be reduced accordingly by an equal percentage reduction in the Short-Term and Long-Term Awards until the amount of variable or total compensation meets the limit.

In the following table all target and maximum amounts for the variable compensation elements as well as the base salary for each Executive Board member in the financial year 2022 based on a year-round full-time employment is shown. The maximum amounts of short-term as well as long-term variable compensation components were set uniformly at 150% of the respective target amount according to the maximum possible level of target achievement.

Target and maximum amounts[1]

					2022	2021
in €	Base salary	Short-Term Award	Long-Term Award[2]	Variable compensation	Total compensation	Total compensation
Chief Executive Officer and Head of Executive Division[3]						
Target value	2,800,000	1,600,000	2,400,000	4,000,000	6,800,000	6,000,000
Maximum value	2,800,000	2,400,000	3,600,000	6,000,000	8,800,000	7,800,000
Chief Financial Officer and Head of CFO Division						
Target value	1,200,000	320,000	480,000	800,000	2,000,000	2,000,000
Maximum value	1,200,000	480,000	720,000	1,200,000	2,400,000	2,400,000
Chief Operating Officer and Head of COO Division						
Target value	1,250,000	620,000	930,000	1,550,000	2,800,000	2,800,000
Maximum value	1,250,000	930,000	1,395,000	2,325,000	3,575,000	3,575,000
Head of Chief Administrative Officer Division[4]						
Target value	950,000	200,000	300,000	500,000	1,450,000	–
Maximum value	950,000	300,000	450,000	750,000	1,700,000	–
Chief Investment Officer and Head of Investment Division[5]						
Target value	1,250,000	700,000	1,050,000	1,750,000	3,000,000	3,000,000
Maximum value	1,250,000	1,050,000	1,575,000	2,625,000	3,875,000	3,875,000
Head of Client Coverage Division[5]						
Target value	1,200,000	480,000	720,000	1,200,000	2,400,000	2,400,000
Maximum value	1,200,000	720,000	1,080,000	1,800,000	3,000,000	3,000,000
Head of Product Division[5]						
Target value	950,000	200,000	300,000	500,000	1,450,000	1,450,000
Maximum value	950,000	300,000	450,000	750,000	1,700,000	1,700,000

[1] Values are annualised values.
[2] The Long-Term Award accounts for 60% of the total reference variable compensation, 50% are determined by the DWS Group component and 10% by the Deutsche Bank Group component.
[3] For further details on the determination of compensation data in 2022 for this function, please refer to section 'Compensation related events 2022'.
[4] New function since 1 November 2022. For further details on the determination of compensation data in 2022, please refer to section 'Compensation related events 2022'.
[5] Due to regulatory requirements, the current function holders have another employment contract with a subsidiary within the Group. For reasons of comparability, the values given refer to full-time employment throughout the year.

Application of the Compensation System in the Financial Year 2022

Non-performance Related Component (Fixed Compensation)

The fixed components of compensation in the form of base salary, fringe benefits and pension contributions or allowances were granted in the financial year as non-performance related and in accordance with the compensation system based on the individual contractual commitments and individual utilization.

The Supervisory Board of DWS KGaA has agreed to bear reasonable costs for the necessary legal advice and support for the Executive Board members in the current investigations affecting the company. Furthermore, in those cases where the assumption of costs represents a benefit in kind in the tax sense, the Supervisory Board of DWS KGaA has decided that the company will assume the income tax for the benefit in kind economically.

Performance Related Component (Variable Compensation)

The variable performance-related compensation for the 2022 financial year was determined by the shareholders' meeting following the proposal of the Joint Committee based on the achievement of the pre-defined and agreed financial and non-financial objectives. For all targets, demanding and ambitious target and maximum values as well as performance parameters for the 2022 financial year were defined, from which the level of achievement of the targets could be transparently derived. The range of possible target achievement was between 0% and 150%.

Short-Term Award

The Short-Term Award is determined based on the results of the individual Balanced Scorecard as well as on the achievement of individual objectives.

Individual Balanced Scorecard

The Balanced Scorecard is a tool used to steer and control key performance indicators (KPIs) and renders it possible to measure the achievement of strategic objectives. At the same time, it offers an overview of the priorities set throughout the entire Group. The Balanced Scorecard contains key financial as well as non-financial performance indicators in a balanced ratio. In accordance with strategic priorities, aspects such as environmental, social and governance considerations are also taken into account – for instance, sustainable finance and products, regulatory requirements and corporate culture.

Balanced Scorecard (illustrative representation)

¹ Resulting bands of KPI categories: Green (100-150%), Green to amber (75-125%), Green to red (50-100%), Amber to red (25%-75%), Red (0%-50%).

These performance indicators are bundled into five categories associated with the business model of an asset manager. The categories are individually weighted depending on the respective area of responsibility of the Executive Board members. Clear financial and non-financial objectives are set for all performance indicators; these can be reviewed at any time based on defined metrics and are measured transparently at the end of each fiscal year.

The level of achievement of the targets is translated into a percentage target achievement for each category at the end of the year, taking into account predefined lower and upper limits. The target achievement level of the individual Balanced Scorecards for each Executive Board member is calculated based on the respective percentage of target achievement and the individual weightings of the individual categories.

The Balanced Scorecard achievement levels were between 98% and 120% in the reporting year 2022.

Individual objectives

Up to three additional individual objectives are agreed between the shareholders' meeting and each Executive Board member as part of the annual objective setting process for each fiscal year. The objectives consider the respective area of responsibility and can be directly influenced. Thus, depending on the specific strategic and operational challenges for each individual Executive Board member, they play a key role in implementing the overall strategy of the Group.

The objectives balance financial and non-financial objectives, with at least one of them relating to the ESG strategy. Objectives may cover strategic projects and initiatives as well as operational activities if they lay the groundwork for the structure and organization of DWS and its long-term development.

For the 2022 financial year, the shareholders' meeting has defined targets from the following subject areas topics for the members of the Executive Board and combined them with relevant and concrete evaluation criteria as well as a weighting:

Individual objectives 2022

Member of the Executive Board	Individual Objectives
Dr Stefan Hoops[1]	– Takeover of the CEO role and ensure continuity in the execution of strategic corporate agenda – Driving sustainability as core principle for the Group under particular consideration of reputational risks – Elaborate and execute inorganic growth options for the Group
Manfred Bauer	– Delivering on the implementation of MIFID II Sustainability requirements in line with regulatory deadlines – Delivering on profitable growth through execution of prioritized growth initiatives for 2022 – Delivering on product pipeline 2022 in line with the Product Launch Framework
Mark Cullen	– Drive execution of the standalone infrastructure program and an asset management focussed policy framework – Leading cost management efforts with focus on CIR – Design and Implement Project Plan to deliver operational Net Zero in 2030
Dirk Goergen	– Engagement with clients on sustainable investments across all asset classes – Execution of the transfer of the DIP platform into an external partnership – Further developing of culture and mindset within the Client Coverage Division
Stefan Kreuzkamp	– Develop Implementation Plan for portfolio Net Zero – Establish new organisational structure in the Investment division – Succession planning for DWS's main revenue contributors
Dr Karen Kuder[2]	– Takeover of the new CAO role – Resolve greenwashing allegations against the Group together with supervisory authorities – Further developing CAO control functions and governance on more independence of the Group
Claire Peel	– Ensure stringent risk management and adherence to regulatory changes, including embedding sustainability efforts into risk management and finance processes – Execute standalone infrastructure for the CFO Division, with partnership from Deutsche Bank and Technology – Representation of the firm on external industry bodies

[1] Member since 10 June 2022.
[2] Member since 1 November 2022.

To determine the respective level of target achievement, contribution to the Company was measured based on pre-defined milestones and deliverables, measurable indicators or feedback from internal and external partners on the one hand. On the other hand, it was also assessed how the member of the Executive Board embodies DWS's values and beliefs in the day-to-day conduct. In particular, feedback from the various control functions such as Anti-

Financial Crime (AFC), Audit, Compliance, Human Resources and Risk is also taken into account.

The Individual objective achievement levels were between 95% and 135% in the reporting year 2022.

Overall achievement of Short-Term Award objectives

The portion of the Short-Term Award determined by the Balanced Scorecard as well as the additional individual objectives account for an equivalent share of 50% each of the performance evaluation of the Short-Term Award.

Taking into account the respective level of target achievement of the Balanced Scorecard and the individual objectives, the following overall target achievement levels and amounts result in the Short-Term Award:

Overall achievement levels Short-Term Award

	Target Value (in €)	Overall achievement level Short-Term Award (in %)	Overall achievement Short-Term Award (in €)
Dr Stefan Hoops[1]	893,333	127.5	1,139,000
Manfred Bauer[2]	80,000	115.5	92,400
Mark Cullen	620,000	104.0	644,800
Dirk Goergen[2]	192,000	117.5	225,600
Stefan Kreuzkamp[2]	280,000	96.5	270,200
Dr Karen Kuder[3]	33,333	115.0	38,333
Claire Peel	320,000	115.5	369,600
Dr Asoka Woehrmann[4]	1,440,000	100.0	1,440,000

[1] Member since 10 June 2022.
[2] The values given refer to the DWS Management GmbH contract (40% working time allocation).
[3] Member since 1 November 2022.
[4] Member until 9 June 2022. Assignment contract ends 31 January 2023 therefore the compensation data refer to the entire 2022 financial year. The overall achievement level Short-Term Award was determined within the framework of the termination agreement.

Long-Term Award

The performance criteria on which the Long-Term Award is based consist of collective long-term objectives which were consistently defined for all Executive Board members. For 2022 financial year the shareholders' meeting determined the target values as well as lower and upper limits and the achievement grade matrix, from which the level of target achievement is determined at the end of the year.

DWS Group component

In accordance with Group's strategy, the shareholders' meeting has selected the following three performance indicators:

- Adjusted cost-income ratio (CIR) (weight 50%)
- Net flows (as a percentage of assets under management (AuM) (weight 20%)
- Environmental, Social and Governance (ESG) footprint (weight 30%)

Based on the communicated medium-term targets by 2024 as well the ESG footprint ambitions, ambitious targets for 2022 were defined, the success of which was measured at the end of the year on the basis of the defined assessment matrix of 2022 as follows:

Overall achievement DWS Group component 2022

Objectives		Medium-term targets / ambitions as at 31 December 2022	Weight	Result	Target achievement level	Achievement level (weighted)
Adjusted cost-income ratio		Adjusted cost-income ratio of 60% in the medium term to 2024	50%	60.6%	95%	47.5%
Net flows		Net flows of >4% (as % of beginning of period AuM on average in the medium term) in the medium term to 2024	20%	€ (20) bn.	0%	0.0%
Environmental, Social and Governance (ESG) footprint[1]			30%		108%	32.4%
Thereof:						
Environment	ESG net flows[2]	Grow ESG net flows at the same, or at a faster rate, than our overall flow target of >4% of AuM	6%	€ 1 bn.	20%	1.2%
	Sustainability rating (CDP)	Maintain or improve our CDP B rating by 2024	6%	A-	140%	8.4%
	Travel emissions reduction (air and rail)[3]	Reduce our travel emissions by 25% by 2022 compared to 2019	6%	(49)%	150%	9.0%
Social	CSR volunteer minutes per employee	Perform 1.5 hours of volunteering on average per employee by 2024	6%	84 minutes	120%	7.2%
Governance	Ethic, conduct and speak-up culture[4]	N/A	6%	77%	110%	6.6%

[1] To improve understandability and transparency, the number of collective ESG objectives was reduced from six to five following removal of "energy consumption" which previously had a 1% weighting. The remaining ESG objectives are now equally weighted.
[2] ESG net flows are derived from the ESG Framework, with ESG net flows being included only at the point from which products are classified as ESG under this framework. Any products that are declassified as ESG under this framework will no longer be included from that point in time. The growth of ESG net flow is calculated as % of beginning of period ESG AuM on average in the medium term.
[3] Rail emissions are determined on a pro-rata average number of effective staff employed (full-time equivalent) basis from Deutsche Bank Group data. DWS flight data is sourced from Deutsche Bank Group and the associated air emissions are calculated using Deutsche Bank Group methodology.
[4] The percentages figure reflects the level of agreement in a predefined set of questions asked within the Annual People Survey. The survey is conducted on a platform hosted by an external company.

Adjusted cost-income ratio (CIR)

The adjusted cost-income ratio underscores the consistent focus of the Group's management on further increasing operational efficiency and cost control in order to generate long-term growth and maximize shareholder value.

The adjusted cost-income ratio (adjusted for litigation expenses, restructuring costs and severance packages as well as costs incurred in the context of transformation) with 60.6% for 2022 was at a good level and was in line with the medium-term financial target of 60% by 2024.

Net flows

Net flows represent assets acquired or withdrawn by clients within a specified period. Inflows and outflows constitute a key driver of change in assets under management. For that reason, this financial indicator has represented a key yardstick for measuring the organic growth of the Group since its IPO.

Net flows were at € (20) billion in the extraordinarily challenging environment of 2022. High-margin Alternatives generated net inflows in 2022, while Cash products, Active (ex Cash) and Passive could not withstand the industry-wide pressure on flows and suffered net outflows.

Environmental, Social and Governance (ESG) footprint

The Group's strategic direction remains committed to sustainability with a focus on climate change and stakeholder engagement.

The following collective ESG objectives and targets were achieved in 2022:

Under environmental aspects ESG net flows of € 1.0 billion were achieved, despite a challenging market environment. In 2022, the Group improved its sustainability CDP rating to A- compared to B in the previous year. Emissions from travel (air and rail) continued to be significantly reduced versus a 2019 baseline.

Social aspects are used as a benchmark for a corporate culture that actively promotes social commitment, striving to achieve a broad-based involvement of the Group's employees in projects relating to corporate social responsibility (CSR) with partner organizations. The resumption of physical volunteering activities in 2022 led to a significant increase in volunteer hours compared to 2021.

Corporate governance aspects relate to ethical conduct, integrity and a speak-up culture as a component of the annual employee survey. In particular, the aim is to gain insight into and assess attitudes towards leadership and to develop a culture of open dialogue. The level of agreement achieved in 2022 was 77%.

For further details on the targets, please refer to the sections 'Our Strategy and our Market – Our Strategy – Internal Management System', 'Our Performance Indicators – Our Financial Performance' and 'Sustainability KPIs' in the section 'Our Responsibility – Sustainable Action' in the 'Summarized Management Report' of the DWS Annual Report 2022.

Overall achievement DWS Group component

From the aforementioned target achievements and taking into account the respective share of the three objectives, a calculated level of target achievement of 79.9% was determined for the DWS Group component.

Deutsche Bank Group component

The overall performance of Deutsche Bank Group which is to be taken into account when determining variable compensation due to regulatory requirements, is determined by the following performance indicators:

Overall achievement Deutsche Bank Group component 2022[1]

Objectives		Target value	Result	Target achievement level
Common Equity Tier 1 capital ratio	The bank's Common Equity Tier 1 capital, as a percentage of the risk weighted assets for credit, market and operational risk	>=13.0%	13.4%	80.0%
Post-tax return on tangible equity	Net income (or loss) attributable to shareholders as a percentage of average tangible shareholders' equity; the latter is determined by deducting goodwill and other intangible assets from shareholders' equity	8.0%	9.4%	
Cost-income ratio	Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income	70.0%	75.0%	
Sustainable finance volume	Volume of new financing, capital markets issuance and investments facilitated across Corporate Bank, Investment Bank and Private Bank in 2022, as defined under the "Sustainable Finance Framework – Deutsche Bank Group"	€ 80.0 bn.	€ 74.2 bn.	

[1] Further information on the results of the Deutsche Bank Group Component can be viewed in the Deutsche Bank Annual Report.

The overall level target achievement in 2022 of all four equally weighted objectives of Deutsche Bank Group component was 80%.

Overall achievement of Long-Term Award objectives

The DWS Group component accounts for 50% and the Deutsche Bank Group component accounts for 10% in the performance measurement of the variable compensation.

In summary, the Long-Term Award results in the following overall levels of target achievement, taking into account the respective levels of target achievement as well as the portion of the targets in the DWS respectively Deutsche Bank Group component:

Overall target achievement level Long-Term Award

Components and Reference Sizes			Objectives	Achievement level (weighted)	Overall achievement
Long-Term Award	DWS Group Component	50%	Adjusted cost-income ratio	47.5%	79.9%
			Net flows (% of BoP AuM)	0.0%	
			Environmental, Social and Governance (ESG) footprint	32.4%	
	Deutsche Bank Group Component	10%	CET1 ratio / post-tax return on tangible equity / cost-income ratio / sustainable finance volume	80.0%	80.0%

Appropriateness of Compensation

The shareholders' meeting regularly reviews the appropriateness of the compensation system, the individual compensation components as well as the overall compensation.

It ensures that the compensation is market-oriented and appropriate for comparable companies and takes into account both the size and international business model of DWS as well as its economic position and profitability.

To that end, external and internal benchmark studies are performed to assess whether compensation is in line with the market:

Horizontal – external benchmarking

Given the Group's international orientation, the review of market conformity of total compensation is based on compensation market data of international asset managers that are comparable in terms of assets under management and number of employees. The comparison factors in the compensation levels and structures. In addition, compensation is benchmarked against companies in Germany listed on the SDAX and MDAX which are comparable in terms of market capitalization.

Vertical – internal benchmarking

Furthermore, the shareholders' meeting considers the development of Executive Board compensation by way of a vertical comparison. It examines the ratio of average compensation of the members of the Executive Board to the average compensation of the first management level below the Executive Board and the employees of the Group worldwide over time. The workforce comprises non-tariff and tariff employees.

The review of appropriateness for the 2022 financial year has shown that the compensation resulting from the achievement of targets for the 2022 financial year is appropriate.

Compliance with the Cap on Total Compensation (Maximum Compensation)

The cap for total compensation for the Executive Board members amounting to € 9.85 million each set by the shareholders' meeting pursuant to Section 87a (1) sentence 2 number 1 AktG was met in 2022 financial year.

Multi-year Variable Compensation

In accordance with the InstVV and the applicable provisions relating to AIFMD/UCITS V, at least 60% of total variable compensation is granted to Executive Board members in deferred form. Up to 100% of the variable compensation offered may be granted on a deferral basis.

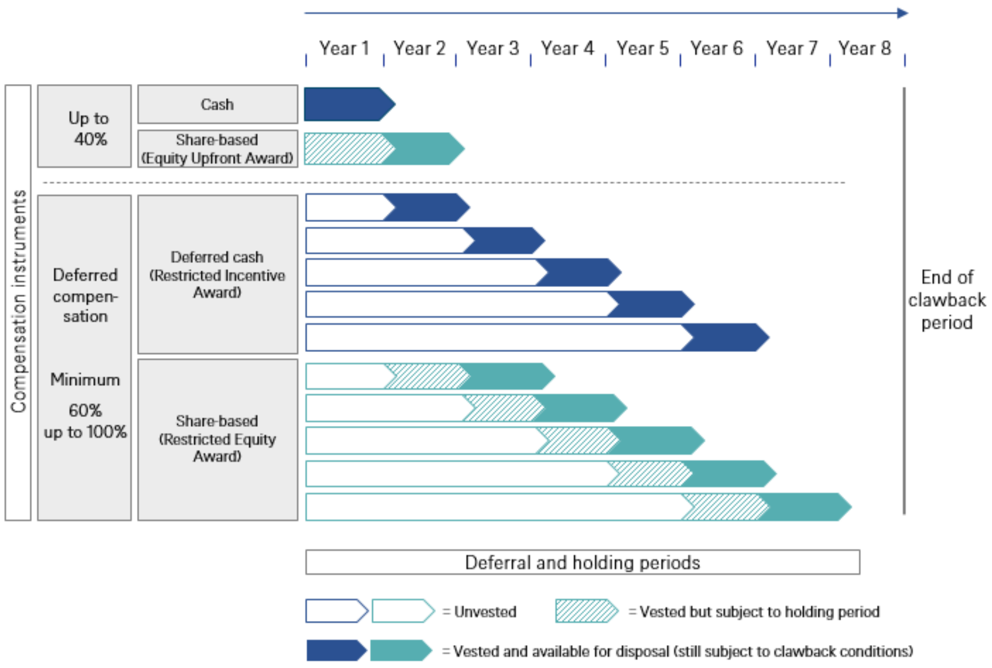
More than half of the deferred compensation is granted in the form of share-based instruments (DWS Restricted Equity Award) while the remainder is granted as deferred cash compensation (DWS Restricted Incentive Award). The DWS Restricted Incentive Award may also be replaced, in whole or in part, with an award under the DWS Employee Investment Plan – Elected Employee Investment Plan Award, which will track the value of selected underlying DWS investment funds. The deferred components of compensation, whether granted as DWS Restricted Equity Award, DWS Restricted Incentive Award or Elected Employee Investment Plan Award, vest in equal annual tranches over a five-year period. Each tranche of the DWS Restricted Equity Award is subject to an additional holding period of one year after vesting.

Additionally, more than half of non-deferred compensation is awarded in the form of share-based instruments (DWS Equity Upfront Award). The DWS Equity Upfront Award is also subject to an additional holding period of one year. Only the remaining amount of the non-deferred compensation can be paid out immediately in cash.

Of the total variable compensation, less than 20% may be paid out in cash immediately, while more than 80% are paid at a later date. Variable compensation awarded for a fiscal year is disbursed over a period of up to six years. Only then may Executive Board members dispose over the full amount of the variable compensation granted to them for a fiscal year. Payment is made after the expiry of the respective deferral or holding period of each tranche.

During the vesting and holding period, the value of the DWS Equity Award depends on the share price performance of DWS shares and thus on the sustainable performance of the Group, thereby establishing a link between compensation of Executive Board members and the success of the company. The value of any Elected Employee Investment Plan Award (where applicable) depends on the value of the selected underlying DWS investment funds.

Overview of award instruments and deferral periods (illustrative representation)



Performance and forfeiture conditions and clawback

The variable compensation components are subject to special performance and forfeiture conditions during the deferral and holding periods; these conditions can result in a partial reduction to the forfeiture in full of the variable compensation granted but not yet paid out. This ensures that appropriate consideration is given to the sustainability of the success of the business and risk strategy and ultimately provides a long-term incentive for variable compensation granted to Executive Board members.

In particular, the following events can result in the partial or complete forfeiture (malus rule):

– Failure to comply with certain performance conditions set at DWS Group's level, such as DWS Group’s pre-tax profit, regulatory own funds requirements under the Investment Firm Regulation (EU) 2019/2033 (IFR) and DWS’s capital adequacy in line with DWS Group´s risk appetite statement.
– Failure to comply with certain performance conditions set at Deutsche Bank Group’s level, such as reporting an after-tax operating loss or exceeding certain capital adequacy requirements. Further information on the Deutsche Bank Group performance conditions can be viewed in the Deutsche Bank Group Annual Report.
– Misconduct on the part of individual Executive Board members, such as breach of internal or external rules and regulations, termination for cause or negative individual contributions to performance.

In the event of specific individual negative performance contributions by Executive Board members, the shareholders' meeting may reclaim variable compensation components already granted up to two years after expiry of the last deferral period (clawback) in accordance with Section 18 (5) and Section 20 (6) InstVV.

The possibility of a full or partial forfeiture (malus) or reclaiming (clawback) of the Executive Board members’ variable compensation components is reviewed regularly and in a timely manner before the respective due dates. In the 2022 financial year, the possibility of suspending and postponing the vesting and release date for Deferred Awards was used based on the review carried out for a former member of the Executive Board. The suspension and postponement of the vesting and release date ends with a final decision on the forfeiture or release of the awards.

The following table shows the characteristics of the deferred and share-based compensation instruments that have been granted to active and previous members of the Executive Board since the IPO in March 2018 for the performance of their duties on the Executive board:

Overview on award types

Award Type	Description	Deferral period	Retention period
2019-2022 DWS Equity Upfront Award	Upfront equity proportion (cash settled): The value of the DWS Equity Upfront Award is linked to DWS's share price.	N/A	12 months
2019-2022 DWS Restricted Incentive Award	Non-equity based portion (deferred cash compensation): The Executive Board members can also elect to link all or part of the value of the DWS Restricted Incentive Award to selected DWS investment fund(s), in which case the Awards will be granted under the "DWS Employee Investment Plan - Elected Employee Investment Plan Award". The value of the Employee Investment Plan depends on the performance of the selected underlying investment funds over the vesting period.	Pro rata vesting over five years	N/A
2019-2022 DWS Restricted Equity Award	Deferred equity portion (cash settled): The value of the DWS Restricted Equity Award is linked to DWS's share price over the vesting and retention period.	Pro rata vesting over five years	12 months
2019 DWS Performance Share Unit Award granted under DWS Equity Plan	One-off IPO related equity portion (cash settled): The value of the DWS Performance Share Unit Award is linked to DWS's share price.	Pro rata vesting over three years	12 months

Benefits in the Event of Termination of the Mandate

Benefits upon early termination

The Executive Board members are in principle entitled to receive a severance payment upon early termination of their appointment at the initiative of the shareholders´ meeting, provided the shareholders´ meeting is not entitled to revoke the appointment or give notice under the contractual agreement for cause. The circumstances of the early termination of the appointment and the length of service on the Executive Board are to be taken into account when determining the amount of the severance payment. The severance payment, as a rule, is two annual compensation amounts and is limited to the claims to compensation for the remaining term of the contract. The calculation of the severance payment is based on the annual compensation for the previous financial year and on the expected annual compensation for the current financial year, if applicable. The severance payment is determined in accordance with the statutory and regulatory requirements, in particular with the provisions of the InstVV.

Early terminations in the 2022 Financial Year

In the 2022 financial year, three members of the Executive Board left the Board prematurely. Dr Asoka Woehrmann resigned with effect from the end of June 9, 2022, his service contract ended with effect from 31 January 2023. Mark Cullen resigned as a member of the Board with effect from end of 31 December 2022, his service contract will end as of 31 March 2023. Stefan Kreuzkamp resigned with effect from end of 31 December 2022, his service contract ended with effect from 31 December 2022.

As provided in the respective service contracts with DWS Management GmbH, termination services were agreed. The amount of benefits is based in particular on the amount of previous compensation and the remaining term of the contract.

All three members of the Executive Board receive their contractual compensation upon the early termination date (base salary, variable compensation, pension contribution respectively supplement and fringe benefits). The individualized details are shown in the table 'Pension contribution and obligation' as well as in the tables in section 'Executive Board Compensation in the 2022 Financial Year'.

In addition the following severance payments were agreed: Dr Asoka Woehrmann receives a severance payment in the amount of € 8,150,000. A severance payment of € 1,250,000 was agreed with Mark Cullen. Stefan Kreuzkamp receives a severance payment of € 1,400,000.

The severance payments shall be subject to all contractual arrangements regarding variable components of compensation, including the possibility of clawback. 60% of the respective severance payments will be made in equal instalments over a five-year period in deferred form. Share-based instruments are subject to an additional holding period of one year after vesting.

The respective components will be reported in the reporting year in which they are granted to the members of the Executive Board in accordance with the requirements of § 162 AktG (Inflow).

In the additional service contract between Stefan Kreuzkamp and DWS Investment GmbH, a severance payment of € 2,100,000 as well as an additional contribution to the pension plan in the amount of € 63,000 were agreed by the Supervisory Board on the basis of the termination benefits regulations applicable in DWS Investment GmbH.

Benefits in the event of regular termination

The Executive Board members receive a commitment to pension benefits under the defined contribution pension plan offered to DWS employees in Germany.

The following table shows the annual pension contribution and annual service cost for the years 2022 and 2021 as well as the corresponding commitment amounts as of 31 December 2022 and 31 December 2021 for the members of the Executive Board working in 2022. The different amounts result in particular from the different duration of the Executive Board's activities.

Pension contribution and obligation

	Annual contribution		Total contributions, end of year		Service cost (IFRS) in the year		Defined benefit obligation (IFRS), end of year	
in €	2022	2021	2022	2021	2022	2021	2022	2021
DWS Management GmbH:								
Dr Stefan Hoops[1]	175,000	–	175,000	–	182,506	–	185,744	–
Manfred Bauer	36,000	36,000	90,000	54,000	39,002	41,430	97,274	62,602
Mark Cullen[2]	0	0	0	0	0	0	0	0
Dirk Goergen	36,000	36,000	147,000	111,000	39,191	41,882	166,213	141,469
Stefan Kreuzkamp	36,000	36,000	174,000	138,000	38,805	41,620	199,785	169,617
Dr Karen Kuder[3]	15,000	–	15,000	–	16,318	–	16,658	–
Claire Peel[2]	0	0	0	0	0	0	0	0
Dr Asoka Woehrmann[4]	300,000	125,000	605,000	305,000	336,506	130,186	694,368	359,294
DWS Group:								
Manfred Bauer	54,000	54,000	135,000	81,000	58,404	61,926	145,662	93,576
Dirk Goergen	54,000	54,000	220,500	166,500	58,628	62,442	249,109	210,932
Stefan Kreuzkamp	54,000	54,000	681,000	627,000	58,157	62,203	869,638	863,066
Total	**760,000**	**395,000**	**2,242,500**	**1,482,500**	**827,517**	**441,689**	**2,624,451**	**1,900,556**

[1] Member since 10 June 2022. On the basis of the commitment under the pension plan given to the Chairman of the Executive Board, the contribution for 2022 is equal to the contribution for seven months.
[2] Mark Cullen and Claire Peel opted for a pension supplement in lieu of the pension plan commitment in the amount of € 90,000.
[3] Member since 1 November 2022.
[4] Member until 9 June 2022. Assignment contract ends 31 January 2023 therefore the contributions relate to the entire financial year 2022. The contribution to the Chairman of the Executive Board was increased to € 300,000 as of November 2021. This is reflected in the respective contributions for the years 2021 and 2022.

Crediting from other Board Memberships

The Executive Board members' service agreements stipulate that Executive Board members shall ensure that compensation to which they may be entitled as members of a board, specifically a supervisory board, an advisory board or comparable institution within a company of the DWS or Deutsche Bank Group (Section 18 AktG), does not accrue to them. Accordingly, Executive Board members did not receive any compensation in the 2022 financial year from mandates in Group companies.

This does not apply to the compensation received by the members of the Executive Board responsible for the Investment, Coverage and Product divisions as a result of their further contract of employment with a subsidiary within the DWS Group.

Compensation for board memberships – specifically on supervisory boards or advisory boards – for a company not belonging to the DWS or Deutsche Bank Group is offset against the base salary at a rate of 50%. Compensation not exceeding € 100,000 per board membership and calendar year is not offset. In the 2022 financial year, there was no offsetting from a mandate with a company not belonging to Group companies.

Compensation System for Additional Service Contracts with a Subsidiary of the Group

Due to regulatory requirements, Executive Board members with responsibility for the Investment, Coverage and Product division each have, in addition to their service contracts with DWS Management GmbH, an additional service contract with a subsidiary of the Group, DWS Investment GmbH. The total compensation of the Executive Board members includes both the compensation received from DWS Management GmbH as well as from the subsidiary of the Group consolidated in the Group financial statements. The compensation system on which the compensation from DWS Investment GmbH is based is subject to the relevant branch-specific remuneration provisions stated in the EU Directives on Alternative Investment Fund Managers (AIFMD) and Undertakings for Collective Investment in Transferable Securities V (UCITS V (AIFMD/UCITS V). If employees of the subsidiary have been identified as having a material impact on Deutsche Bank Group's risk profile (InstVV Material Risk Taker), the stricter regulation apply in case of deviating regulation.

The employees of DWS Investment GmbH are subject to the compensation standards and principles as outlined in the DWS Compensation Policy. The policy is reviewed on an annual basis. As part of the Compensation Policy, the Group employs a Total Compensation philosophy which comprises fixed pay and variable compensation and ensures an appropriate relationship to each other.

Fixed pay is used to compensate employees for their skills, experience and competencies, commensurate with the requirements, size and scope of their role. The appropriate level of fixed pay is determined with reference to the prevailing market rates for each role, internal comparisons and applicable regulatory requirements.

Variable compensation enables to provide additional reward to employees for their performance and behaviours without encouraging excessive risk-taking. The variable compensation basically consists of two elements: DWS component (corresponds to 25% of the reference value of the variable compensation) and individual component (corresponds to 75% of the reference value of the variable compensation).

For employees identified as InstVV Material Risk Taker (MRT), half of the DWS component is determined by the three performance indicators at the level of the DWS Group, which also apply to the members of the Executive Board: Adjusted cost-income ratio, net flows and Environmental, Social and Governance (ESG) footprint. Each of the objectives is weighted at a fixed percentage. The second half of the DWS component of variable remuneration considers four equally weighted objectives at Deutsche Bank Group level, also applicable for the Executive Board members: Common Equity Tier 1 capital ratio, post-tax return on tangible equity, cost-income ratio, and sustainable finance volume.

For the 2022 financial year, a target achievement level of 78.125% was set for the DWS component based on the assessment of the defined performance indicators at the level of the DWS and Deutsche Bank Group, taking into account the weighting of 50% each.

The individual component of the variable compensation is determined on the basis of objectives agreed with each employee for the financial year.

Both DWS component as well as the individual component may be awarded in cash, share-based or fund-based instruments under the Group deferral arrangements. For employees who are identified as having a material impact on the company's risk profile at least 40% of the total variable compensation must be granted on a deferred basis. The limit is increased to 60% depending on the amount of the variable remuneration and the risks that a risk taker may pose. The Group retains the right to reduce the total amount of variable compensation, including the DWS Component, to zero in cases of significant misconduct, performance-related measures, disciplinary outcomes or unsatisfactory conduct or behaviour by the employee subject to applicable local law.

Total Compensation is supplemented by additional benefits, which are considered to be fixed remuneration in the regulatory sense, as they are not directly linked to the performance or individual discretion.

With the consent of the shareholders, DWS Investment GmbH has increased the fixed-to-variable compensation ratio from 1:2 to 1:3 in 2022. Nevertheless, for employees identified as InstVV Material Risk Taker, the stricter ratio 1:2 still applies.

Executive Board Compensation in the 2022 Financial Year

Compensation of the Members of the Executive Board acting in the financial year

In the 2022 financial year, the compensation for the members of the Executive Board for the performance of their duties for and on behalf of the Group and its subsidiaries is provided below.

This comprises on the one hand the compensation determined for their activity as a member of the Executive Board on an individual basis for the 2022 financial year. In addition, the compensation granted and due (inflows) in the year under review in accordance with

Section 162 AktG is shown. The inflows are reported broken down by fixed and variable compensation components including the fringe benefits.

Inflows as well as the compensation determined for the 2022 financial year from the additional service contracts of the members of the Executive Board with responsibility for the Investment, Coverage and Product division are shown in a separate table; they relate to the period in which the person affected was a member of the Executive Board.

Compensation determined

Following the proposal of the Joint Committee, the shareholders' meeting determined the compensation and its composition under the service contract with DWS Management GmbH for the 2022 financial year based on the assessment of the achievement of the objectives as follows:

Total compensation for the 2022 and 2021 financial years

	2022					2021
in €	Base salary	Short-Term Award	Long-Term Award	Variable compensation	Total compensation	Total compensation
Dr Stefan Hoops[1]	1,563,333	1,139,000	1,070,883	2,209,883	3,773,216	–
Manfred Bauer[2]	380,000	92,400	95,900	188,300	568,300	642,500
Mark Cullen	1,250,000	644,800	743,225	1,388,025	2,638,025	3,284,375
Dirk Goergen[2]	480,000	225,600	230,160	455,760	935,760	1,124,400
Stefan Kreuzkamp[2]	500,000	270,200	335,650	605,850	1,105,850	1,383,750
Dr Karen Kuder[3]	158,333	38,333	39,958	78,291	236,624	–
Claire Peel	1,200,000	369,600	383,600	753,200	1,953,200	2,250,000
Dr Asoka Woehrmann[4]	2,400,000	1,440,000	1,726,200	3,166,200	5,566,200	6,945,000
Total	**7,931,666**	**4,219,933**	**4,625,576**	**8,845,509**	**16,777,175**	**15,630,025**

[1] Member since 10 June 2022.
[2] The table above sets out the compensation determined under the service contract with DWS Management GmbH (40% working time allocation).
[3] Member since 1 November 2022.
[4] Member until 9 June 2022. Assignment contract ends 31 January 2023. Compensation data therefore refer to the entire 2022 financial year.

In the additional service contracts of the Executive Board members with responsibility for the Investment, Coverage and Product division with 60% working time allocation, the Supervisory Board of DWS Investment GmbH responsible for the compensation determined the compensation and its composition for the 2022 financial year on the basis of the assessment of the achievement of the respective targets as follows:

Total compensation in the additional service contracts for the 2022 and 2021 financial years

	2022			2021
in €	Base salary	Variable compensation	Total compensation	Total compensation
Manfred Bauer	570,000	351,094	921,094	951,563
Dirk Goergen	720,000	869,625	1,589,625	1,608,750
Stefan Kreuzkamp	750,000	953,203	1,703,203	1,849,219
Total	**2,040,000**	**2,173,922**	**4,213,922**	**4,409,532**

In summary, within the scope of DWS Management GmbH and additional service contracts share-based components were determined for the 2022 financial year as follows:

Share-based components

	2022		2021	
	Share-based components in €	Share-based components in Units[1]	Share-based components in €	Share-based components in Units[1]
Granted by DWS Management GmbH	4,422,769	144,064	4,710,024	138,547
Granted by DWS Group	1,086,962	35,406	1,184,771	34,851
Total	**5,509,731**	**179,470**	**5,894,795**	**173,397**

[1] Units were calculated by dividing the respective amounts in euro by the average share price of DWS share over the last ten trading days prior to 1 March 2023 and 1 March 2022 respectively.

Compensation granted and due (inflows)

The following tables show the fixed as well as the variable compensation components granted and due to the active members of the Executive Board in the reporting year according to Section 162 AktG (broken down by cash portion and various award instruments differentiated according to the respective grant years). These are the compensation components that were either actually paid ("granted") to individual members of the Executive Board during the reporting period or were already due in law during the reporting period but have not yet been paid ("due"). In addition to the compensation levels, pursuant to Section 162 (1) sentence 2 AktG, the relative shares of fixed and variable components of the total compensation are shown.

With respect to deferred awards from previous years disbursed in the year under review, the respective DWS Group and Deutsche Bank Group performance conditions were met.

Compensation granted and due (inflows) in the 2022 and 2021 financial years according to Section 162 AktG

	Dr Stefan Hoops (member since 10 June 2022)				Manfred Bauer							
	2022		2021		2022				2021			
					DWS Management GmbH	DWS Group	Overall	Relative portion	DWS Management GmbH	DWS Group	Overall	Relative portion
	in € t.	in %	in € t.	in %	in € t.	in € t.	in € t.	in %	in € t.	in € t.	in € t.	in %
Components of fixed compensation:												
Base salary	1,563	100	–	N/M	380	570	950	64	380	570	950	95
Pension allowance	0	0	–	N/M	0	0	0	0	0	0	0	0
Fringe benefits	1	0	–	N/M	285[1]	4	289	19	0	4	4	0
Total fixed compensation	**1,564**	**100**	**–**	**N/M**	**665**	**574**	**1,239**	**83**	**380**	**574**	**954**	**95**
Components of variable compensation:												
Cash compensation for 2021 (2020)	0	0	–	N/M	52	76	129	9	20	30	50	5
DWS Restricted Incentive Awards:												
2021 DWS Restricted Incentive Award for 2020	0	0	–	N/M	6	23	29	2	0	0	0	0
2021 Elected Employee Investment Plan Award for 2020	0	0	–	N/M	0	0	0	0	0	0	0	0
2020 DWS Restricted Incentive Award for 2019	0	0	–	N/M	0	0	0	0	0	0	0	0
2020 Elected Employee Investment Plan Award for 2019	0	0	–	N/M	0	0	0	0	0	0	0	0
2019 DWS Restricted Incentive Award for 2018	0	0	–	N/M	0	0	0	0	0	0	0	0
2019 Elected Employee Investment Plan Award for 2018	0	0	–	N/M	0	0	0	0	0	0	0	0
DWS Equity Awards:												
2021 DWS Equity Upfront Award for 2020	0	0	–	N/M	21	78	99	7	0	0	0	0
2020 DWS Equity Upfront Award for 2019	0	0	–	N/M	0	0	0	0	0	0	0	0
2020 DWS Restricted Equity Award for 2019	0	0	–	N/M	0	0	0	0	0	0	0	0
2019 DWS Restricted Equity Award for 2018	0	0	–	N/M	0	0	0	0	0	0	0	0
Total variable compensation	**0**	**0**	**–**	**N/M**	**80**	**177**	**256**	**17**	**20**	**30**	**50**	**5**
Total compensation	**1,564**	**100**	**–**	**N/M**	**744**	**751**	**1,495**	**100**	**400**	**604**	**1,004**	**100**

[1] Fringe benefits as shown include income tax for the benefits in kind resulting from the assumption of costs for legal advice to the amount of € 285 thousand; please also refer to section 'Application of the Compensation System in the financial year 2022'.

	Mark Cullen[1]				Dirk Goergen							
	2022		2021		2022				2021			
	in € t.	in %	in € t.	in %	DWS Management GmbH in € t.	DWS Group in € t.	Overall in € t.	Relative portion in %	DWS Management GmbH in € t.	DWS Group in € t.	Overall in € t.	Relative portion in %
Components of fixed compensation:												
Base salary	1,250	48	1,250	58	480	720	1,200	58	480	720	1,200	78
Pension allowance	90	3	90	4	0	0	0	0	0	0	0	0
Fringe benefits	238[2]	9	7	0	263[3]	(2)[4]	261	13	0	(2)[4]	(2)	0
Total fixed compensation	**1,578**	**60**	**1,347**	**63**	**743**	**718**	**1,461**	**70**	**480**	**718**	**1,198**	**78**
Components of variable compensation:												
Cash compensation for 2021 (2020)	356	14	338	16	129	178	307	15	72	103	175	11
DWS Restricted Incentive Awards:												
2021 DWS Restricted Incentive Award for 2020	35	1	0	0	22	31	52	3	0	0	0	0
2021 Elected Employee Investment Plan Award for 2020	72	3	0	0	0	0	0	0	0	0	0	0
2020 DWS Restricted Incentive Award for 2019	106	4	106	5	15	23	38	2	15	23	38	2
2020 Elected Employee Investment Plan Award for 2019	0	0	0	0	0	0	0	0	0	0	0	0
2019 DWS Restricted Incentive Award for 2018	7	0	7	0	1	1	2	0	1	1	2	0
2019 Elected Employee Investment Plan Award for 2018	0	0	0	0	0	0	0	0	0	0	0	0
DWS Equity Awards:												
2021 DWS Equity Upfront Award for 2020	345	13	0	0	73	105	178	9	0	0	0	0
2020 DWS Equity Upfront Award for 2019	0	0	346	16	0	0	0	0	50	74	124	8
2020 DWS Restricted Equity Award for 2019	101	4	0	0	15	22	36	2	0	0	0	0
2019 DWS Restricted Equity Award for 2018	9	0	10	0	1	2	3	0	1	2	3	0
Total variable compensation	**1,032**	**40**	**806**	**37**	**256**	**361**	**617**	**30**	**139**	**203**	**342**	**22**
Total compensation	**2,610**	**100**	**2,152**	**100**	**999**	**1,079**	**2,078**	**100**	**619**	**921**	**1,540**	**100**

[1] Member until 31 December 2022. Assignment contract ends 31 March 2023.
[2] Fringe benefits as shown include income tax for the benefits in kind resulting from the assumption of costs for legal advice to the amount of € 216 thousand; please also refer to section 'Application of the Compensation System in the financial year 2022'.
[3] Fringe benefits as shown include income tax for the benefits in kind resulting from the assumption of costs for legal advice to the amount of € 263 thousand; please also refer to section 'Application of the Compensation System in the financial year 2022'.
[4] Due to the economic participation in the costs of a company bicycle, which exceeds the amount of the other fringe benefits, a negative balance is to be shown for the financial years 2022 and 2021.

	Stefan Kreuzkamp[1]								Dr Karen Kuder (member since 1 November 2022)			
	2022				2021				2022		2021	
	DWS Management GmbH	DWS Group	Overall	Relative portion	DWS Management GmbH	DWS Group	Overall	Relative portion				
	in € t.	in € t.	in € t.	in %	in € t.	in € t.	in € t.	in %	in € t.	in %	in € t.	in %
Components of fixed compensation:												
Base salary	500	750	1,250	46	500	750	1,250	56	158	100	–	N/M
Pension allowance	0	0	0	0	0	0	0	0	0	0	–	N/M
Fringe benefits	263[2]	6	268	10	0	3	3	0	1	0	–	N/M
Total fixed compensation	**763**	**756**	**1,518**	**56**	**500**	**753**	**1,253**	**57**	**159**	**100**	**–**	**N/M**
Components of variable compensation:												
Cash compensation for 2021 (2020)	177	220	397	15	129	175	304	14	0	0	–	N/M
DWS Restricted Incentive Awards:												
2021 DWS Restricted Incentive Award for 2020	39	53	91	3	0	0	0	0	0	0	–	N/M
2021 Elected Employee Investment Plan Award for 2020	0	0	0	0	0	0	0	0	0	0	–	N/M
2020 DWS Restricted Incentive Award for 2019	45	64	110	4	45	64	109	5	0	0	–	N/M
2020 Elected Employee Investment Plan Award for 2019	0	0	0	0	0	0	0	0	0	0	–	N/M
2019 DWS Restricted Incentive Award for 2018	30	10	40	1	30	10	40	2	0	0	–	N/M
2019 Elected Employee Investment Plan Award for 2018	0	39	39	1	0	39	39	2	0	0	–	N/M
DWS Equity Awards:												
2021 DWS Equity Upfront Award for 2020	132	179	312	11	0	0	0	0	0	0	–	N/M
2020 DWS Equity Upfront Award for 2019	0	0	0	0	147	210	357	16	0	0	–	N/M
2020 DWS Restricted Equity Award for 2019	43	61	104	4	0	0	0	0	0	0	–	N/M
2019 DWS Restricted Equity Award for 2018	42	69	111	4	43	71	114	5	0	0	–	N/M
Total variable compensation	**508**	**695**	**1,203**	**44**	**395**	**569**	**964**	**43**	**0**	**0**	**–**	**N/M**
Total compensation	**1,271**	**1,450**	**2,721**	**100**	**895**	**1,322**	**2,217**	**100**	**159**	**100**	**–**	**N/M**

[1] Member until 31 December 2022. Assignment contract ends 31 December 2022.
[2] Fringe benefits as shown include income tax for the benefits in kind resulting from the assumption of costs for legal advice to the amount of € 263 thousand; please also refer to section 'Application of the Compensation System in the financial year 2022'.

	Claire Peel				Dr Asoka Woehrmann (member until 9 June 2022)[1]			
	2022		2021		2022		2021	
	in € t.	in %	in € t.	in %	in € t.	in %	in € t.	in %
Components of fixed compensation:								
Base salary	1,200	65	1,200	72	2,400	41	2,400	60
Pension allowance	90	5	90	5	0	0	0	0
Fringe benefits	0	0	0	0	1,369[2]	23	6	0
Total fixed compensation	**1,290**	**70**	**1,290**	**77**	**3,769**	**64**	**2,406**	**61**
Components of variable compensation:								
Cash compensation for 2021 (2020)	210	11	147	9	682	12	575	14
DWS Restricted Incentive Awards:								
2021 DWS Restricted Incentive Award for 2020	44	2	0	0	215	4	0	0
2021 Elected Employee Investment Plan Award for 2020	0	0	0	0	54	1	0	0
2020 DWS Restricted Incentive Award for 2019	41	2	41	2	202	3	202	5
2020 Elected Employee Investment Plan Award for 2019	0	0	0	0	106	2	102	3
2019 DWS Restricted Incentive Award for 2018	28	2	28	2	0	0	35	1
2019 Elected Employee Investment Plan Award for 2018	0	0	0	0	0	0	0	0
DWS Equity Awards:								
2021 DWS Equity Upfront Award for 2020	151	8	0	0	588	10	0	0
2020 DWS Equity Upfront Award for 2019	0	0	132	8	0	0	605	15
2020 DWS Restricted Equity Award for 2019	39	2	0	0	275	5	0	0
2019 DWS Restricted Equity Award for 2018	39	2	40	2	0	0	51	1
Total variable compensation	**551**	**30**	**387**	**23**	**2,121**	**36**	**1,570**	**39**
Total compensation	**1,841**	**100**	**1,677**	**100**	**5,890**	**100**	**3,976**	**100**

[1] Member until 9 June 2022. Assignment contract ends 31 January 2023. Compensation data therefore refer to the entire financial year 2022.
[2] Fringe benefits as shown include income tax for the benefits in kind resulting from the assumption of costs for legal advice to the amount of € 1,363 thousand; please also refer to section 'Application of the Compensation System in the financial year 2022'.

Compensation of the Previous Members of the Executive Board

Compensation granted and due (inflow)

The following tables show the compensation granted and due (inflows) according to Section 162 AktG in the year under review for former members of the Executive Board with regard to the previous performance of their duties for and on behalf of the Group and its subsidiaries shown in the order of their leaving date. The variable compensation inflows are reported broken down by cash portion and various award types. These are the compensation components that were either actually paid ("granted") to former members of the Executive Board during the reporting period or were already due in law during the reporting period but have not yet been paid ("due"). Furthermore, the inflows from further service contracts of the members of the Executive Board from commitments during the time in which they were members of the Executive Board are presented. In addition to the compensation levels, pursuant to Section 162 (1) sentence 2 AktG, the relative shares of variable components of the total compensation are shown.

With respect to deferred awards from previous years paid in the year under review, the respective DWS Group and Deutsche Bank Group performance conditions were met.

Compensation granted and due (inflows) in the 2022 financial year according to Section 162 AktG for former members

	Pierre Cherki (member until 9 June 2020)				Robert Kendall (member until 9 June 2020)				Nikolaus von Tippelskirch (member until 9 June 2020)	
	2022				2022				2022	
	DWS Management GmbH	DWS Group	Overall	Relative portion	DWS Management GmbH	DWS Group	Overall	Relative portion	Overall	Relative portion
	in € t.	in € t.	in € t.	in %	in € t.	in € t.	in € t.	in %	in € t.	in %
Components of variable compensation:										
DWS Equity Upfront Award	70	0	70	11	50	0	50	12	100	41
DWS Restricted Incentive Award	149	13	162	26	105	79	184	44	83	34
Elected EIP Award	0	119	119	19	0	0	0	0	0	0
DWS Restricted Equity Award	133	134	267	43	94	92	186	44	61	25
Total compensation	**352**	**266**	**618**	**100**	**249**	**171**	**420**	**100**	**244**	**100**

	Jonathan Eilbeck (member until 30 November 2018)		Thorsten Michalik (member until 30 November 2018)				Nicolas Moreau[1] (member until 25 October 2018)	
	2022		2022				2022	
	Overall	Relative portion	DWS Management GmbH	DWS Group	Overall	Relative portion	Overall	Relative portion
	in € t.	in %	in € t.	in € t.	in € t.	in %	in € t.	in %
Components of variable compensation:								
DWS Equity Upfront Award	0	0	0	0	0	0	0	0
DWS Restricted Incentive Award	38	42	15	30	45	42	90	42
Elected EIP Award	0	0	0	0	0	0	0	0
DWS Restricted Equity Award	53	58	21	42	63	58	126	58
Total compensation	**90**	**100**	**36**	**72**	**108**	**100**	**216**	**100**

[1] The table above sets out the inflows for Mr Moreau with regard to the previous performance of duties as an Executive Board member. Inflows with regard to the previous performance of duties as a Management Board member of Deutsche Bank AG are disclosed in the Compensation Report of Deutsche Bank Group.

Pension payments

No pension payments have been made to former members of the Executive Board.

Compensation for Supervisory Board Members

The compensation for members of the Supervisory Board is set forth in the Articles of Association of DWS KGaA. Any amendment of the Articles of Association requires a resolution of the General Meeting of DWS KGaA.

The members of the Supervisory Board receive a fixed annual compensation (“Supervisory Board compensation”). The annual base compensation amounts to € 85,000 for each member, the Chairperson of the Supervisory Board receives twice that amount and the Deputy Chairperson one and a half times that amount.

Members and the Chairpersons of the Committees of the Supervisory Board are paid an additional fixed annual compensation as follows.

Committee Compensation

in €	Chairperson	Member
Audit and Risk Committee	40,000	20,000
Nomination Committee	20,000	15,000
Remuneration Committee	20,000	15,000
Adhoc Committee ESG matters	20,000	15,000

The Supervisory Board compensation is disbursed within the first three months of the following year.

In case of a change in the composition of the Supervisory Board during the year, the compensation for the financial year will be paid on a pro rata basis, rounded up/down to full months.

The members of the Supervisory Board are reimbursed by the company for the cash expenses they incur in the performance of their office, including any value added tax on their compensation and reimbursement of expenses. Furthermore, any employer contributions to social security schemes that may be applicable under foreign law to the performance of their work on the Supervisory Board is paid for each member of the Supervisory Board affected. Finally, the Chairman of the Supervisory Board will be reimbursed appropriately for travel expenses incurred in performing representative tasks due to his role.

In the interest of DWS KGaA, the members of the Supervisory Board are included in an appropriate amount, with a deductible, in any financial liability insurance policy held by the company. In the financial year 2022, Deutsche Bank Group provided a Directors’ and Officer´s Liability Insurance to the members of the Supervisory Board.

The current Supervisory Board compensation and the underlying compensation system was determined in 2018, prior to the IPO of DWS KGaA, with the support of an independent external remuneration advisor. The compensation takes into account the responsibilities, requirements and time commitment of the members of the Supervisory Board. It also reflects, based on a horizontal peer group comparison, the compensation arrangements of competitors and selected German listed companies of comparable size, market capitalization and structure and is therefore competitive.

The Supervisory Board considers the appropriateness of the compensation level and system in its annual self-assessment as part of the efficiency review.

In addition, the Supervisory Board compensation is reviewed from time to time with the help of independent external experts at the instigation of the Supervisory Board or the Executive Board, representing the General Partner. Based on the results of a review undertaken in the first quarter 2021, the Executive Board and the Supervisory Board saw no cause for any amendments. Subsequently, the confirmation of the current compensation of the members of the Supervisory Board was proposed to the General Meeting on 9 June 2021 and approved by 99.85% of all valid votes.

In the event that the Executive Board and the Supervisory Board see reason for change, they will submit a modified compensation system and a proposal for a corresponding amendment of the Articles of Association of DWS KGaA to the General Meeting. In any case, the compensation for the Supervisory Board, including the underlying compensation system, will be presented to the General Meeting for its approval (“Billigung”) every four years. Potential conflicts of interest on the part of individual members of the Executive Board or members of the Supervisory Board with regard to the compensation system for the Supervisory Board will be treated in accordance with the existing policies and procedures.

In the opinion of the Executive Board and the Supervisory Board the design of the Supervisory Board compensation as a purely fixed compensation without performance-related elements is most suitable to properly reflect and promote the independence of the Supervisory Board and its advisory and monitoring function. This enables the Supervisory Board to make its decisions objectively and independently of the Executive Board in the interests of the company, without being guided by any short-term business successes that might be reflected in variable compensation.

The Supervisory Board compensation provides a useful counterbalance to the strategically oriented compensation system for the members of the Executive Board, which contains both fixed and variable components. Supervisory Board compensation thus contributes to the implementation of a sustainable corporate strategy at DWS KGaA.

The appropriateness of Supervisory Board compensation ensures that the company will continue to be able to attract appropriately qualified candidates to join the Supervisory Board; in this way, Supervisory Board compensation also makes a sustainable contribution to promoting the business strategy and the long-term development of the company.

The table below provides the Supervisory Board Compensation (excluding value added tax) granted and owed to the individual members of the Supervisory Board for the financial years 2022 in according to Section 162 AktG.

DWS KGaA does not provide members of the Supervisory Board with benefits after they have left the Supervisory Board.

Supervisory Board Compensation

	Compensation for fiscal year 2022						Compensation for fiscal year 2021				
in €	Supervisory Board	Audit and Risk Committee	Remuneration Committee	Nomination Committee	Adhoc Committee ESG matters	Total	Supervisory Board	Audit and Risk Committee	Remuneration Committee	Nomination Committee	Total
Karl von Rohr[1]	–	–	–	–	–	–	–	–	–	–	–
Ute Wolf	127,500	40,000	–	–	15,000	182,500	127,500	40,000	–	–	167,500
Stephan Accorsini	85,000	20,000	–	–	–	105,000	85,000	20,000	–	–	105,000
Annabelle Bexiga	85,000	–	15,000	–	–	100,000	85,000	–	15,000	–	100,000
Aldo Cardoso	85,000	20,000	15,000	–	–	120,000	85,000	20,000	15,000	–	120,000
Minoru Kimura[2]	–	–	–	–	–	–	–	–	–	–	–
Bernd Leukert[1]	–	–	–	–	–	–	–	–	–	–	–
Angela Meurer	85,000	–	–	–	–	85,000	85,000	–	–	–	85,000
Richard I. Morris, Jr.	85,000	20,000	–	15,000	15,000	135,000	85,000	20,000	–	15,000	120,000
Erwin Stengele	85,000	–	15,000	–	–	100,000	85,000	–	15,000	–	100,000
Margret Suckale	85,000	–	20,000	15,000	–	120,000	85,000	–	20,000	15,000	120,000
Said Zanjani	85,000	–	–	15,000	15,000	115,000	85,000	–	–	15,000	100,000

[1] Deutsche Bank Group shareholders' representatives on the Supervisory Board have waived their Supervisory Board compensation in line with Deutsche Bank Group policies and procedures.
[2] In 2022 and 2021 one independent shareholders' representative on the Supervisory Board waived his Supervisory Board compensation in line with applicable policies and procedures.

Compensation for Joint Committee Members

The compensation for members of the Joint Committee is set forth in the Articles of Association of DWS KGaA. The members of the Joint Committee receive a fixed annual remuneration of € 20,000 and the Chairman of € 40,000.

The compensation is disbursed within the first three months of the following year.

In case of a change in the composition of the Joint Committee during the year, the compensation for the financial year will be paid on a pro rata basis, rounded up/down to full months.

The members of the Joint Committee are reimbursed by the company for the cash expenses they incur in the performance of their office, including any value added tax (VAT) on their compensation and reimbursement of expenses. Furthermore, any employer contributions to social security schemes that may be applicable under foreign law to the performance of their work on the Joint Committee is paid for each member of the Joint Committee affected. Finally, the Chairman of the Joint Committee will be reimbursed appropriately for travel expenses incurred in performing representative tasks due to his role.

In the interest of DWS KGaA, the members of the Joint Committee are included in an appropriate amount, with a deductible, in any financial liability insurance policy held by the company. In the financial year 2022, Deutsche Bank Group provided a Directors' and Officer´s Liability Insurance to the members of the Joint Committee.

The following table provides the compensation (excluding value added tax) granted and owed to the individual members of the Joint Committee for the financial year 2022.

Compensation for Joint Committee members

in €	Compensation for fiscal year 2022	Compensation for fiscal year 2021
Karl von Rohr[1]	–	–
Minoru Kimura[2]	–	–
James von Moltke[1]	–	–
Ute Wolf	20,000	20,000

[1] Deutsche Bank Group executives, delegated by the shareholders' meeting of the General Partner to the Joint Committee, have waived their compensation in line with Deutsche Bank Group policies and procedures.
[2] In 2022 and 2021 one member of the Joint Committee, delegated by the shareholders' representatives on the Supervisory Board from their midst, waived his compensation in line with applicable policies and procedures.

Comparative Presentation of Compensation and Earnings Development

The table below shows the comparative presentation of the annual change in compensation of the members of the Executive Board and the Supervisory Board, the performance of the KGaA and the Group and the average compensation of employees on a full-time equivalence basis. In the following years, the information referred to in Section 162 (1) sentence 2 number 2 AktG, will gradually be expanded to include the change in a financial year compared to the previous year, until a reporting period of five years is reached. From the financial year 2025 onwards, the annual changes for the last five years will be shown.

The information on the compensation of the active and former members of the Executive Board and the Supervisory Board shall be the compensation granted and due pursuant to Section 162 (1) sentence 2 number 1 AktG.

The presentation of the company's performance is to reflect, according to the legal requirements, those of the legally independent company listed on the stock exchange. Accordingly, the net income (loss) of DWS KGaA is used to present earnings within the meaning of Section 162 (1) sentence 2 number 2 AktG. As the Executive Board compensation is measured on the basis of Group relevant data, net income (loss) for the Group is additionally shown as well as adjusted cost-income ratio and net flows related to the Group. The latter as important key metrics for the Group account for 35% in the performance measurement of the members of the Executive Board. Taking into account the international business model of DWS, all employees of the Group worldwide were considered for the comparison group of employees; this corresponds to the approach in the vertical benchmarking in the context of the review of appropriateness.

in € t. (unless stated otherwise)	2022	2021	2020	Annual change from 2022 to 2021 in %	Annual change from 2021 to 2020 in %
1. Company profit development					
Net income (loss) DWS KGaA (in € m.)	412	532	388	(23)	37
Net income (loss) DWS Group (in € m.)	595	782	558	(24)	40
Adjusted cost-income ratio (CIR) DWS Group (in %)	60.6	58.1	64.5	2.5 ppt	(6.4) ppt
Net flows DWS Group (in € bn.)	(20)	48	30	N/M	N/M
2. Average compensation employees					
World-wide on a full-time equivalent basis	190	193	179	(2)	8
3. Executive Board compensation					
Current members of the Executive Board:					
Dr Stefan Hoops (member since 10 June 2022)	1,564	–	–	N/M	N/M
Manfred Bauer (member since 1 July 2020)	1,495	1,004	478	49	110
Mark Cullen	2,610	2,152	1,741	21	24
Dirk Goergen	2,078	1,540	1,215	35	27
Stefan Kreuzkamp	2,721	2,217	2,101	23	6
Dr Karen Kuder (member since 1 November 2022)	159	–	–	N/M	N/M
Claire Peel	1,841	1,677	1,492	10	12
Members who left the Executive Board during the financial year:					
Dr Asoka Woehrmann (member until 9 June 2022)	5,890	3,976	3,041	48	31
Former members who left the Executive Board before the financial year:					
Pierre Cherki (member until 9 June 2020)	618	1,005	3,388	(39)	(70)
Robert Kendall (member until 9 June 2020)	420	704	2,670	(40)	(74)
Nikolaus von Tippelskirch (member until 9 June 2020)	244	288	1,453	(15)	(80)
Jonathan Eilbeck (member until 30 November 2018)	90	91	230	(1)	(60)
Thorsten Michalik (member until 30 November 2018)	108	110	276	(2)	(60)
Nicolas Moreau (member until 25 October 2018)	216	220	1,747	(2)	(87)
4. Supervisory Board compensation					
Current members of the Supervisory Board:					
Karl von Rohr[1]	–	–	–	N/M	N/M
Ute Wolf	183	168	168	9	0
Stephan Accorsini	105	105	105	0	0
Annabelle Bexiga	100	100	100	0	0
Aldo Cardoso	120	120	120	0	0
Minoru Kimura (member since 10 August 2020)[2]	–	–	–	N/M	N/M
Bernd Leukert (member since 21 July 2020)[1]	–	–	–	N/M	N/M
Angela Meurer	85	85	85	0	0
Richard I. Morris, Jr.	135	120	120	13	0
Erwin Stengele	100	100	100	0	0
Margret Suckale	120	120	120	0	0
Said Zanjani	115	100	100	15	0
Former members of the Supervisory Board:					
Hiroshi Ozeki (member until 10 April 2020)	–	–	–	N/M	N/M

[1] Deutsche Bank Group shareholders' representatives on the Supervisory Board have waived their Supervisory Board compensation in line with Deutsche Bank Group policies and procedures.
[2] In 2022 and 2021 one and in 2020 two independent shareholders' representatives on the Supervisory Board waived their Supervisory Board compensation in line with applicable policies and procedures.

Independent Auditor's Report

Note: The English language text below is a translation provided for information purposes only. The original German text shall prevail in the event of any discrepancies between the English translation and the German original. We do not accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may arise from the translation.

To DWS Group GmbH & Co. KGaA, Frankfurt am Main

Report on the Audit of the Remuneration Report

We have audited the attached remuneration report of DWS Group GmbH & Co. KGaA, Frankfurt am Main, for the financial year from January 1 to December 31, 2022, including the related disclosures, prepared to meet the requirements of Section 162 AktG [Aktiengesetz: German Stock Corporation Act].

Responsibilities of Management and the Supervisory Board

The management and the Supervisory Board of DWS Group GmbH & Co. KGaA are responsible for the preparation of the remuneration report, including the related disclosures, in accordance with the requirements of Section 162 AktG. The management and the Supervisory Board are also responsible for such internal control as they have determined necessary to enable the preparation of the remuneration report that is free from material misstatement, whether due to fraud or error.

Auditor's responsibilities

Our responsibility is to express an opinion on this remuneration report, including the related disclosures, based on our audit. We conducted our audit in accordance with the German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the remuneration report, including the related disclosures, is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts, including the related disclosures, in the remuneration report. The procedures selected depend on the auditor's professional judgement. This includes an assessment of the risks of material misstatement, whether due to fraud or error, in the remuneration report, including the related disclosures. In assessing these risks, the auditor considers the internal control system relevant for the preparation of the remuneration report, including the related disclosures. The objective is to plan and perform audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the Supervisory Board, as well as evaluating the overall presentation of the remuneration report, including the related disclosures.

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

Opinion

In our opinion, on the basis of the knowledge obtained in the audit, the remuneration report for the financial year from January 1 to December 31, 2022, including the related disclosures, complies in all material respects with the financial reporting requirements of Section 162 AktG.

Other matter – formal examination of the remuneration report

The substantive audit of the remuneration report described in this independent auditor's report includes the formal examination of the remuneration report required by Section 162 (3) AktG, including issuing an assurance report on this examination. As we have issued an unqualified opinion on the substantive audit of the remuneration report, this opinion includes the conclusion that the disclosures pursuant to Section 162 (1) and (2) AktG have been made, in all material respects, in the remuneration report.

Limitation of liability

The terms governing this engagement, which we fulfilled by rendering the aforesaid services to DWS Group GmbH & Co. KGaA, are set out in the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms] as amended on 1 January 2017. By taking note of and using the information as contained in this auditor's report, each recipient confirms to have taken note of the terms and conditions laid down therein (including the limitation of liability of EUR 4 million for negligence under Clause 9 of the General Engagement Terms) and acknowledges their validity in relation to us.

Frankfurt am Main, March 13 2023

KPMG AG
Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

[Signature] Fox	[Signature] Anders
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Employee Compensation (unaudited)

IFR Article 51

The content of the 2022 Employee Remuneration Report is based on the qualitative and quantitative remuneration disclosure requirements outlined in Article 51 of Regulation (EU) 2019/2033 of the European Parliament and of the Council of 27 November 2019 on the prudential requirements of investment firms and amending Regulations (EU) No 1093/2010, (EU) No 575/2013, (EU) No 600/2014 and (EU) No 806/2014 (IFR).

In line with Article 51 the following disclosure focusses on staff whose professional activities have a material impact on the risk profile of the Group (i. e. Material Risk Takers or MRTs), as further detailed below.

This section excludes specifics of the Executive Board remuneration structure which are disclosed in the section 'Executive Board Compensation'.

Regulatory Environment

DWS KGaA qualifies as an Union parent investment holding company and the DWS Group qualifies as an investment firm group within the meaning of the IFR, and is subject to the Investment Firm Directive and its transposition into national law in the German Investment Institutions Act (Wertpapierinstitutsgesetz) and German Remuneration Ordinance for Investment Firms (Wertpapierinstituts-Vergütungsverordnung) once adopted. DWS Group consists of a number of subsidiaries located both within the EU/EEA and outside in third countries. The majority of its regulated subsidiaries are management companies which, for those based in the EU/EEA, are regulated under the AIFMD or the UCITS Directive.

In the context of Employee Remuneration, the Group takes into account sector-specific remuneration regulations of its subsidiaries and therefore does not apply IFR and IFD remuneration rules to its AIF/UCITS management companies in EU/EEA and management companies in third countries. Instead, for those entities, the Group complies in general with sector-specific remuneration requirements under AIFMD/UCITS Directive.

DWS KGaA is also an indirectly owned subsidiary of Deutsche Bank AG, a Banking Group subject to the Capital Requirements Directive and its transposition into German national law in the German Banking Act and the Remuneration Ordinance for Institutions (InstVV).

As a result of the sector specific remuneration regulations under AIFMD, UCITS Directive and IFD, and in accordance with Section 1 and Section 27 of InstVV, DWS KGaA and its subsidiaries are carved-out from the application of InstVV with the exception of individuals who are identified as having a material impact on Deutsche Bank Group's risk profile (InstVV Material Risk Taker). For InstVV MRTs, such as the Executive Board members, the stricter regulation applies in case of deviating regulation.

Identification of Material Risk Takers

Employees who are not employed by an AIF/UCITS management company, and whose professional activities have a material impact on the Group, have been identified in line with Art. 3 and 4 of the Commission Delegated Regulation (EU) 2021/2154, supplementing IFD with regard to regulatory technical standards specifying appropriate criteria to identify categories of staff whose professional activities have a material impact on the risk profile of an investment firm or of the assets that it manages (IFD MRTs). In addition, any employee of an AIF/UCITS management company, who is mandated to perform professional activities that have a direct material impact on the risk profile or the business of the Group, has been identified as IFD MRT.

Furthermore, AIFMD/UCITS MRTs are identified in accordance with the sector-specific remuneration requirements of the AIFM and UCITS Directives.

Compensation Governance

The objective of our compensation governance is to ensure that the Group acts within the framework of its remuneration strategy and policy. The Executive Board is responsible for introducing and implementing the employee compensation system. The Supervisory Board of DWS KGaA has set up a Compensation Control Committee to support it in monitoring the appropriate design of such employee compensation system. This monitoring is carried out taking into account the impact of the compensation system on Group-wide risk, capital and liquidity management and the consistency of the compensation strategy with the Group's business and risk strategy.

The DWS Compensation Committee is a delegated committee established by the Executive Board. Its mandate is to develop a sustainable compensation framework and operating principles, make recommendations on total compensation levels and ensure appropriate governance and oversight of the compensation processes. It establishes the Compensation Policy.

As part of its mandate, the committee, using quantitative and qualitative factors, assesses Group and divisional performance as a basis for compensation decisions and makes recommendations to the Executive Board on the total annual amount of variable compensation and its allocation across business divisions and infrastructure functions.

In 2022, the DWS Compensation Committee membership comprised of the Chief Executive Officer, the Chief Financial Officer, Chief Operating Officer, and Global Head of Human Resources. The Head of Reward is a non-voting member. Control functions such as Compliance, Anti-Financial Crime and Risk Management are represented on the committee by the CFO and the COO. Control functions are also appropriately involved in the design and implementation of the Group's compensation system to ensure that conflicts of interest do not arise as a result of the compensation system and to consider the impact of compensation on the Group's risk profile.

Compensation Framework

The compensation framework, generally applicable globally across all regions and business divisions, emphasizes an appropriate balance between fixed pay and variable compensation – together forming total compensation. It aligns incentives for sustainable performance at all levels whilst ensuring the transparency of compensation decisions and their impact on shareholders, investors and employees. The underlying principles of the compensation framework are applied to all employees equally, irrespective of differences in seniority, tenure, gender or ethnicity. The implementation of the gender-neutral compensation policy is monitored by the DWS Compensation Committee.

Fixed pay is used to compensate employees for their skills, experience and competencies, commensurate with the requirements, size and scope of their role. The appropriate level of fixed pay is determined gender neutral with reference to the prevailing market rates for each role, internal comparison and applicable regulatory requirements.

Variable compensation reflects affordability and performance at Group, divisional and individual level. It allows to differentiate individual performance and to drive behaviour through appropriate incentives that can positively influence culture. It also allows for flexibility in the cost base. Variable compensation generally consists of two elements – the franchise variable compensation component and the individual variable compensation component.

The Franchise Variable Compensation component is based on one of the overarching goals of the compensation framework – to ensure an explicit link between variable compensation and the performance of the Group. To assess our annual achievements in reaching our strategic targets, three KPIs are utilized as the basis for determining the 2022 franchise variable compensation: Adjusted CIR, Net Flows and ESG metrics.

The Individual Variable Compensation takes into consideration a number of financial and non-financial factors, relativities within the employee's peer group and retention considerations. In case of negative performance contributions or misconduct, an employee's variable compensation can be reduced accordingly and can go down to zero. Variable compensation is granted and paid out subject to Group affordability. Under the compensation framework, there continues to be no guarantee of variable compensation in an existing employment relationship. Guaranteed variable compensation is utilized only on a very limited basis for new hires in the first year of employment and are subject to the standard deferral requirements.

The compensation strategy is designed to achieve an appropriate ratio between fixed and variable compensation. This helps to align employee compensation with the interests of clients, investors and shareholders and with industry standards while ensuring that the fixed compensation is a sufficiently high proportion of the total compensation to enable the Group to be fully flexible on variable compensation.

For 2022, the DWS Compensation Committee has determined a ratio of 1:1 with regard to fixed-to-variable remuneration components for IFD MRTs in Control Functions, and a 1:3 ratio for other IFD MRTs.

Determination of Performance-based Variable Compensation

The variable compensation pools are subject to appropriate risk-adjustment measures which include ex-ante and ex-post risk adjustments. The robust methodology in place aims at ensuring that the determination of variable compensation reflects the risk-adjusted performance as well as the capital and liquidity position of the Group. The total amount of variable compensation is primarily driven by (i) affordability (i. e. what "can" the Group sustainably afford to award in alignment with regulatory requirements) and (ii) performance (what "should" the Group award in order to provide an appropriate compensation for performance and future incentive while protecting the long-term health of the franchise).

When assessing divisional performance, a range of considerations are referenced. Performance is assessed in the context of financial and non-financial targets (based on balanced scorecards). Whilst the allocation of variable compensation to infrastructure functions, and in particular to control functions, depends on the overall Group performance of, it is not dependent on the performance of the division(s) that these functions oversee.

At the level of the individual employee, established variable compensation guiding principles which are gender neutral and detail the factors and metrics that must be taken into account when making Individual variable compensation decisions. These include, for instance, investment performance, client retention, culture considerations, and objective setting and performance assessment based on the total performance approach. Furthermore, any control function inputs and disciplinary sanctions have to be considered in deciding on Individual variable compensation.

Variable Compensation Structure and Vehicles

The compensation structures are designed not to provide incentives for excessive risk-taking but rather provide a mechanism to promote and support the long-term performance of employees and the Group. For MRTs a portion of variable compensation is paid upfront and, an appropriate portion is deferred to ensure alignment to the sustainable Group performance, and/or investors in DWS funds. Generally, DWS share-based instruments are used as an effective way to align compensation with Group's sustainable performance and the interests of shareholders. For investment professionals, where permissible DWS funds-linked instruments are used instead to ensure alignment with the investors.

MRTs with variable compensation at or above € 50,000 (or which exceeds one fourth of total compensation) have at least 40% to 60% of their variable compensation deferred over a period of at least three years. In case the variable compensation is below these thresholds, the Material Risk Takers receive their entire variable compensation in cash without any deferral.

The instruments are subject to a 12-month period retention period, and all deferred components are subject to a number of performance conditions, continued employment within Deutsche Bank Group and forfeiture provisions which ensure an appropriate ex-post risk adjustment.

Compensation Decisions for 2022

In an extraordinarily challenging environment of 2022, DWS's diverse range of investment products and solutions contributed to deliver solid results and helped to successfully continue its way to become a stand-alone asset manager.

Despite adverse market developments, the Group was able to generate revenues virtually at the level of the previous record year while maintaining a strict cost management.

The intensified focus on investment performance, increased investor demand for targeted asset classes and sustainable investment solutions as well as significant contributions from strategic partnerships were key drivers of this success.

Against this backdrop, the DWS Compensation Committee has monitored the affordability of variable compensation for 2022. The committee has concluded that the capital and liquidity base of DWS remain above regulatory minimum requirements, and internal risk appetite threshold.

As part of the overall 2022 variable compensation granted in March 2023, the Franchise Component was awarded in line with the assessment of the defined KPIs. The Executive Board determined a payout of 76.25% for the Franchise Variable Compensation component in 2022.

Material Risk Takers Compensation Disclosure

61 individuals were identified as MRTs according to IFD for financial year 2022. The remuneration elements for IFD MRTs are detailed in the tables below in accordance with Article 51 IFR.

Remuneration awarded for 2022

in € m. (unless stated otherwise)	Supervisory Board	Executive Board	Other Material Risk Takers	Total Material Risk Takers
Number of MRTs[1]	12	8	38	58
Components of fixed compensation:				
Cash-based	1	12	15	28
Shares or equivalent ownership interests	–	0	0	0
Share-linked instruments or equivalent non-cash instruments	–	0	0	0
Other instruments	–	0	0	0
Other forms	–	1	2	3
Total fixed compensation	**1**	**13**	**16**	**30**
Components of variable compensation:				
Cash-based	–	6	10	16
Thereof: Deferred	–	3	4	7
Shares or equivalent ownership interests	–	0	0	0
Thereof: Deferred	–	0	0	0
Share-linked instruments or equivalent non-cash instruments	–	6	7	13
Thereof: Deferred	–	4	4	8
Other instruments	–	1	0	1
Thereof: Deferred	–	1	0	1
Other forms	–	0	0	0
Thereof: Deferred	–	0	0	0
Total variable compensation[2]	**–**	**13**	**17**	**30**
Total compensation	**1**	**26**	**34**	**61**

[1] Beneficiaries only (Headcount reported for Supervisory Board and Executive Board, FTE reported for the remaining part). Therefore, the totals do not add up to 61 individuals identified as MRTs under IFD.
[2] Variable compensation includes DWS's Year-end performance based variable compensation for 2022, other variable compensation and severance payments. It also includes fringe benefits awards to Executive Board Members which are to be classified as variable remuneration. The table does not include new hire replacement awards for lost entitlements from previous employers (buyouts).

Guaranteed variable remuneration and severance payments - Material Risk Takers

in € m. (unless stated otherwise)	Supervisory Board	Executive Board	Other Material Risk Takers	Total Material Risk Takers
Guaranteed variable remuneration awards:				
Number of MRTs[1]	–	0	0	0
Total amount	–	0	0	0
Severance payments awarded in previous periods, that have been paid out during the financial year:				
Number of MRTs[1]	–	0	0	0
Total amount	–	0	0	0
Severance payments awarded during the financial year:				
Number of MRTs[1]	–	0	0	0
Severance payments paid during financial year	–	1	2	3
Severance payments deferred	–	0	0	0
Total Severance payments awarded during the financial year	**–**	**1**	**2**	**4**
Thereof: Highest payment that has been awarded to a single person	–	1	2	2

[1] Beneficiaries only (Headcount reported for all categories).

Deferred remuneration - Material Risk Takers

in € m.	Amount of deferred remuneration awarded for previous performance periods			Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in the financial year	Amount of deferred remuneration due to vest in the financial year that was paid out during the financial year
	Due to vest in the financial year	Vesting in subsequent financial years	Total		
Supervisory Board:					
Cash-based	–	–	–	–	–
Shares or equivalent ownership interests	–	–	–	–	–
Share-linked instruments or equivalent non-cash instruments	–	–	–	–	–
Other instruments	–	–	–	–	–
Other forms	–	–	–	–	–
Total Supervisory Board	**–**	**–**	**–**	**–**	**–**
Executive Board:					
Cash-based	5	12	17	0	4
Shares or equivalent ownership interests	5	7	12	0	0
Share-linked instruments or equivalent non-cash instruments	2	9	12	0	0
Other instruments	0	2	2	0	0
Other forms	0	0	0	0	0
Total Executive Board	**12**	**30**	**42**	**0**	**5**
Other Material Risk Takers:					
Cash-based	4	8	12	0	4
Shares or equivalent ownership interests	1	0	1	0	0
Share-linked instruments or equivalent non-cash instruments	5	12	17	0	4
Other instruments	0	1	2	0	0
Other forms	0	0	0	0	0
Total Other Material Risk Takers	**10**	**22**	**32**	**0**	**8**
Total	**22**	**52**	**74**	**0**	**13**

Corporate Governance Statement

Corporate Governance Statement

All information presented in this Corporate Governance Statement pursuant to Sections 289f, 315d of the German Commercial Code is shown as of 1 March 2023.

Corporate Bodies

GRI 102-22; 102-23; 102-24; 102-26
IFR Article 48(a)

Overview of the Corporate Bodies

GRI 102-18; 102-5

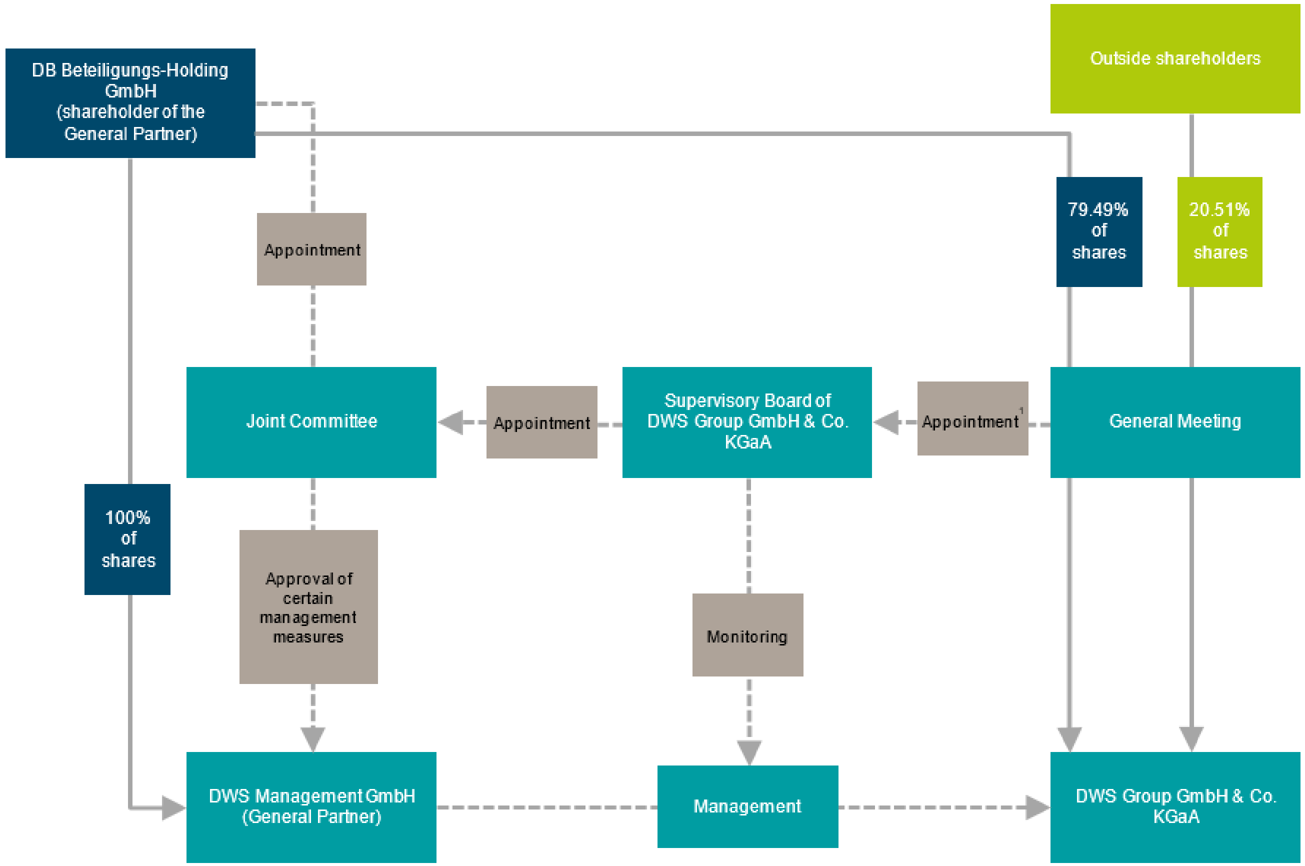
DWS KGaA is a German partnership limited by shares (Kommanditgesellschaft auf Aktien – KGaA) with a German-law limited liability company (Gesellschaft mit beschränkter Haftung – GmbH) as its general partner. The company is governed by its Articles of Association and the general provisions of German corporate law, particularly the German Stock Corporation Act (Aktiengesetz – AktG) and the German Commercial Code (Handelsgesetzbuch – HGB).

A KGaA is a hybrid legal form under German corporate law, which has elements of both a limited partnership and a stock corporation (Aktiengesellschaft – AG). Like a stock corporation, the share capital of a KGaA is held by its shareholders. Like a limited partnership, the KGaA is managed by a general partner which is subject to unlimited liability vis-à-vis third parties.

DWS KGaA's sole general partner, DWS Management GmbH (General Partner), is a wholly owned subsidiary of DB Beteiligungs-Holding GmbH, which is 100% owned by Deutsche Bank AG.

DWS KGaA's corporate bodies are its General Partner, acting through its Managing Directors (Geschäftsführer) who collectively are referred to as the Executive Board of DWS KGaA, its Supervisory Board, and the General Meeting of DWS KGaA's shareholders. In addition, DWS KGaA has a Joint Committee that consists of members of the Supervisory Board as well as delegates appointed by the shareholders' meeting of the General Partner.

Corporate Bodies of DWS



[1] Right of outside shareholders to appoint supervisory board members does not extend to employee representatives.

General Partner

The General Partner has the sole responsibility for the management of DWS KGaA, including all management measures. The General Partner is acting through its Managing Directors (Geschäftsführer), who collectively are referred to as the Executive Board of DWS KGaA. The Executive Board manages the day-to-day business and represents DWS KGaA vis-à-vis third parties. Any reference to Executive Board in this report refers to the collective Managing Directors of the General Partner.

The Managing Directors of the General Partner are appointed and dismissed by resolution of the shareholders' meeting of the General Partner, which also has the authority to appoint one of them as the chairman, i. e. the CEO.

Certain measures by the General Partner, acting through the Executive Board, require approval from the shareholders' meeting of the General Partner (e. g. the preparation of the annual financial plan of DWS Group, group reorganizations and related contracts, joint ventures, the acquisition and disposal of participations if the transaction value exceeds a certain threshold).

In addition, certain measures undertaken by the General Partner in the course of its management of DWS KGaA require the prior approval of the Joint Committee.

Supervisory Board

The Supervisory Board advises and monitors the General Partner, acting through the Executive Board, in its management of the company. Except for the employee representatives, the members of the Supervisory Board are elected by the shareholders of DWS KGaA at the General Meeting. Shares held by the General Partner or its affiliated companies are not entitled to vote for the election or removal of the members of the Supervisory Board.

In general, the authority and scope for influence of the Supervisory Board of a KGaA is limited as compared to a Supervisory Board of a stock corporation. In particular, the Supervisory Board is not entitled to appoint and dismiss the Managing Directors of the general partner. Additionally, the Supervisory Board does not determine the remuneration for the Managing Directors of the general partner and the underlying remuneration system. Further, the Supervisory Board may not subject the management measures of the general partner to its consent, or issue rules of procedure for the general partner.

Joint Committee

Besides the Supervisory Board and the General Partner (acting through the Executive Board), DWS KGaA has established a Joint Committee as an additional corporate body. The Joint Committee consists of two members delegated by the shareholders' meeting of the General Partner and two members delegated by the shareholders' representatives on the Supervisory Board. The shareholders' meeting of the General Partner appoints one of its delegates as the Chairman of the Joint Committee; the Chairman has a casting vote with regard to decisions taken by the Joint Committee.

The Joint Committee has approval rights with regard to certain measures undertaken by the General Partner (e. g. group reorganizations and related contracts; the acquisition and disposal of real estate or participations if the transaction value exceeds a certain threshold). The Joint Committee also possesses a right of proposal with respect to the ratification of acts of management of the General Partner and with respect to the determination of the variable compensation of the Managing Directors of the General Partner. Nonetheless, these matters are legally subject to decisions of the shareholders' meeting of the General Partner. Therefore, the proposals of the Joint Committee are not legally binding, and the shareholders' meeting of the General Partner remains independent in its right to decide on these matters. The Joint Committee reports in text form to the General Meeting on its activities. The report for the reporting year can be found under 'Report of the Joint Committee'.

General Meeting

The General Meeting is the resolution body of the shareholders of DWS KGaA. Shareholders can exercise their voting rights at the General Meeting themselves, by proxy via a representative of their choice, or by a company-nominated proxy acting on their instructions. Among other matters, the General Meeting approves the annual financial statements of the company. The internal procedure of the General Meeting of a KGaA corresponds to that of the general meeting of a stock corporation.

Certain material matters requiring a resolution of the General Meeting also require the consent of the General Partner (which does not have a voting right in the General Meeting as it does not hold shares in DWS KGaA), such as amendments to the Articles of Association, dissolution of the company, mergers, a change in the legal form of DWS KGaA, enterprise agreements (Unternehmensverträge, such as domination agreements or profit and loss transfer agreements) and other fundamental changes as well as the approval of the annual financial statements. The General Partner therefore has a de facto veto right on these matters.

The members of the Supervisory Board – with the exception of the employee representatives – are elected by the General Meeting.

Managing Directors of the General Partner (Executive Board)

The General Partner fulfils its task of managing DWS KGaA through its Managing Directors (Geschäftsführer), who are collectively referred to as the Executive Board. The Managing Directors are appointed and dismissed by resolution of the shareholders' meeting of the General Partner. Pursuant to the Articles of Association of the General Partner, the General Partner shall have at least two Managing Directors. The General Partner shall be represented either jointly by two Managing Directors or by a Managing Director acting jointly with an authorized representative (Prokurist). The shareholders' meeting may, pursuant to the Articles of Association of the General Partner, vest Managing Directors with the authority to represent the General Partner solely. Furthermore, Managing Directors are exempted from the restrictions of entering into a legal transaction in the name of the principal with himself in his own name or as an agent of a third party pursuant to Section 181 2nd alternative German Civil Code (Bürgerliches Gesetzbuch – BGB).

The Managing Directors, i. e. the members of the Executive Board, manage the business activities of DWS Management GmbH and – with regard to the position of DWS Management GmbH as the General Partner of DWS KGaA – the business activities of DWS KGaA in accordance with the law, the respective Articles of Association, the Terms of Reference and, subject to statutory and regulatory restrictions, the instructions of the shareholders' meeting. The business activities are managed with the objective of creating sustainable value in the interests of the company, thus taking into account the needs and requirements of the shareholders, the employees, and the other groups affiliated with the company (stakeholders). The business allocation plan (Geschäftsverteilungsplan) assigns specific areas of functional and regional responsibility to each member of the Executive Board. The Executive Board is nevertheless jointly responsible for managing the General Partner and DWS KGaA.

The Executive Board steers DWS KGaA and its subsidiaries based on uniform policies and generally controls the Group entities within the limits of applicable laws. The Executive Board is responsible for ensuring the proper business organisation of the Group, which includes appropriate and efficient risk management as well as compliance with legal regulations and internal policies (Compliance) and takes the necessary measures to ensure that the adequate internal guidelines are developed and implemented. The full Executive Board resolves on appointments of first-level executives, in particular on the appointment of the global key function holders employed by DWS KGaA, and of management board members of its subsidiaries. In appointing employees to management functions in the Group, the Executive Board takes diversity into account. It strives, in particular, to achieve an appropriate representation of women. In addition, the Executive Board seeks to ensure that the employees in management functions have the knowledge and skills required for the proper performance of tasks and the necessary experience. In the context of succession management, the Executive Board has implemented a series of sophisticated leadership and board readiness assessments designed to identify and develop management talent for enhanced leadership responsibilities. The discipline applied to succession management in line with best practices has resulted in long-term succession plans.

The Executive Board closely collaborates with the Supervisory Board in a cooperative relationship of trust and for the benefit of the company. The Executive Board reports to the Supervisory Board at a minimum within the scope prescribed by law or administrative guidelines, in particular on all issues with relevance for the Group concerning strategy, the intended business policy, planning, business development, risk situation, risk management, staff and leadership team developments, reputation and compliance.

For the members of the Executive Board, the age limit is reached, in general, when a member reaches the retirement age according to the rules of the German statutory pension insurance scheme. The standard retirement age is regularly reached at the age of 67.

The following table shows the members of the Executive Board. The table includes their year of birth, the date on which they were first appointed, the date of their departure or the date when their appointment is scheduled to end as well as their position on the Executive Board.

Members of the Executive Board

Name	Year of birth	First appointment	Appointment until	Position
Dr Stefan Hoops	1980	10 June 2022	30 June 2025	Chief Executive Officer (CEO) and Head of Executive and Investment Division
Manfred Bauer	1969	1 July 2020	30 June 2026	Head of Product Division
Dirk Goergen	1981	1 December 2018	30 November 2024	Head of Client Coverage Division
Dr Karen Kuder	1973	1 November 2022	31 October 2025	Chief Administrative Officer (CAO) and Head of CAO Division
Angela Maragkopoulou	1976	1 January 2023	31 December 2025	Chief Operating Officer (COO) and Head of COO Division
Claire Peel	1974	1 March 2018	28 February 2024	Chief Financial Officer (CFO) and Head of CFO Division
Dr Asoka Woehrmann	1965	25 October 2018	9 June 2022	Chief Executive Officer (CEO) and Head of Executive Division
Mark Cullen	1955	1 December 2018	31 December 2022	Chief Operating Officer (COO) and Head of COO Division
Stefan Kreuzkamp	1966	1 March 2018	31 December 2022	Chief Investment Officer (CIO) and Head of Investment Division

Manfred Bauer has been appointed for a second term of three years as member of the Executive Board.

In the following, information is provided on the current members of the Executive Board. The information includes the current positions and area of responsibility according to the current Business Allocation Plan for the Executive Board. Also specified are other board mandates or directorships within and outside of the Group as well as all memberships in legally prescribed supervisory boards or other comparable domestic or foreign supervisory bodies of commercial enterprises. The members of the Executive Board have generally undertaken not to assume chairmanships of supervisory boards of companies outside the Group.

Current Members of the Executive Board

GRI 102-32

The Managing Directors of the General Partner, collectively referred to as the Executive Board, are jointly responsible for managing the business activities of the General Partner – and with regard to the position of DWS Management GmbH as the General Partner of DWS KGaA – of DWS KGaA. However, the business allocation plan (Geschäftsverteilungsplan) of the Executive Board assigns each Managing Director specific areas of functional and regional responsibility.

The areas of responsibility of the current members of the Executive Board are as follows:

Dr Stefan Hoops – Effective 10 June 2022, Dr Stefan Hoops was appointed as Managing Director of the General Partner, Chief Executive Officer and Chairman of the Executive Board. He succeeds Dr Asoka Woehrmann, who decided to step down from this position, effective 9 June 2022. Effective 10 June 2022 Dr Hoops took over the following responsibilities as CEO and Head of the Executive Division previously allocated to Dr Woehrmann: Audit, Human Resources, Communications and Marketing, Corporate Strategy and M&A and the APAC Region. Additionally, Dr Hoops assumed the responsibility for setting the DWS sustainability strategy and has the overall responsibility for the Group's positioning in relation to climate-related risks and opportunities. In addition, Dr. Hoops has been Head of the Investment Division since 1 January 2023. In this role he manages and oversees all portfolio management activities, including Active, Passive and Alternatives strategies. Further, he is responsible for trading oversight.

Dr Hoops chairs the Supervisory Boards of DWS Investment GmbH and DWS Grundbesitz GmbH.

Dr Hoops does not have any external directorships subject to disclosure.

Manfred Bauer – As the Head of the Product Division, Mr Bauer is responsible for the product value chain along its entire life-cycle, including product strategy and innovation, structuring and product management.

Mr Bauer is the speaker of the Management Board of DWS Investment GmbH and a member of the Management Board of DWS Beteiligungs GmbH. Further, Mr Bauer serves as a member of the Supervisory Board of DWS Alternatives GmbH and a member of the Supervisory Board of DWS Investment S.A.

Mr Bauer does not have any external directorships subject to disclosure.

Dirk Goergen – Mr Goergen is the Head of the Global Client Coverage Group, responsible for Sales Management and Sales Strategy, consolidating all global distribution teams and activities.

Mr Goergen is also the Regional Head of the Americas and the Chief Executive Officer of DWS USA Corporation.

Mr Goergen does not have any external directorships subject to disclosure.

Dr Karen Kuder – Dr Kuder is the Chief Administrative Officer and heads the CAO Division. In her role Dr Kuder is responsible for the Legal (including Data Privacy), Compliance & Anti Financial Crime departments as well as Corporate Governance and Client & Investment Monitoring.

Dr Kuder does not have any external directorships subject to disclosure.

Angela Maragkopoulou – As the Chief Operating Officer and Head of the COO Division, Ms Maragkopoulou is responsible for Technology and Operations, Data, and Business Services.

Ms Maragkopoulou does not have any external directorships subject to disclosure.

Claire Peel – Ms Peel is the Chief Financial Officer and Head of the CFO Division. Her responsibilities include Finance, Financial Accounting, Strategic Financial Planning, Tax, Capital and Liquidity Management, Investor Relations, Risk Management and the EMEA region. Further, the CFO is responsible for the Group's climate-related disclosures, including information according to the recommendations of the "Task Force on Climate-related Financial Disclosures" (TCFD).

Ms Peel serves as the chairwoman of the Supervisory Board of DWS Investment S.A.

Ms Peel does not have any external directorships subject to disclosure.

Former Members of the Executive Board

Dr Asoka Woehrmann – In his role as the Chief Executive Officer and Chairman of the Executive Board, the Head of Audit, the Head of Human Resources, the Head of Communications and Marketing, the Head of Corporate Strategy and M&A and the Regional Head for APAC reported to Dr Woehrmann. Additionally, Dr Woehrmann was responsible for setting the DWS sustainability strategy and had the overall responsibility for the Group's positioning in relation to climate-related risks and opportunities.

Mark Cullen – Mr Cullen, as Chief Operating Officer and Head of the COO Division, was responsible for Information Technology, Operations, Corporate Services, Legal, Compliance, Anti Financial Crime and Data Protection. Mr Cullen was also the Regional Head of the Americas and the Chief Executive Officer of DWS USA Corporation.

Stefan Kreuzkamp – Mr Kreuzkamp was the Chief Investment Officer and headed the Investment Division. In this role he ran and oversaw all portfolio management activities, including Active, Passive and Alternatives strategies. Further, Mr Kreuzkamp was responsible for trading oversight.

Supervisory Board

The Supervisory Board monitors and advises the General Partner in its task of managing DWS KGaA and its subsidiaries. Between meetings, the Chairman of the Supervisory Board, and, to the extent relating to the responsibilities of the respective Supervisory Board committees, the Chairpersons of the Supervisory Board committees, maintain contact with the General Partner on a regular basis as far as this is necessary for the proper performance of their supervisory duties. The Chairman of the Supervisory Board, and – within their respective functional responsibility – the Chairpersons of the Supervisory Board committees, are informed without delay by the General Partner about important events of material significance for the assessment of the situation and the development as well as for the management of the Group. The Chairman of the Supervisory Board then notifies the Supervisory Board and, if necessary, convenes an extraordinary Supervisory Board meeting; this applies respectively to the Chairpersons of the Supervisory Board committees with regard to the respective committees.

The Chairman of the Supervisory Board plays a crucial role in the proper functioning of the Supervisory Board and has a leadership role in this regard. He shall ensure the Supervisory Board's effective overall functioning and a cooperative relationship of trust between the members of the Supervisory Board and the General Partner's Executive Board.

In 2022, a total of 20 meetings of the Supervisory Board and its standing committees took place. The Supervisory Board meets regularly without the Executive Board.

In the fourth quarter of 2022 the Supervisory Board performed the annual review of the efficiency of its activities. It conducted a questionnaire-based self-assessment, which was complemented by interviews with selected Supervisory Board members, including the Chairman, the Chairwoman of the Audit and Risk Committee, one independent Supervisory Board member and one employee representative. The assessment was supported by an external advisor who designed the questionnaire and conducted the interviews, using a previously coordinated interview guide. Both the questionnaire and the interview guide considered additional committee responsibilities and included a self-assessment of the knowledge, skills and experience of the Supervisory Board members. The individual feedback provided was consolidated in a report, which included a comparison with previous year's assessment results and with other Supervisory Boards where appropriate. The report was submitted – along with action items recommended by the Nomination Committee – to the Supervisory Board for its discussion and the adoption of measures.

Members of the Supervisory Board

The Supervisory Board is composed of eight shareholders' representatives and four employee representatives, as it is subject to the German One-Third Employee Participation Act (Drittelbeteiligungsgesetz), which requires that one third of the Supervisory Board members are employee representatives. The eight members representing the shareholders are appointed by the General Meeting of DWS KGaA, the four employee representatives are to be elected by the employees pursuant to the provisions of the One-Third Employee Participation Act (Drittelbeteiligungsgesetz).

The current four employee representatives were appointed by the responsible court on 29 May 2018. The employee representatives appointed by the court will remain on the Supervisory Board until employee elections to the Supervisory Board in accordance with the German One-Third Participation Act (Drittelbeteiligungsgesetz) have been conducted.

The shareholders' representatives on the Supervisory Board are elected for the period until conclusion of the General Meeting which adopts the resolutions concerning the ratification of acts of management for the fourth financial year following the beginning of the term of office. The financial year in which the term of office begins is not taken into account. The General Meeting may determine a shorter term of office upon such election. All shareholders' representatives on the Supervisory Board have been appointed before 2022 and remained in office throughout the year. Therefore, there were no changes amongst the eight members representing the shareholders in 2022.

The following table shows the members of the Supervisory Board through 2022, their year of birth, the year in which they were first elected or appointed, the year in which their term is scheduled to end, their position on the Supervisory Board, their principal occupation and supervisory board positions as well as directorships at other companies.

Members of the Supervisory Board

Name	Year of birth	First elected From	Until	Position on the Supervisory Board	Principal occupation	Other supervisory board positions and directorships
Karl von Rohr	1965	2018	2023	Chairman and shareholder representative	Deputy Chairman of the Management Board of Deutsche Bank AG	Deputy Chairman of the Management Board of Deutsche Bank AG
Ute Wolf	1968	2018	2023	Deputy Chairperson and shareholder representative	Chief Financial Officer of Evonik Industries AG	Member of the Management Board of Evonik Industries AG, Member of the Supervisory Board of Klöckner & Co. SE and Chairwoman of the Audit Committee, Member of the Supervisory Board of Pensionskasse Degussa VVaG
Stephan Accorsini	1969	2018		Employee representative appointed by court[1]	First Deputy Chairman of the Workers' Council of DWS Investment Group	None
Annabelle Bexiga	1962	2019	2023	Shareholders' representative	Founder and Principal, self-employed at Bay Harbour Consulting	Non-Executive Director of StoneX Group Inc., Non-Executive Director of Triton International Limited, Non-Executive Director of Fleetcor Technologies, Inc
Aldo Cardoso	1956	2018	2023	Shareholders' representative	Chairman of the Board of Bureau Veritas	Chairman of the Board of Bureau Veritas, Director of Imerys SA and Chairman of the Audit Committee, Director of Worldline SA and Chairman of the Audit Committee
Minoru Kimura	1967	2020	2023	Shareholders' representative	Executive Officer of Nippon Life Insurance Company and Regional CEO for the Americas and Europe	Non-Executive Director of Nippon Life Global Investors Europe Plc, Non-Executive Director of Nippon Life Schroders Asset Management Europe Limited, Non-Executive Director of Nippon Life Insurance Company of America, Non-Executive Director of Nippon Life Global Investors Americas, Inc, Director of Resolution Life Group Holdings Ltd. (since 1 April 2021), Chairman of the Board of Nippon Life Americas, Inc. (since 1 May 2021)
Bernd Leukert	1967	2020	2023	Shareholders' representative	Chief Technology, Data and Innovation Officer and member of the Management Board of Deutsche Bank AG	Member of the Management Board of Deutsche Bank AG, Member of the Supervisory Board of Bertelsmann SE & Co. KGaA, Member of the Supervisory Board of Bertelsmann Management SE
Angela Meurer	1962	2018		Employee representative appointed by court[1]	Chairwoman of the representative body for disabled employees of Deutsche Bank AG	None
Richard I. Morris, Jr.	1949	2018	2023	Shareholders' representative	Advisor to TA Associates Management LP	None
Erwin Stengele	1969	2018		Employee representative appointed by court[1]	Chairman of the Workers' Council of DWS Investment Group	None
Margret Suckale	1956	2018	2023	Shareholders' representative	Former member of the Management Board of BASF SE	Member of the Supervisory Board of Deutsche Telekom AG, Member of the Supervisory Board of HeidelbergCement AG, Member of the Supervisory Board of Infineon Technologies AG
Said Zanjani	1958	2018		Employee representative appointed by court[1]	Former Chairman of the Workers' Council of DWS Investment Group	None

[1] Appointed by the court until the end of the next elections of employee representatives to the Supervisory Board in accordance with the German One-Third Participation Act (Drittelbeteiligungsgesetz).

Objectives for the Composition of the Supervisory Board, Profile of Requirements and Status of Implementation

Objectives for the composition of the Supervisory Board

In accordance with German law, the members of the Supervisory Board must be reliable, must have the expertise required to perform their control function and to assess and monitor the company's businesses, and must commit sufficient time to the performance of their tasks.

The Supervisory Board first established objectives for its composition and adopted a profile of requirements for the Supervisory Board collectively as described below in its meeting on 29 January 2019 that were last updated on 21 October 2021, when the Supervisory Board determined that the Audit and Risk Committee must comprise at least two financial experts.

The Supervisory Board shall be composed in such a way that its members collectively possess the knowledge, abilities and expert experience to properly complete its tasks. The members of the Supervisory Board collectively and the members of its Audit and Risk Committee must be familiar with the financial industry in general and more specifically with the asset management industry. The composition of the Supervisory Board shall ensure qualified control of and advice to the Executive Board taking into account that the Group is an internationally operating, broadly positioned asset manager. The members of the Supervisory Board should preserve the public reputation of the Group and, in particular, attention should be placed on the integrity, personality, willingness to perform, professionalism and independence of the individuals proposed for election. The objective is for the Supervisory Board collectively to have all of the knowledge and experience considered to be essential, while taking into account the business activities of the Group. The current members of the Supervisory Board fulfil these objectives.

In addition, the Supervisory Board shall have what it considers to be an adequate number of independent members from the group of shareholders' representatives, thereby taking into account the shareholder structure. A Supervisory Board member is considered independent if he or she is independent from the company, its Executive Board and from the controlling shareholder. The Supervisory Board has determined that at least five of the shareholders' representatives shall be independent. Currently, the Supervisory Board has six independent shareholders' representatives: Ms Annabelle Bexiga, Mr Aldo Cardoso, Mr Minoru Kimura, Mr Richard I. Morris, Jr., Ms Margret Suckale and Ms Ute Wolf.

Mr von Rohr and Mr Leukert are members of the management board of Deutsche Bank AG. Deutsche Bank AG is the sole shareholder of DB Beteiligungs-Holding GmbH, which is the majority shareholder of DWS KGaA. They are, therefore, not considered independent from the controlling shareholder and thus not as independent as defined in Section C.6 of the German Corporate Governance Code. However, they are considered independent from the company and the Executive Board as they have no personal or business relationship with the company or its Executive Board that may cause a substantial structural and not merely temporary – conflict of interest. They are therefore considered independent for the purposes of Section C.7 of the German Corporate Governance Code. The members of the Supervisory Board may not exercise functions on a management body of or perform advisory duties at major competitors. Material conflicts of interest on the part of a member of the Supervisory Board that are not just temporary shall result in the termination of the mandate. As described in the Report of the Supervisory Board, none of the Supervisory Board members had any conflicts of interests in the reporting year.

There is a regular maximum age limit of 75. In exceptional cases, a Supervisory Board member can be elected or appointed for a period that extends no longer than until the end of the fourth Ordinary General Meeting that takes place after he/she has turned the age of 75. The regular length of each individual Supervisory Board membership is not to exceed 15 years. The age limit and the limit on the length of Supervisory Board membership are met by all current Supervisory Board members.

The Supervisory Board shall not comprise more than two former Managing Directors of the General Partner. Currently, there is no former Managing Director of the General Partner on the Supervisory Board.

The Supervisory Board respects diversity when proposing members for appointment to the Supervisory Board. In light of the international operations of the Group, attention should be paid to ensure that the Supervisory Board has an appropriate number of members with long-term international experience. As per today, the professional careers or private lives of four members of the Supervisory Board are centred outside Germany. Furthermore, all the shareholders' representatives on the Supervisory Board have several years of international experience from their current or former activities as management board members or a comparable executive function of corporations or organizations with international operations. In these two ways, the Supervisory Board believes the international activities of DWS are sufficiently taken into account. The objective is to retain the currently existing international profile.

For the election proposals of shareholders' representatives to the General Meeting of DWS KGaA, the Supervisory Board takes into account the recommendations of the Nomination Committee. In reviewing potential candidates for a new election or subsequent appointments to Supervisory Board positions, qualified women shall be included in the selection process and shall be appropriately considered in the election proposals. In accordance with Section 111 (5) of the German Stock Corporation Act (AktG), the Supervisory Board determined a target for the percentage of female members on the Supervisory Board of at least 30% of the members by 29 January 2024. Currently, four Supervisory Board members are women. This reflects a share of around 33.34% of all members and more than 30% of the shareholders' representatives. It should be taken into account that the Supervisory Board can only influence the composition of the Supervisory Board through its election proposals to the General Meeting.

The Supervisory Board profile of requirements includes, in particular, the knowledge, skills and professional expertise that are collectively required to perform the tasks of the Supervisory Board, taking into account the suitability and properness requirements of the European Banking Authority and the standards which are required under applicable laws (collective qualifications). The Supervisory Board as a whole shall have an understanding of the fields of expertise specified below that is appropriate for the size and complexity of the Group. Accordingly, the Supervisory Board ensures that all Supervisory Board members have sufficient basic knowledge in each field of competence and that several members also contribute extended expertise in each field of competence. This combination results in a mix of expertise that ensures that all fields of competence are collectively and adequately covered.

The fields of competence include, in particular:

– (Non-executive) supervisory experience: Preferably, experience as a member in a supervisory capacity on dual-tiered board structures, and as such, performing a monitoring role over the management body.
– Asset Management: Clear understanding of fiduciary responsibilities, fund management and prudent investment processes of a bank-owned asset manager.
– Experience with client handling, financial markets and jurisdictional expertise with due consideration to be given to US representation.
– Technology, digitalisation, artificial intelligence and operational excellence.
– Financial expertise (including non-financial reporting): The Audit and Risk Committee must comprise at least two financial experts, with one serving as the committee's chairperson. At least one committee member must have expertise in the field of accounting and one further member in the field of auditing pursuant to Section 100 (5), Section 107 (4) of the German Stock Corporation Act (AktG), whilst accounting and auditing also include sustainability reporting and its audit and assurance. It would be advantageous to have that expertise gained within asset management with some knowledge of credit and liquidity management. At least the member with expertise in the field of accounting shall have special knowledge and experience in the application of internal control and risk management systems.
– Risk management and controls which includes promoting a culture of individual accountability, knowledge and experience of risk governance and applicable control environment.
– Compensation and compensation systems as well as succession management.
– Strategic planning, business and risk strategies as well as their implementation.
– Governance and corporate culture.
– ESG and Sustainability, including corporate and social responsibility: Expertise regarding ESG standards and best practices and their implementation.

In addition, each member of the Supervisory Board should be able to weigh the short- and long-term benefits and risks of decisions (business judgement). He or she should act in accordance with stated values and principles and should encourage an open environment Each member of the Supervisory Board should be able to build productive partnerships with key constituents including fellow Supervisory and Executive Board members. Furthermore, each member of the Supervisory Board should be free from substantial structural and not merely temporary conflict of interests and should not engage in any business activities that conflict, directly or indirectly, with regulated activities of the Group. The members of the Supervisory Board shall also have sufficient time to carry out their respective responsibilities taking into account all personal and professional commitments. Members of the Supervisory Board shall not hold more than the allowed number of Supervisory Board mandates in accordance with the applicable legal requirements. The current members of the Supervisory Board fulfil these requirements.

To clearly present the implementation status of the profile of requirements, the Supervisory Board has drawn up a qualification matrix in accordance with recommendation C.1 GCGC. The contents of the matrix are based on a self-assessment by the Supervisory Board members, which was conducted and validated in early 2023 with the support of an independent advisor.

Qualification matrix

	Karl von Rohr (Chair)	Ute Wolf (Deputy Chair)	Annabelle Bexiga	Aldo Cardoso	Minoru Kimura	Bernd Leukert	Richard I. Morris, Jr.	Margret Suckale	Stephan Accorsini[1]	Angela Meurer[1]	Erwin Stengele[1]	Said Zanjani[1]
General information:												
Year of birth	1965	1968	1962	1956	1967	1967	1949	1956	1969	1962	1969	1958
Gender	male	female	female	male	male	male	male	female	male	female	male	male
Nationality	German	German	Portuguese, US	French	Japanese	German	British, US	German	German, Italian	German	German	German, Iranian
Member since	2018	2018	2019	2018	2020	2020	2018	2018	2018	2018	2018	2018
Committee memberships	Nomination (Chair)	Audit and Risk (Chair)	Remuneration	Remuneration, Audit and Risk	–	–	Audit and Risk, Nomination	Remuneration (Chair), Nomination	Audit and Risk	–	Remuneration	Nomination
Independence (●/○)	●[2,3]	●/○[2]	●/○[2]	●/○[2]	●/○[2]	●[2,3]	●/○[2]	●/○[2]	N/A[1]	N/A[1]	N/A[1]	N/A[1]
Competencies:[4]												
Non-executive supervisory experience	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓
Asset management	✓✓	✓✓	✓	✓	✓✓	✓	✓✓	✓	✓✓	✓	✓✓	✓
Client handling	✓✓	✓	✓	✓✓	✓✓	✓	✓✓	✓✓	✓	✓✓	✓	✓
Financial markets	✓✓	✓✓	✓	✓✓	✓✓	✓	✓✓	✓✓	✓	✓	✓	✓
Jurisdictional expertise	✓✓	✓	✓	✓✓	✓✓	✓	✓	✓✓	✓	✓	✓	✓
Technology, digitalization, artificial intelligence and operational excellence	✓	✓	✓✓	✓	✓	✓✓	✓✓	✓	✓✓	✓	✓✓	✓✓
Financial expertise including non-financial reporting	✓✓	✓✓[5]	✓	✓✓[5]	✓✓	✓	✓✓[5]	✓	✓✓	✓	✓✓	✓✓
Risk management and controls	✓✓	✓✓	✓✓	✓	✓	✓✓	✓	✓✓	✓✓	✓	✓	✓
Compensation (systems) and succession management	✓✓	✓	✓✓	✓✓	✓	✓	✓	✓✓	✓✓	✓	✓✓	✓
Strategic planning, business and risk strategies as well as their implementation	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓	✓
Governance and corporate culture	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓
ESG and Sustainability including corporate and social responsibility	✓✓	✓✓	✓	✓	✓	✓✓	✓✓	✓✓	✓	✓✓	✓	✓✓

1 Employee representative.
2 According to the German Corporate Governance Code (GCGC); ● – independent from the company and the Managing Directors of the General Partner, ○ – independent from the controlling shareholder.
3 Member of the Management Board of Deutsche Bank AG.
4 Based on a self-assessment by the Supervisory Board, which was conducted and validated with the support of an independent advisor:
✓ – basic knowledge in order to have an understanding of relevant issues and to be able to make information-based decisions in the respective area,
✓✓ – extended expertise in the respective area.
5 Financial expert according to Section 100 (5) of the German Stock Corporation Act and Recommendation D.3 of the GCGC.

Standing Committees of the Supervisory Board

IFR Article 48(c)

The Supervisory Board has established the following three standing committees. The committees work closely together and, to the extent required, coordinate their activities with each other and with the Chairman of the Supervisory Board and consult each other on an ad-hoc basis. To increase efficiency and enhance the exchange of information, committees can also hold joint meetings.

The committee chairpersons report regularly to the Supervisory Board on the work of the committees. The Report of the Supervisory Board in the Annual Report 2022 provides information on the work of the committees over the reporting year.

Audit and Risk Committee

The Audit and Risk Committee consists of three members of the Supervisory Board representing shareholders and one member of the Supervisory Board representing employees. The committee is chaired by a representative of the shareholders. The Chairperson of the committee is elected by the Supervisory Board.

The Chairperson of the committee has expertise in accounting and auditing as well as specialist knowledge and experience in the application of accounting principles and internal control processes. In addition, at least one other member of the committee must have expertise in the field of accounting or in the field of auditing.

The Audit and Risk Committee generally supports the Supervisory Board in its monitoring activities, in particular, in monitoring the effectiveness of the risk management system, the auditing of the financial statements, especially with regard to the auditor's independence and the additional services provided by the auditor as well as the Executive Board's prompt remediation – through suitable measures – of any deficiencies that might be identified by the auditor and internal control functions based on internal and external audits, in particular any such deficiencies that might relate to any weaknesses that might be found in risk controls, non-compliance with policies, laws and regulatory requirements.

The committee is entitled to inspect all business documentation of DWS KGaA. The committee and each of its members are entitled to obtain, through the Chairperson, information in connection with its tasks directly from the auditor, the Executive Board and from the Heads of the central functions responsible for tasks relating to the committee. The committee's right to obtain information applies in particular towards the Head of Internal Audit, the Head of the Compliance function, the Head of the Risk function and the Group Controller. The Chairperson will inform all members of the Committee of the information received. The Executive Board is informed without undue delay when information is obtained from any central function Head. If required, the committee meets without representatives of the Executive Board. This applies in particular when the auditor is called in as an expert, unless the committee considers the participation of members of the Executive Board to be necessary.

The committee pre-reviews the annual and consolidated financial statements and management reports including the integrated non-financial group statement, as they are prepared. The committee discusses the audit reports with the auditor. The committee also prepares the decisions of the Supervisory Board on the proposal for a resolution to be submitted to the General Meeting with regard to the establishment of the annual financial statements and the approval of the consolidated financial statements as well as the resolution proposal on the appropriation of distributable profit and submits corresponding recommendations to the Supervisory Board. It discusses material changes to the audit and accounting methods.

The committee discusses the half-year financial reports and the report on the limited review of the quarterly financial statements with the Executive Board and the auditor. The committee also supports the Supervisory Board in monitoring the financial reporting process and can submit recommendations or suggestions to the Supervisory Board on ensuring the integrity of the financial reporting process.

The committee submits proposals to the Supervisory Board for the appointment of the auditor, which shall include at least two candidates when tendering the auditor mandate and complies with the requirements of Article 16 (2) Regulation (EU) No. 537/2014 to the extent applicable and it prepares the proposal of the Supervisory Board to the General Meeting for the election of the auditor. The committee advises the Supervisory Board on issuing, terminating and continuing the audit mandate to the auditor and submits proposals to the Supervisory Board for the auditor's remuneration. The committee supports the Supervisory Board in monitoring the independence, qualification and efficiency of the auditor as well as the rotation of the members of the audit team. Further, it regularly reviews the quality of the audit based on suitable criteria. Mandates for non-audit-related services given to the auditor or to companies to which the auditor is related in legal, economic or personnel terms need the prior consent of the Audit and Risk Committee. In this the committee is supported by the Group's Audit Independence Council.

The committee is appointed by the Supervisory Board to resolve on reserved matters in relation to material Related Party Transactions pursuant to Section 111b of the German Stock Corporation Act (AktG). In this context, the Audit and Risk Committee is supported by the Related Party Transaction Council, which issues the Related Party Approval Report to the committee if required. The committee arranges to be informed regularly about the work performed by Internal Audit, the effectiveness of the internal audit system and in particular about the focal areas of its auditing activity and on the results of its audits. It is responsible, in particular, for receiving and handling the quarterly, annual and ad-hoc reports provided by Internal Audit. The Executive Board informs the committee about special audits, substantial complaints and other exceptional measures at DWS KGaA and its subsidiaries on the part of German and foreign regulatory authorities.

The committee regularly obtains reports on the receipt and handling of complaints from employees and its subsidiaries, from shareholders of DWS KGaA and from third parties. In particular complaints concerning accounting, internal accounting controls, auditing and other financial reporting matters must be submitted to the committee without undue delay.

Reports concerning compliance matters are presented in the meetings of the committee on a regular basis. The committee is responsible for taking receipt of and handling the report by the Head of Compliance on the implementation and effectiveness of the control environment for investment services and activities, on the risks that have been identified and on the complaints-handling reporting as well as remedies undertaken or to be undertaken (Compliance Report). The Compliance Report is issued at least once a year, i. e. within a 12 months period.

In addition, the committee advises the Supervisory Board on the overall risk appetite and risk strategy on a consolidated basis. It monitors the implementation of the stated risk appetite and risk strategy on a consolidated basis by senior management. The committee monitors material aspects of the rating and valuation processes. The committee receives reports from the Executive Board, which are appropriate to monitor whether the conditions in the client business are in line with the business model and risk structure of DWS KGaA. If this is not the case, the committee requests proposals from the Executive Board on how the conditions in the client business could be structured to align them with the business model and risk structure of DWS KGaA. The committee also monitors the implementation of such proposals. In addition, the committee reviews whether the incentives set by the compensation system take into account the risk, capital and liquidity structure of DWS KGaA as well as the likelihood and maturity of earnings. This is without prejudice to the tasks of the Remuneration Committee. The committee determines the nature, scope, format and frequency of the information which the General Partner is required to submit on strategy and risks.

The Audit and Risk Committee held seven meetings in 2022.

The current members of the Audit and Risk Committee are Ms Ute Wolf (Chairperson), Mr Stephan Accorsini, Mr Aldo Cardoso, and Mr Richard I. Morris, Jr.

Nomination Committee

The Nomination Committee consists of the three members of the Supervisory Board representing shareholders and one member of the Supervisory Board representing employees. The committee is chaired by a member of the Supervisory Board representing shareholders.

The tasks of the Nomination Committee of the Supervisory Board of DWS Group GmbH & Co. KGaA are based on Section 25d (11) of the German Banking Act (KWG) and should in substantial parts not solely be performed by the shareholders' representatives on the supervisory board. Against this background, the Nomination Committee of the Supervisory Board of DWS KGaA also comprises employee representatives. However, it is ensured that the candidate recommendations for the election proposals to the General Meeting are prepared exclusively by the committee's shareholder representatives.

The shareholders' representatives on the Nomination Committee prepare the Supervisory Board's proposals for the election or appointment of new shareholders' representatives to the Supervisory Board. In this context, they take into account the statutory requirements, guidelines from supervisory authorities and criteria specified by the Supervisory Board for its composition as well as the balance and diversity of the knowledge, skills and experience of all members of the Supervisory Board, prepare a job description with a candidate profile, and state the time commitment associated with the tasks.

The committee is responsible for drawing up an objective to promote the representation of the under-represented gender on the Supervisory Board as well as a strategy for achieving this and the regular assessment of the structure, size, composition and performance of the Supervisory Board and making recommendations to the Supervisory Board regarding this. The Nomination Committee supports the Supervisory Board in the regular assessment of the knowledge, skills and experience of the individual members of the Supervisory Board as well as of the body collectively, and in reviewing the principles of the Executive Board for selecting and appointing persons to the upper management levels and the recommendations made to the Executive Board in this respect.

The Nomination Committee held one meeting in 2022.

The current members of the Nomination Committee are Mr Karl von Rohr (Chairperson), Mr Richard I. Morris, Jr., Ms Margret Suckale and Mr Said Zanjani.

Remuneration Committee

The Remuneration Committee consists of three members of the Supervisory Board representing shareholders and one member of the Supervisory Board representing employees.

The committee should include a sufficient number of independent Supervisory Board members. At least one member of the committee must have sufficient expertise and professional experience in the field of risk management and risk controlling, in particular with regard to mechanisms used to align the compensation systems to DWS KGaA's overall risk propensity and strategy and its capital base. The committee is chaired by a Chairperson who shall be a member of the Supervisory Board representing shareholders.

The Remuneration Committee monitors the appropriate structure of the compensation systems for the employees and, in particular, the appropriate structure of the compensation for the Head of Compliance and for the employees who have a material influence on the overall risk profile of DWS KGaA and its subsidiaries. The effects of the compensation systems on risk, capital and liquidity management shall be assessed and it shall be ensured that the compensation systems and the group-wide compensation strategy – in consideration of the corporate culture – are aligned to achieving the objectives set out in the business and risk strategies of the Group.

In addition, the committee supports the Supervisory Board in monitoring the process to identify Group Risk Takers in accordance with Section 27 (2) sentence 1 of the Regulation on Remuneration in Financial Institutions (InstVV) and in this context checks the appropriate structure of the compensation systems for the relevant employees.

The committee supports the Supervisory Board in monitoring whether the internal controls and other relevant areas are properly implemented in the structuring of the compensation systems. It also supports the Supervisory Board in preparing resolution proposals to the General Meeting on the structuring of variable and fixed compensation in accordance with Section 25a (5) sentence 6 of the German Banking Act (KWG) and in submitting the remuneration system for the member of the Executive Board to the General Meeting pursuant to Section 120a (1) of the German Stock Corporation Act (AktG).

The committee coordinates its work with the Audit and Risk Committee and works closely with it as required in order to properly perform its tasks.

The committee is authorized to obtain, via its Chairperson, information relating to the committee tasks from the Head of Internal Audit and from the Heads of the organizational units responsible for structuring the compensation systems. The Executive Board must be informed of this. In addition, the committee Chairperson is kept up to date by the Compensation Officer on his work and ensures close coordination of the monitoring activities as well as the submission of the Compensation Officer's informative reports on the appropriateness and structure of the compensation system.

The Remuneration Committee held two meetings in 2022.

The current members of the Remuneration Committee are Ms Margret Suckale (Chairperson), Ms Annabelle Bexiga, Mr Aldo Cardoso and Mr Erwin Stengele.

Joint Committee

DWS KGaA has a Joint Committee as an additional corporate body. If the Joint Committee has met, it shall report to the General Meeting on its activities. The Joint Committee consists of two members delegated by the shareholders' meeting of the General Partner, and of two members delegated by the shareholders' representatives on the Supervisory Board from their midst. The shareholders' meeting of the General Partner appoints one of its delegates as Chairperson of the Joint Committee. The Chairperson has a casting vote with regard to decisions taken in the Joint Committee.

The shareholders' meeting of the General Partner and the Supervisory Board may at any time dismiss and replace the members they delegated.

With respect the period of office of the members of the Joint Committee the regulations applicable to the shareholders' representatives on the Supervisory Board apply accordingly. For the members delegated by the Supervisory Board it ends no later than their respective term of office as a member of the Supervisory Board.

The following table shows the members of the Joint Committee through 2022, their year of birth, the date when they were first delegated to the Joint Committee and the year in which their term is scheduled to end, their position on the Joint Committee, their principal occupation and supervisory board positions as well as directorships at other companies.

Joint Committee members

		Appointed				
Name	Year of birth	From	Until	Position on the Joint Committee	Principal occupation	Supervisory board positions and directorships
Karl von Rohr	1965	2018	2023	Delegated by the shareholders' meeting of the General Partner	Deputy Chairman of the Management Board of Deutsche Bank AG	Deputy Chairman of the Management Board of Deutsche Bank AG
Minoru Kimura	1967	2020	2023	Delegated by the shareholders' representatives on the Supervisory Board	Executive Officer of Nippon Life Insurance Company and Regional CEO for the Americas and Europe	Non-Executive Director of Nippon Life Global Investors Europe Plc; Non-Executive Director of Nippon Life Schroders Asset Management Europe Limited; Non-Executive Director of Nippon Life Insurance Company of America; Non-Executive Director of Nippon Life Global Investors Americas, Inc; Director of Resolution Life Group Holdings Ltd. (since 1 April 2021); Chairman of the Board of Nippon Life Americas, Inc. (since 1 May 2021)
James von Moltke	1969	2018	2023	Delegated by the shareholders' meeting of the General Partner	Deputy Chairman of the Management Board of Deutsche Bank AG	Deputy Chairman of the Management Board of Deutsche Bank AG
Ute Wolf	1968	2018	2023	Delegated by the shareholders' representatives on the Supervisory Board	Chief Financial Officer of Evonik Industries AG	Member of the Management Board of Evonik Industries AG; Member of the Supervisory Board of Klöckner & Co. SE and Chairwoman of the Audit Committee; Member of the Supervisory Board of Pensionskasse Degussa VVaG

Sustainability Governance

Sustainability governance at DWS starts with the Executive Board, which has the overall responsibility for managing sustainability-related risks and opportunities throughout our activities.

During 2022, we adapted our sustainability governance and created a Sustainability Strategy Team to support the CEO in the development of our sustainability strategy and to ensure that it is embedded within our corporate strategy. Effective January 2023, the Executive Board is supported by a new sub-committee, the Group Sustainability Committee, which is empowered to take decisions to implement our sustainability strategy. Additionally we have set-up a Sustainability Oversight Office which aims to ensure effective sustainability governance throughout the organization and to support the Group Sustainability Committee.

The ESG Advisory Board continues to advise the Executive Board on sustainability issues and opportunities.

Furthermore, sustainability-related issues have been discussed by our Supervisory Board as described in the 'Report of the Supervisory Board' in our Annual Report 2022.

Group Sustainability Committee

In 2023, we transformed the Group Sustainability Council into a Committee of the Executive Board. The Group Sustainability Committee is mandated to implement the sustainability strategy as approved by the Executive Board at the fiduciary and corporate level across all divisions and legal entities. It consists of global senior representatives from all divisions and is chaired by the Head of Product Division and acts as a senior decision-making body for sustainability-related topics, unless decision-making falls in the core area of competence of the Board or a legal entity.

ESG Advisory Board

The ESG Advisory Board consists of internationally recognized sustainability experts from diverse disciplines and met four times during 2022. The members act independently and advise the Executive Board on a range of long-term sustainability trends, challenges and opportunities.

Five of the six ESG Advisory Board members renewed their contracts for another two years. Further details about the composition are described in our Annual Report 2021.

Further details on our sustainability and climate-related governance can also be found in Climate Report 2022.

Share Plans

For information on our employee share programs, please refer to note '20 – Employee Benefits' to the 'Consolidated Financial Statements'.

Related Party Transactions

For information requirement regarding related party transactions please refer to note '22 – Related Party Transactions' to the 'Consolidated Financial Statements'.

Audit Committee Financial Experts

Pursuant to Sections 107 (4), 100 (5) of the German Stock Corporation Act (AktG) the Audit and Risk Committee shall comprise at least two financial experts, with at least one member having expertise in the field of accounting and one further member in the field of auditing. The Supervisory Board has appointed Ute Wolf (Chairwoman), Aldo Cardoso and Richard I. Morris, Jr. as shareholders' representatives to the Audit and Risk Committee. The Chairwoman and the other shareholders' representatives on the Audit and Risk Committee have the required expertise in both financial accounting and in auditing.

Values and Leadership Principles

GRI 102-16

Code of Conduct

The Group adheres to a Code of Conduct which describes the values and minimum standards for ethical business conduct that we expect all of our employees to follow. These values and standards govern employee interactions with our clients, competitors, business partners, government and regulatory authorities, and shareholders, as well as with other employees. The Code of Conduct is established by Deutsche Bank Group. The Executive Board has adopted these Deutsche Bank Group values and beliefs and implemented Group values in supplement. In addition, the Code of Business Conduct forms the cornerstone of Group policies, which provide guidance on compliance with applicable laws and regulations. The current versions of the Code of Conduct is available from Deutsche Bank's website: https://investor-relations.db.com/corporate-governance/documents/.

Principal Accountant Fees and Services

For information regarding DWS Group's principal accountant fees and services please refer to note '26 – Additional Disclosures' to the 'Consolidated Financial Statements'.

Compliance with the German Corporate Governance Code

Declaration pursuant to Section 161 of the German Stock Corporation Act (AktG) (Declaration of Conformity 2022)

The Managing Directors of DWS Management GmbH, representing the general partner of DWS Group GmbH & Co. KGaA, and the Supervisory Board of DWS Group GmbH & Co. KGaA submit the following declaration pursuant to Section 161 of the German Stock Corporation Act (AktG):

The last Declaration of Conformity was issued on 10 December 2021. Since then and under consideration of the specific characteristics of a partnership limited by shares as outlined in Section I below, DWS Group GmbH & Co. KGaA ("DWS KGaA") has complied with the recommendations of the "Government Commission on the German Corporate Governance Code" in the version dated 16 December 2019, as published in the Federal Gazette on 20 March 2020, subject to the deviations as disclosed in Section II.

On 28 April 2022, the „Government Commission on the German Corporate Governance Code" submitted a new version of the German Corporate Governance Code, which came into effect with its publication by the Federal Ministry of Justice and Consumer Protection in the official section of the Federal Gazette (Bundesanzeiger) on 27 June 2022. Under consideration of the specific characteristics of DWS KGaA's legal form as outlined in Section I below, DWS KGaA complies with the applicable recommendations of this new version and will continue to comply with them in the future, whereas the deviations as disclosed in Section II apply.

Section I: Specific characteristics of the legal form of a partnership limited by shares

- Taking into account the specific features of the legal form of a partnership limited by shares (Kommanditgesellschaft auf Aktien or "KGaA") several recommendations of the German Corporate Governance Code ("GCGC") can only be applied in a modified way. The GCGC is geared towards the governance structure typical for a German stock corporation (Aktiengesellschaft or "AG") and does not consider specific characteristics of a KGaA.

- In the legal form of a KGaA, the tasks and duties performed by the management board of an AG are undertaken by the general partners, who are determined in the articles of association of the KGaA and not by the supervisory board. The sole general partner of DWS KGaA is DWS Management GmbH, who has the sole responsibility for the management of DWS KGaA, including all day-to-day management measures and representation of the company vis-à-vis third parties. The Managing Directors of DWS Management GmbH jointly manage the business activities of DWS Management GmbH and – with regard to the position of DWS Management GmbH as the General Partner of DWS KGaA – the business activities of DWS KGaA.

- The Supervisory Board of DWS KGaA has no authority to appoint and dismiss the Managing Directors of the General Partner, preside over associated contractual arrangements or determine the remuneration system and the fixed and variable compensation of the Managing Directors. Such decisions are taken by the shareholders' meeting of the General Partner. Certain management measures by the General Partner require prior approval from the shareholders' meeting of the General Partner.

- In addition to the corporate bodies regulated by German law, the legal form of the KGaA allows for the establishment of additional governance bodies. DWS KGaA has put this in use and has set up the Joint Committee as an additional corporate body. Certain management measures require the approval from the Joint Committee as set forth in the Articles of Association of DWS KGaA. Accordingly, DWS Management GmbH may only take such measures with the consent of the Joint Committee. The Joint Committee also possesses a right of proposal with respect to the ratification of acts of management of the Managing Directors of DWS Management GmbH and with respect to the determination of their variable compensation. Nonetheless, these proposals are legally not binding for the shareholders' meeting of DWS Management GmbH. The Joint Committee reports to the general meeting of DWS KGaA on its activities.

- The authority and scope for influence of the supervisory board of a KGaA is limited as compared to the supervisory board of a stock corporation. In addition to the specifics above, the supervisory board of DWS KGaA as a mere supervisory and advisory body is not entitled to subject the management measures to its consent, or issue rules of procedure for DWS Management GmbH. Such rights are reserved to the shareholders' meeting of DWS Management GmbH which can take these measures for the Managing Directors of DWS Management GmbH.

- The general meeting of the shareholders of a KGaA has in principle the same rights and responsibilities as the general meeting of a German stock corporation. In particular this includes the ratification of the acts of management of the general partner and the supervisory board, the election of shareholders' representatives to the supervisory board, the voting on the appropriation of profits and the appointment of the external financial auditor. As defined by German law, the general meeting of a KGaA also approves the annual financial statements, which in the case of an AG is typically performed by the supervisory board and only subject to approval of the general meeting in exceptional cases if the management board and supervisory board decide that the general meeting shall approve, or the supervisory board refuses its approval. Certain material matters requiring a resolution of the general meeting, such as the approval of the annual financial statements but also measures aiming at structural changes such as mergers, a change in the legal form of the company or the conclusion of enterprise agreements, also require the consent of the general partner.

Section II: Deviations

- Relating to recommendation C.4 of the Code, whereby a supervisory board member who is not a member of any management board of a listed company shall not accept more than five supervisory board mandates at non-group listed companies or comparable functions, with an appointment as chair of a supervisory board being counted twice. One member of the Supervisory Board of DWS KGaA, Mr Aldo Cardoso, currently holds five mandates in supervisory bodies of listed companies and in one case he chairs the respective board. Whether the number of mandates held by a member of a supervisory board seems appropriate should in the opinion of DWS KGaA, however, be assessed more appropriately on a case-by-case basis than with a rigid upper limit. The individual workload expected for a member of a supervisory board as a result of the total number of mandates held does not necessarily increase in proportion to their number. Moreover, Mr Cardoso has declared to the Supervisory Board of DWS KGaA that he has sufficient time to perform the duties associated to his position as a member of this body with the required due regularity and care. The Supervisory Board has determined that all members have sufficient time to exercise their mandate at DWS KGaA taking into account all personal and professional commitments.

- Relating to recommendation D.4 of the Code (D.5 in the Code version dated 16 December 2019), according to which the supervisory board shall form a nomination committee composed exclusively of shareholder representatives. The tasks of the Nomination Committee of the Supervisory Board of DWS KGaA are based on Section 38 (6) in connection with Section 44 (7) of the German Securities Institutions Act (WpIG) and should in substantial parts not solely be performed by the shareholder representatives on the supervisory board. Against this background, the Nomination Committee of the Supervisory Board of DWS KGaA also comprises employee representatives. However, it will be ensured that the candidate recommendations for the election proposals to the general meeting will be prepared exclusively by the committee's shareholder representatives.

- Relating to recommendation G.10, sentence 2, whereby granted long-term variable remuneration components shall be accessible to management board members only after a period of four years. In accordance with the Remuneration Regulation for Institutions (Institutsvergütungsverordnung), the granted long-term variable amounts vest in annual tranches over a retention period of five years. If the tranches represent share-based remuneration elements, they are subject to an additional holding period of one year after they become due. The Managing Directors of DWS Management GmbH can thus dispose of an initial small partial amount of the long-term grant amounts after one year and, taking into account the retention period and the holding period after six years, the last partial amount.

Frankfurt am Main, in December 2022

The Managing Directors of DWS Management GmbH	The Supervisory Board of DWS Group GmbH & Co. KGaA

Statement on the Suggestions of the German Corporate Governance Code

DWS KGaA complies with the suggestions of the Code in the version dated 28 April 2022, with the following exceptions:

- Our whistleblowing arrangements are not external facing to all third parties (although the arrangements are available to contractors). For instance, we do not include details of how to access the Integrity Hotline on our website. However, if we receive a Whistleblowing notification from an external third party, we will log this as a whistleblowing matter if it contains an allegation of misconduct against a Group staff member.

Diversity at DWS Group

GRI 102-16

As a global organisation, the Group is committed to an inclusive culture that respects and embraces the diversity of our employees, clients, and communities. As diversity and inclusion are central to the firm's culture, our continuous focus is to:

- Build talented and diverse teams to drive business results
- Create a respectful and inclusive environment where people can thrive
- Strengthen our relationship with our stakeholders – among them clients, partners, regulators, communities, and potential employees

We are convinced that diversity and inclusion, for example, stimulate innovation and help make more balanced decisions thus playing a decisive role in the success of the Group.

The Supervisory Board and Executive Board aim to serve as a role model with regards to diversity and inclusion. In line with our above-mentioned conviction, a diverse composition enables the Supervisory Board and the Executive Board to properly perform tasks and duties incumbent upon them under law, the Articles of Association and rules of procedure.

Proportion of Women in Management Positions

IFR Article 48(b)

On 29 January 2019, the Supervisory Board set a target for the percentage of women on our Supervisory Board of at least 30% of the members by 29 January 2024. As of 31 December 2022, the percentage of women on our Supervisory Board is 33.3%.

At the end of the financial year, our Executive Board includes two women which exceeds the German Executives Positions Act II (Zweites Führungspositionengesetz) which was introduced in August 2021.

In 2021, the Executive Board set further targets for the percentage of women for the first management level (32%) and the second management level (33%) beneath the Executive Board, to be reached by 31 December 2024.

As of 31 December 2022, 34.5% of the executive positions at the first management level below the Executive Board were held by women (2021: 28.1%). At the second management level below the Executive Board, this percentage stood at 33.0% (2021: 29.0%).

Diversity Concept for the Supervisory Board

The Group transparently reports on Supervisory Board diversity in this Corporate Governance Statement in the section 'Corporate Bodies – Supervisory Board' and previous section 'Proportion of Women in Management Positions'.

In addition, diversity is measured by the following aspects:

- The age structure is diverse, ranging from 52 to 72 years of age at the end of the financial year.
- At the end of the financial year, the length of experience as member of the Supervisory Board, which was constituted first in 2018, ranged from under two years to below four years. The length of experience in comparable governance bodies was between three and seventeen years.
- The diverse range of the members' educational and professional backgrounds includes banking, business administration, science, law, and information technology.

Diversity Concept for the Executive Board

The implementation of the diversity concept takes places in the course of selecting new members for the Executive Board.

Through the composition of the Executive Board, it is to be ensured that its members have, at all times, the required knowledge, skills and experience necessary to properly perform their tasks. Accordingly, when selecting members for the Executive Board, care is to be taken that they collectively have sufficient expertise and diversity within the meaning of our objectives specified above.

Diversity is measured by the following aspects:

- The age structure is diverse, ranging from 41 to 67 years of age at the end of the financial year.
- The length of experience as member of the Executive Board, since the IPO in 2018, ranged from less than one year to below five years. The length of experience in comparable management bodies ranged between five and around thirteen years.
- Also, with our strategy in mind of being a leading asset manager with headquarters in Germany and operating globally, five of the seven Executive Board members, as of the end of the financial year, have a German background. The other two members come from Australia and England respectively.
- However, the ethnic diversity of the Executive Board does not currently reflect the full diversity of the markets where we do business or the diversity of our employees.
- The diverse range of the members' educational and professional backgrounds includes banking, business administration, social sciences.
- Please also refer to section 'Corporate Bodies– Managing Directors of the General Partner (Executive Board)'.

Supplementary Information

Supplementary Information

GRI Index

GRI 102-54; GRI 102-55

Our Annual Report 2022 provides comprehensive disclosure of our material topics for our financial and non-financial performance. Disclosures included in the table below were selected based on the GRI core requirements and on a materiality analysis conducted in 2022. Please refer to the section 'About this Report – Materiality Assessment' for further information.

In order to give a better overview, the Annual Report 2022 has been prepared partially in accordance with the GRI Standards – option core. Information can either be found in the referenced pages in the report or directly in this table.

Disclosure		Annual Report	Remarks/omissions
ORGANISATION PROFILE			
102-1	Name of the organisation	DWS Group GmbH & Co. KGaA	
102-2	Activities, brands, products and services	Summarized Management Report – Who We Are	
102-3	Location of headquarters	Frankfurt/Main, Germany	
102-4	Location of operations	Summarized Management Report – Who We Are	
102-5	Ownership and legal form	Corporate Governance Statement – Corporate Bodies – Overview of the Corporate Bodies of DWS Our Shares – Shareholder Structure	
102-6	Markets served	Summarized Management Report – Who We Are	
102-7	Scale of the organisation	Summarized Management Report – Who We Are	
102-8	Information on employees and other workers	DWS Human Capital	Partially reported: Legal restrictions and data availability prevent a disclosure of external employees by gender.
102-9	Supply chain	Summarized Management Report – Who We Are	
102-10	Significant changes to the organisation and its supply chain	N/A	
102-11	Precautionary principle or approach	Summarized Management Report – Our Responsibility – Sustainable Action	
102-12	External initiatives	Summarized Management Report – Supplementary Information – Stakeholder Engagement	
102-13	Membership of associations	Summarized Management Report – Supplementary Information – Stakeholder Engagement	
102-14	Statement from senior decision-maker	Interview with the Chairman of the Executive Board	
102-15	Key impacts, risks, and opportunities	Summarized Management Report – About this Report – Materiality Assessment for 2022 Summarized Management Report – Outlook – DWS Group – Opportunities and Risks Summarized Management Report – Our Strategy and our Market – Our Strategy Summarized Management Report – Risk Report	

Disclosure		Annual Report	Remarks/omissions
102-16	Values, principles, standards, and norms of behaviour	Summarized Management Report – Who We Are Summarized Management Report – Our Strategy and our Market – Our Strategy Summarised Management Report – Compliance and Control Report – Business Ethics Corporate Governance Statement – Diversity at DWS Group Corporate Governance Statement – Values and Leadership Principles	
102-17	Mechanisms for advice and concerns about ethics	Summarized Management Report – Compliance and Control – Business Ethics	
102-18	Governance structure	Corporate Governance Statement – Corporate Bodies – Overview of the Corporate Bodies of DWS	
102-20	Executive-level responsibility for economic, environmental, and social topics	Summarized Management Report – Our Strategy and our Market – Our Strategy	
102-21	Consulting stakeholders on economic, environmental, and social topics	Summarized Management Report – Supplementary Information – Stakeholder Engagement	
102-22	Composition of the highest governance body and its committees	Corporate Governance Statement – Corporate Bodies	
102-23	Chair of the highest governance body	Corporate Governance Statement – Corporate Bodies	
102-24	Nominating and selecting the highest governance body	Corporate Governance Statement – Corporate Bodies	
102-25	Conflicts of interest	Summarized Management Report – Compliance and Control – Business Ethics – Dealing with Conflicts of Interest	
102-26	Role of the highest governance body in setting purpose, values, and strategy	Corporate Governance Statement – Corporate Bodies	
102-27	Collective knowledge of highest governance body	Please refer to the DWS Climate Report 2022 – Governance section	
102-28	Evaluating the highest governance body's performance	Please refer to the DWS Climate Report 2022 – Governance section	
102-29	Identifying and managing economic, environmental, and social topics	Summarized Management Report – About this Report – Materiality Assessment for 2022	
102-30	Effectiveness of risk management processes	Summarised Management Report – Risk Report	
102-31	Review of economic, environmental, and social topics	Summarized Management Report – About this Report – Materiality Assessment for 2022	
102-32	Highest governance body's role in sustainability reporting	Corporate Governance Statement – Corporate Bodies – Managing Directors of the General Partner (Executive Board) – Current Members of the Executive Board	
102-33	Communicating critical concerns	Summarised Management Report – Our Responsibility – Our Entrepreneurial Spirit – Employer Attractiveness	
102-34	Nature and total number of critical concerns	Summarised Management Report – Our Responsibility – Client Commitment Summarised Management Report – Our Responsibility – Our Entrepreneurial Spirit – Employer Attractiveness	
102-35	Remuneration policies	Summarized Management Report – Our Responsibility – Our Entrepreneurial Spirit – Employees and Workplace – Remuneration Strategy	
102-36	Process for determining remuneration	Compensation Report	
102-37	Stakeholders' involvement in remuneration	Compensation Report	
102-38	Annual total compensation ratio	Compensation Report	
102-39	Percentage increase in annual total compensation ratio	Compensation Report	
102-40	List of stakeholder groups	Summarized Management Report – Supplementary Information – Stakeholder Engagement	
102-41	Collective bargaining agreement	All DWS employees in Germany, who are part of collective bargaining agreements are formally covered by the German "Bankentarif", which corresponds to 24% as of December 2022. According to local jurisdiction the percentage of employees covered by collective bargaining agreements ranges from 26% to 100% in Austria, France, Italy, Luxembourg, Spain and the Netherlands.	
102-42	Identifying and selecting stakeholders	Summarized Management Report – Supplementary Information – Stakeholder Engagement	
102-43	Approach to stakeholder engagement	Summarized Management Report – Supplementary Information – Stakeholder Engagement	
102-44	Key topics and concerns raised	Summarized Management Report – About this Report – Materiality Assessment for 2022 Summarized Management Report – Supplementary Information – Stakeholder Engagement	

Disclosure		Annual Report	Remarks/omissions
REPORTING PRINCIPLES			
102-45	Entities included in the consolidated financial statements	Summarized Management Report – About this Report – Content and Structure	
102-46	Defining report content and topic boundaries	Summarized Management Report – About this Report – Content and Structure Summarized Management Report – About this Report – Data and Presentation Summarized Management Report – Supplementary Information – Stakeholder Engagement Summarized Management Report – About this Report – Materiality Assessment for 2022	
102-47	List of material topics	Summarized Management Report – About this Report – Materiality Assessment for 2022	
102-48	Restatement of information	N/A	
102-49	Changes in reporting	Summarized Management Report – About this Report	
102-50	Reporting period	Summarized Management Report – About this Report – Data and Presentation	
102-51	Date of most recent report	Annual Report and Climate Report 2021 were issued by DWS on 11 March 2022.	
102-52	Reporting cycle	Summarized Management Report – About this Report	
102-53	Contact point for questions regarding the report	Imprint	
102-54	Claims of reporting in accordance with	GRI Index In order to give a better overview, the Annual Report 2022 has been prepared partially in accordance with the GRI Standards – option core.	
102-55	GRI content index	GRI Index Our GRI content index is part of this integrated Annual Report.	
102-56	External assurance	Summarized Management Report – About this Report – External Audit and Evaluation	
TOPIC-SPECIFIC STANDARD DISCLOSURES			
ECONOMIC			
COMPANY PERFORMANCE			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Who We Are	
103-2	The management approach and its components	Summarized Management Report – Who We Are Summarized Management Report – Our Strategy and our Market – Our Strategy Summarized Management Report – Our Responsibility – Sustainable Action Summarized Management Report – Our Responsibility – Client Commitment	
103-3	Evaluation of the management approach	Summarized Management Report – Who We Are Summarized Management Report – Our Strategy and our Market Summarized Management Report – Our Responsibility – Client Commitment Summarized Management Report – Our Responsibility – Sustainable Action	
201-1	Direct economic value generated and distributed	Summarized Management Report – Our Performance Indicators – Our Financial Performance	
CLIENT SATISFACTION			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Our Responsibility – Client Commitment	
103-2	The management approach and its components	Summarized Management Report – Our Responsibility – Client Commitment	
103-3	Evaluation of the management approach	Summarized Management Report – Our Responsibility – Client Commitment	
BOARD EFFECTIVENESS			
103-1	Explanation of the material topic and its boundary	Corporate Governance Statement – Corporate Bodies – Overview of the Governance Bodies of DWS	
103-2	The management approach and its components	Corporate Governance Statement – Corporate Bodies – Overview of the Governance Bodies of DWS Corporate Governance Statement – Corporate Bodies – Managing Directors of the General Partner (Executive Board)	
103-3	Evaluation of the management approach	Corporate Governance Statement – Corporate Bodies – Overview of the Governance Bodies of DWS	
SUSTAINABILITY GOVERNANCE STRUCTURE			
103-1	Explanation of the material topic and its boundary	Corporate Governance Statement – Sustainability Governance	
103-2	The management approach and its components	Corporate Governance Statement – Sustainability Governance	
103-3	Evaluation of the management approach	Corporate Governance Statement – Sustainability Governance	

Disclosure		Annual Report	Remarks/omissions
RESPONSIBLE INVESTING AND FINANCING			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Our Responsibility – Sustainable Action	
103-2	The management approach and its components	Summarized Management Report – Our Responsibility – Sustainable Action	
103-3	Evaluation of the management approach	Summarized Management Report – Our Responsibility – Sustainable Action	
203-1	Infrastructure investments and services supported	Summarized Management Report – Our Responsibility – Sustainable Action – Our Investment Approach – ESG in Real Estate Investments	
203-2	Significant indirect economic impacts	Summarized Management Report – Our Responsibility – Sustainable Action Summarized Management Report – About this Report – Materiality Assessment for 2022	
ANTI-FINANCIAL CRIME			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Compliance and Control – Compliance Management, (ESG) Public Policy and Regulation Compliance and Control – Anti-Financial Crime – Preventing Fraud, Bribery and Corruption	
103-2	The management approach and its components	Summarized Management Report – Compliance and Control – Anti-Financial Crime – Preventing Fraud, Bribery and Corruption	
103-3	Evaluation of the management approach	Summarized Management Report – Compliance and Control – Anti-Financial Crime – Preventing Fraud, Bribery and Corruption	
205-2	Communication and training about anti-corruption policies and procedures	Summarized Management Report – Compliance and Control – Anti-Financial Crime – Preventing Fraud, Bribery and Corruption	
206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	Summarized Management Report – Compliance and Control – Business Ethics – Anti-Competitive Behaviour	
COMPLIANCE MANAGEMENT			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Compliance and Control Summarized Management Report – Risk Report	
103-2	The management approach and its components	Summarized Management Report – Risk Report – Introduction Summarized Management Report – Risk Report – Risk Framework	
103-3	Evaluation of the management approach	Summarized Management Report – Risk Report – Risk Framework – Risk Management – Risk Appetite and Capacity Summarized Management Report – Risk Report – Risk Framework – Risk Management – Risk Measurement and Monitoring	
TAX POLICY			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Compliance and Control – Responsible Tax Practices	
103-2	The management approach and its components	Summarized Management Report – Compliance and Control – Responsible Tax Practices	
103-3	Evaluation of the management approach	Summarized Management Report – Compliance and Control – Responsible Tax Practices	
207-1	Approach to tax	Summarized Management Report – Compliance and Control – Responsible Tax Practices	
207-2	Tax governance, control, and risk management	Summarized Management Report – Compliance and Control – Responsible Tax Practices	
207-3	Stakeholder engagement and management of concerns related to tax	Summarized Management Report – Compliance and Control – Responsible Tax Practices	
BUSINESS ETHICS			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Compliance and Control – Business Ethics	
103-2	The management approach and its components	Summarized Management Report – Compliance and Control – Business Ethics	
103-3	Evaluation of the management approach	Summarized Management Report – Compliance and Control – Business Ethics	
BUSINESS CONTINUITY			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Risk Report – Non-Financial Risk – Business Continuity and Crisis Management	
103-2	The management approach and its components	Summarized Management Report – Risk Report – Non-Financial Risk – Business Continuity and Crisis Management	
103-3	Evaluation of the management approach	Summarized Management Report – Risk Report – Non-Financial Risk – Business Continuity and Crisis Management	

Disclosure		Annual Report	Remarks/omissions
GRIEVANCE MECHANISM AND REMEDIATION			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Our Responsibility – Entrepreneurial Spirit Summarized Management Report – Our Responsibility – Client Commitment	
103-2	The management approach and its components	Summarized Management Report – Our Responsibility – Entrepreneurial Spirit Summarized Management Report – Our Responsibility – Client Commitment	
103-3	Evaluation of the management approach	Summarized Management Report – Our Responsibility – Entrepreneurial Spirit Summarized Management Report – Our Responsibility – Client Commitment	
CORPORATE REPUTATION			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Risk Report – Non-Financial Risk – Dedicated Reputational Risk Management Process	
103-2	The management approach and its components	Summarized Management Report – Risk Report – Non-Financial Risk – Dedicated Reputational Risk Management Process	
103-3	Evaluation of the management approach	Summarized Management Report – Risk Report – Non-Financial Risk – Dedicated Reputational Risk Management Process	
ENVIRONMENT			
CLIMATE CHANGE			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Our Responsibility – Sustainable Action – Our Impact on Climate Change	
103-2	The management approach and its components	Summarized Management Report – Our Responsibility – Sustainable Action – Our Impact on Climate Change	
103-3	Evaluation of the management approach	Summarized Management Report – Our Responsibility – Sustainable Action – Our Impact on Climate Change	
201-2	Financial implications and other risks and opportunities due to climate change	Summarized Management Report – Our Responsibility – Sustainable Action – Our Impact on Climate Change Summarized Management Report – Our Responsibility – Sustainable Action – Our Investment Approach – Contribution to Action on Climate Change	
305-5	Reduction of GHG emissions	Summarized Management Report – Our Responsibility – Sustainable Action – Our Impact on Climate Change	
SOCIAL			
DIVERSITY AND EQUAL OPPORTUNITIES			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Our Responsibility – Our Entrepreneurial Spirit – Diversity & Equal Opportunities	
103-2	The management approach and its components	Summarized Management Report – Our Responsibility – Our Entrepreneurial Spirit – Diversity & Equal Opportunities	
103-3	Evaluation of the management approach	Summarized Management Report – Our Responsibility – Our Entrepreneurial Spirit – Diversity & Equal Opportunities	
405-1	Diversity of governance bodies and board members	Summarized Management Report – Our Responsibility – Our Entrepreneurial Spirit – Diversity & Equal Opportunities	
CYBERSECURITY AND INFORMATION SECURITY			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Compliance and Control Report – Data Privacy and Information Security	
103-2	The management approach and its components	Summarized Management Report – Compliance and Control Report – Data Privacy and Information Security	
103-3	Evaluation of the management approach	Summarized Management Report – Compliance and Control Report – Data Privacy and Information Security	
418-1	Substantiated complaints concerning breaches of client privacy and losses of client data	Summarized Management Report – Compliance and Control Report – Data Privacy and Information Security	
DATA PRIVACY MANAGEMENT			
103-1	Explanation of the material topic and its boundary	Summarized Management Report – Compliance and Control Report – Data Privacy and Information Security	
103-2	The management approach and its components	Summarized Management Report – Compliance and Control Report – Data Privacy and Information Security	
103-3	Evaluation of the management approach	Summarized Management Report – Compliance and Control Report – Data Privacy and Information Security	
418-1	Substantiated complaints concerning breaches of client privacy and losses of client data	Summarized Management Report – Compliance and Control Report – Data Privacy and Information Security	
ATTRACTIVE EMPLOYER			
103-1	Explanation of the material topic and its boundary	Summarised Management Report – Our Responsibility – Our Entrepreneurial Spirit – Employer Attractiveness	
103-2	The management approach and its components	Summarised Management Report – Our Responsibility – Our Entrepreneurial Spirit – Employer Attractiveness	
103-3	Evaluation of the management approach	Summarised Management Report – Our Responsibility – Our Entrepreneurial Spirit – Employer Attractiveness	
404-2	Programs for upgrading employee skills and transition assistance programs	Summarised Management Report – Our Responsibility – Our Entrepreneurial Spirit	

Materiality Assessment – Definition of Material Topics

Material Topic	Definition
Anti-Financial Crime	Means of preventing an organization, its employees and/or its clients from being misused, or from engaging in the commission of certain criminal offences, referred to as financial crime. These relate to the prevention of money laundering, countering terrorism financing, and the prevention of other criminal activities (such as fraud, bribery, and corruption) as well as observing sanctions and embargoes.
Attractive Employer	Continuous creation of a working environment in which people can be innovative, work in partnership and are enabled to deliver long-term sustainable performance. This includes aspects such as health, well-being and resilience, mobility, employee satisfaction and employee development.
Board Effectiveness	Processes aimed at ensuring and evaluating the knowledge, skills and experience of board members, as well as related performance standards. It covers the structure and composition of a board, including diversity, board independence as well its guiding principles and continuity and improvement practices.
Business Continuity	The plans, actions, protocols, and training conducted to ensure continuity of core business operations during and after crises that may disrupt commercial activities. It also covers strategies to adapt business models to actual or potential changes in the external environment. This includes factors such as business continuity planning, business recovery, crisis management and response, business model adaptation, supply availability and continuity risks.
Business Ethics	Guidelines or codes that dictate fair, ethical and moral executive, and employee conduct, as well as training on the subject and implementation by staff and management. This includes factors such as business ethics, corporate ethics and conduct guidelines, workplace ethical training, responsible conduct, information pluralism and literacy.
Client Satisfaction	The strategies and processes intended to meet or surpass customer expectations and the requirements to create a positive experience and build customer loyalty from the point of purchase onwards. This includes factors such as customer centricity, customer acquisition, customer retention, customer satisfaction measurements and metrics, customer service, customer complaints and disputes.
Climate Change	The long-term shift in global or regional patterns - such as temperature and rainfall - driven by emissions of greenhouse gases caused by human activity. The topic includes potential risk and opportunities stemming from it. This topic includes aspects such as air quality, air pollution, energy efficiency and the Path to Net Zero.
Company Performance	The financial and non-financial performance, which indicates the overall health and value creation of our company from its primary business activities over a given period.
Compliance Management	The securing to meet the requirements of accepted practices, legislation, prescribed rules and regulations, specified standards, or the terms of a contract and the process of identifying, assessing and controlling threats to our organization's capital, earnings, reputation, etc. across all three lines of defence. This topic includes aspects such as data protection and client privacy, regulatory compliance.
Corporate Reputation	How a company presents itself to the outside world regarding performance and strategic decisions. It covers the positive and negative perceptions of stakeholders and associated risks based on the company’s past actions and its perceived ability to deliver value. This topic includes aspects such as corporate identity and image, branding and reputation risk.
Cybersecurity and Information Security	The breakdown or vulnerability of critical information systems and networks due to security breaches, which might disrupt core operations or lead to accidental or illegal access, destruction, alteration or disclosure of protected data. It covers the mechanisms for protecting computers, networks, programs and data, as well as remediation measures if breaches occur. This topic covers factors such as cybersecurity strategy, IT disruption and cyber threats.
Data Privacy Management	The collection, storage, processing, usage and sharing of data that is, or might be, connected to an identifiable person, including sensitive personal information. It covers mandatory and voluntary regulations and security mechanisms that aim to protect personal data, as well as instances of violation of individuals' privacy. This topic includes factors such as personal data protection policies and regulations, personal data handling, processing and transferring, sensitive personal data management, privacy violations and data breaches as well as law enforcement requests for personal data.
Diversity and Equal Opportunities	Commitment to create an inclusive culture and equal opportunities that respect and embrace the diversity of employees, clients, and communities regardless of gender, ethnic origin, age, level of education, sexual orientation, etc.
Grievance Mechanisms and Remediation	Systems and channels aimed at collecting, processing, and addressing formal complaints from employees or other parties engaged in business, legal, or societal relationships, including whistleblowing procedures. This topic includes factors such as complaint management systems and whistleblowing procedures.

Material Topic	Definition
Responsible Investing and Financing	Refers to investment products aimed at producing a specific sustainability-oriented outcome, the financing of projects or companies with an environmental or social benefit and investing and financing practices specifically geared to making a positive impact. This topic includes factors such as responsible investing and financing, impact investing and financing, green investing and financing, innovative and thematic financing.
Responsible Tax Practices	Refers to the taxation of a company's profits and related matters, including state incentives and corporate strategies to reduce the amount of taxes levied or paid, the effective exchange of information with tax authorities, and illegal activities aimed at evading the imposition or payment of a tax. This topic covers factors such as tax policies, tax planning, tax transparency and disclosures, cross-border taxation, tax evasion and tax relief.
Sustainability Governance Structure	The governance bodies and organizational structures that define and manage an organization’s sustainability strategy, objectives, and goals. The topic covers factors such as sustainability governance, management and councils as well as committees.

Stakeholder Engagement

GRI 102-12; 102-13; 102-21; 102-40

DWS stakeholder management activities with a global scope, high materiality and/or significant impact

Name	Type of engagement	Events/developments 2022
Academic engagement		
Columbia University	Lecturer	A DWS employee has continued to teach financial inclusion and impact investing at Columbia University's School of International Public Affairs as adjunct professor.
Goethe-University Frankfurt	Guest lecturer	A DWS employee delivered a guest lecture on Corporate Governance (M.Sc-program).
HHL – Leipzig Graduate School for Management	Guest lecturer	A DWS employee delivered a guest lecture on Corporate Governance (PhD-program).
Corporate Governance		
Berufsverband der Investment Professionals (DVFA) – Corporate Governance & Stewardship Commission and Sustainable Investment Commission	Member	DWS continued to be an active supporter of the DVFA and DWS staff was invited to several conferences. Furthermore, DWS has remained an active promoter and co-initiator of the DVFA-Corporate Governance Scorecard.
Bundesverband Investment und Asset Management (BVI) – Sustainability Committee, Corporate Governance, and Compliance working groups	Member	DWS remained active in several political engagement and sustainability groups of the BVI, providing consultations on several national and European legislative initiatives and collective comments regarding ESG issues, annually reviewing the Guidelines on German AGMs, as well as drafting and developing several position papers on virtual AGMs.
Corporate Governance Roundtable by Harvard Law School	Member	DWS participated in the roundtable which was focused specifically on the topics Hedge Fund Activism, Board Independence & Efficiency, Proxy Access, and Campaigns.
European Funds and Asset Management Association (EFAMA) – Responsible Investment and Corporate Governance working groups	Member	DWS continued to be part of the workstreams regarding ESG & Stewardship Standing Committee as well as Sustainable Finance, providing feedback to various topics.
Global Institutional Governance Network (GIGN)	Member	DWS continued to participate in an investor group focused on good corporate governance and improving long-term shareholder value.
International Corporate Governance Network (ICGN)	Committee Member	DWS was a member of the Global Governance Committee participating in meetings on topics around supply chains and controlled companies as well as consultations.
UK Stewardship Code	Signatory	DWS Investment UK Ltd. was recognized for the second year as a signatory to the Financial Reporting Council's UK Stewardship Code, which sets high standards of stewardship for those investing money on behalf of UK savers and pensioners.
UK The Investment Association (IA)	Member	A DWS employee acted as an Advisory Board member. Further activities of different DWS employees include being Chair of the IA Passive Investment Committee, being a member of the IA Stewardship & Governance Committee, contributing to a thought leadership working group focused on UK corporate governance best practices, and being a member of the Sustainable and Responsible Investments Committee. DWS provided significant input to IA's response to a Parliamentary committee consultation on energy security and successfully encouraged the IA to sign a letter to the UK Prime Minister calling for stronger energy efficiency policies, one of the first such letters that the IA has signed. DWS employees also participated in the TCFD Implementation Forum on a regular basis.
Corporate responsibility and sustainable finance		
Dutch Association of Investors for Sustainable Development (VBDO)	Member	VBDO and DWS hosted an online Expert Session on Water Risk across asset classes via DWS BrightTALK platform, accessible for a global audience. VBDO and DWS hosted an online Expert Session on Ocean Sustainability via DWS BrightTALK platform, accessible for a global audience.
European Financial Reporting Advisory Group (EFRAG)	In-kind donation	A DWS employee was a member of the Project Task Force on European Sustainability Reporting Standards (PTF-ESRS).
Forum Nachhaltige Geldanlagen (FNG)	Member	DWS contributed to the market report of Nachhaltige Geldanlagen with DWS data.
Global Impact Investing Network (GIIN)	Member	DWS attended the annual Global Impact Investing Network investor forum and hosted a networking event for sustainability leaders.
Pension for Purpose (PfP)	Member	A DWS employee participated in a PfP workshop on physical climate risk. Several DWS Research Institute reports have been distributed to PfP members.
Principles for Responsible Investment (PRI)	Signatory	DWS has been signatory to the PRI since 2008. A DWS employee was a member of the sub-sovereign advisory committee and provided feedback to PRI's white paper on ESG Integration in Sub-Sovereign Debt. Another DWS employee held a lecture on integrating climate change considerations in the investment management process for PRI Latin American members.
World Economic Forum (WEF)	Working group participant	DWS Research participated in a working group focused on transformative investments.

Name	Type of engagement	Events/developments 2022
Climate		
CDP	Signatory, Member, Commitment, Reporter	DWS has been an investor signatory of CDP since 2006. As a CDP reporter, DWS received a CDP score of A-, reaching CDP “Leadership level”. In addition, DWS is once again a signatory to CDP Science-Based Targets (SBTs) campaign with the purpose to accelerate the adoption of science-based climate targets in the corporate sector. In addition, DWS became a signatory to CDP Municipal Disclosure campaign aimed at increasing US municipality participation in the annual CDP reporting.
Ceres Investor Network on Climate Risk and Sustainability	Member	DWS employees participated in working group update sessions including on net zero in private equity and attended presentations. DWS collaborated with Ceres to publish a report on the financial materiality of water. The report won an award from Environmental Finance. The report helped to establish the Valuing Water Finance initiative’s investor engagement, which DWS became a member of.
Climate Action 100+	Signatory	DWS has been a signatory to Climate Action 100+ since 2017 and continued the engagement with an Italian utility company via Climate Action 100+.
Climate Policy Initiative's (CPI) Global Innovation Lab for Climate Finance	Founding Member	DWS is a member of the Climate Lab cycle and participated in conferences and workshops held by the Climate Policy Initiative.
Coalition for Climate Resilient Investments (CCRI)	Founding Member	DWS is a founding member of the Coalition for Climate Resilient Investment (CCRI). A DWS expert provided input to CCRI’s guide to incorporate physical climate assessment methodology, which received special recognition in the report.
EU Energy Efficiency Financial Institutions Group (EEFIG)	Founder and Steering Committee Member	A DWS employee is a member of the EEFIG steering committee. As such, the activities of the employee include providing advice to the EU Commission on energy efficiency policy, participating in a working group on financial risk in energy efficient loans, and being a keynote speaker at EEFIG’s annual meeting.
Eurosif	Working group member	A DWS employee participated in the climate reporting & indicators advisory group.
Global Investor Statement on Climate Change	Signatory	DWS renewed its signatory for the Global Investor Statement on Climate Change and is one of the longest standing supporters since the statement was initiated in 2009.
Global Off-Grid Lighting Association (GOGLA)	Member	DWS became a member of GOGLA in January 2021, alongside contributing to work streams on best practice for transparency in off-grid solar.
Green Climate Fund (GCF)	Accredited Entity Status	In 2022, GCF entered into a commitment agreement worth USD 78.4m and a technical assistance facility agreement worth USD 1.6m for DWS’s Universal Green Energy Access Programme, an investment fund that invests in decentralised renewable electrical energy production and distribution in Africa. The investment fund is managed by DWS Investments S.A..
Institutional Investors Group on Climate Change (IIGCC)	Member	Various DWS experts contributed to working groups covering net zero, physical climate risk and resilience, providing feedback on net zero metrics for banks, and providing input to investor expectations for data providers. A DWS expert joined the policy working group, providing input to energy efficiency related policy advocacy.
Investment Adviser Association (IAA)	Member	DWS continued to participate in the ESG Committee focused on ESG investing in the context of SEC-registered investment advisors. Specifically, DWS provided input to the Investment Advisor Association on an industry-group comment letter to the SEC on the proposed climate disclosure rule.
Investing in a Just Transition	Signatory	DWS continued to support the PRI Investor Statement on a Just Transition on Climate Change.
Net Zero Asset Manager Initiative (NZAM)	Signatory	DWS has been a founding signatory to the NZAM initiative since 2020. DWS provided its first "Net Zero Annual Disclosure - Base year 2020" in December 2022.
Science Based Targets Initiative (SBTi)	Commitment	DWS committed to SBTi in 2021 and regularly engages with SBTi in context of its net zero activities. A DWS employee served in a SBTi working group to develop a target setting methodology for Sovereign Debt.
Taskforce on Climate related Financial Disclosure (TCFD)	Supporter	DWS has been a TCFD supporter since 2017 and issues a Climate Report since 2020.
Social Commitments		
Diversity and Inclusion Working Group of the US Institute	Member	DWS has continued to be part of a think tank for leading investment management firms which allowed sharing and discussing successes in advancing diversity practices in the firms' organizations.
New Financial	Member	DWS has remained a member of a think tank and forum launched in 2014 with the view to rethinking how Diversity and Inclusion can be improved in capital markets in Europe and to look at rebuilding trust and improving industry culture. Activities included publishing research papers, preparing for how aspects of Diversity and Inclusion can be brought into regulatory requirements, focusing on diversity data to understand the workforce and eliminate potential bias.

Name	Type of engagement	Events/developments 2022
Non-Governmental Organisations (NGOs)		
Greenpeace	Stakeholder	DWS was in exchange with Greenpeace in context of its fossil fuel investments.
Reclaim Finance	Stakeholder	DWS contributed to the 2022 Asset Manager's coal as well as oil and gas scorecards and had a regular exchange on multiple sustainability related topics with Reclaim Finance.
ShareAction	Stakeholder	DWS contributed to ShareAction asset manager benchmarking in August 2022.
WWF	Stakeholder	Since 2021, DWS partners with WWF in the context of DWS Concept ESG Blue Economy fund and on a multi-year marine conservation project in the second largest coral reef in the world.
Real Estate and Infrastructure		
Better Buildings Partnership (BBP)	Member/ Signatory of Climate Commitment	DWS has been a signatory to BBP since 2013. It has committed to deliver net zero carbon real estate portfolios by 2050. Further, DWS has continued to participate in working groups focusing on net zero, embodied carbon of development, refurbishment, and fit-out works, as well as resilience.
Building Research Establishment (BRE)	Member	A DWS employee was active in a working group to support the development of BREEAM standards.
Carbon Risk Real Estate Monitor (CRREM)	Member	DWS continued to participate in the Scientific & Investor Committee focused on accelerating the decarbonization and climate change resilience of the EU commercial real estate sector. Further, another DWS key activity comprised integrating CRREM into transaction ESG screenings, annual fund business planning, and SFDR targets.
European Association for Investors in Non-Listed Real Estate Vehicles (INREV)	Member	A DWS employee co-chairs the INREV ESG Committee. In addition, DWS participated in various working groups focusing on developing ESG reporting standards and looking into regulatory requirements for real estate.
Global Infrastructure Investors Association (GIIA)	Founding Member	As a founding member of the GIIA, DWS Infrastructure is working jointly with governments and other stakeholders to boost the role of private investment in providing infrastructure that improves national, regional and local economies. DWS employees participated in various working groups, for example, regarding UK water and ESG.
GRESB (Global Real Estate Sustainability Benchmark)	Member	A DWS employee chairs the GRESB Real Estate Standards Committee. Besides, DWS experts continued to participate in the Real Estate Benchmarking Committees, contributing to develop a GRESB roadmap for the future.
Urban Land Institute (ULI)	Founding Member	A DWS employee contributed as a speaker to a number of panels and webinars. Further, DWS continued to submit data to the ULI Greenprint Center Building Performance and participated in working groups focused on sustainable practices in the real estate asset management industry.
US Department of Energy Better Buildings Challenge	Member	DWS committed to a 20% reduction in energy and water use by 2030 for its portfolio of US office properties, and had previously met a 2020 target three years early. The progress was published on the website of the US Department of the Energy Better Building Challenge.
Transparency and Reporting		
Operating Principles for Impact Management (OPIM)	Signatory	DWS became a signatory of the Operating Principles for Impact Management in 2019 and published a DWS Disclosure Statement based on the Principles. DWS had four Sustainable Investments funds aligned with OPIM's guided impact principles.
Schmalenbach Gesellschaft für Betriebswirtschaft	Member	Since 2015, a DWS employee is an active member of the working group "integrated reporting and sustainable management" and since 2021, a DWS employee is an active member of the working group "Sustainable Finance".

DWS Human Capital

GRI 102-8

Our Workforce - Numbers

Employees by region (Full-time Equivalent - FTE)

	31 Dec 2022	31 Dec 2021	Change in %
Germany	1,719	1,678	2
Europe (excluding Germany), Middle East and Africa	638	631	1
Americas	843	823	2
Asia/Pacific	459	289	59
Total	**3,657**	**3,422**	**7**

Note: We calculate our employee figures on a full-time equivalent (FTE) basis, meaning we include proportionate numbers of part-time employees. Region reflects legal entity location not physical location of staff.

Contingent workers by region (FTE)

	31 Dec 2022	31 Dec 2021	Change in %
Germany	558	564	(1)
Europe (excluding Germany), Middle East and Africa	316	325	(3)
Americas	102	104	(2)
Asia/Pacific	7	7	0
Total	**983**	**1,000**	**(2)**

Note: All workers having a temporary contract with Deutsche Bank vendor companies and who are not paid via Deutsche Bank payroll system.

Full-time employees by region

	31 Dec 2022	31 Dec 2021	Change in %
Germany	1,552	1,505	3
Europe (excluding Germany), Middle East and Africa	613	588	4
Americas	839	820	2
Asia/Pacific	457	288	59
Total	**3,461**	**3,201**	**8**

Part-time employees by region

	31 Dec 2022	31 Dec 2021	Change in %
Germany	231	241	(4)
Europe (excluding Germany), Middle East and Africa	32	59	(46)
Americas	5	5	0
Asia/Pacific	2	1	100
Total	**270**	**306**	**(12)**

Extended Workforce

The employee numbers stated above are based on the scope of DWS Group. There are also employees within the Deutsche Bank AG group of companies who are not within the scope of the Group but provide services for the Group and are aligned to DWS on a segment reporting basis ("Extended Workforce"). As at 31 December 2022 the Extended Workforce included 625 FTE, making the total combined FTE of the Group and the Extended Workforce: 4,282.

Human Capital Metrics

Diversity

Employees by gender

	31 Dec 2022	
FTE	Total	in %
Female	1,473	40 %
Male	2,185	60 %
Total	**3,657**	**100 %**

Percentage of employees by age group

FTE	31 Dec 2022 Total
Under 30	12 %
30-50	60 %
50+ years	28 %
Total	**100 %**

Note: DWS confirms it does not employ anyone between the ages of 0-14 years (children).

Our employees have a wide variety of life experiences and come from many backgrounds. The Group recognizes the importance of a diverse and inclusive work environment and understands that transparency is valuable in creating accountability. In an effort to continue to drive progress, DWS is publishing our consolidated EEO-1 reports for its US workforce. The EEO-1 report is an annual data collection for the US workforce only that requires all private sector employers with 100 or more employees to submit demographic workforce data including data by ethnicity, sex and job categories to the US Equal Employment Opportunity Commission on an annual basis. This data is being voluntarily disclosed in our Annual Report to reflect our commitment to transparency and our focus on further progress.

US diversity statistics according to US Equal Employment Opportunities Commission

EEO-1 Level	White	Asian	Latinx	Black	Native Hawaiian or Pacific Islander	Native American or Alaska Native	Two or more ethnicities
Executive/Senior Level Officials and Managers	77.3 %	9.1 %	9.1 %	4.6 %	0.0 %	0.0 %	0.0 %
First/Mid Level Officials and Managers	74.5 %	16.2 %	4.3 %	3.3 %	0.3 %	0.3 %	1.0 %
Professionals	55.6 %	28.6 %	7.7 %	5.4 %	0.0 %	0.3 %	2.4 %
Sales Workers	83.3 %	5.3 %	5.3 %	3.8 %	0.0 %	0.0 %	2.3 %
Administrative Support Workers	65.7 %	12.1 %	6.1 %	14.1 %	0.0 %	0.0 %	2.0 %
Total	**68.3 %**	**18.2 %**	**6.0 %**	**5.4 %**	**0.1 %**	**0.2 %**	**1.8 %**

Note: Data as at 1 December 2022.

Percentage of employees reporting a disability

Headcount	31 Dec 2022	31 Dec 2021
Germany	2.8 %	3.2 %
Japan	1.3 %	N/A
United Kingdom	1.4 %	N/A
United States	2.1 %	2.5 %
Total	**2.4 %**	**2.9 %**

Note: Disability data is not commonly obtained in other DWS locations due to legal and other reasons. However, given Germany, Japan, United Kingdom and the US represents more than three quarters (83%) of the global employee headcount we do not anticipate it would materially change the % if we obtained disability data from the other locations. US disability numbers may be marginally understated given any new joiners with disability since July 2019 are not included, due to Human Resources system transition.

Note that all of the remaining data below is inclusive of the extended workforce.

Productivity, Costs, Sourcing Performance and Turnover

Productivity

	2022	2021
EBIT per employee (in t. €)	203	270
Human capital return on investment (ROI)	101%	137%

Note: EBIT per employee is calculated as profit before tax/FTE.

Workforce costs

	2022	2021
Total workforce costs (in € m.)	979.3	913.9

Note: Total workforce costs are calculated as total compensation and benefits plus external workforce costs, business consultancy and other outsourced operations.

Talent sourcing performance

	2022	2021
Time to fill vacant positions (job creation to start date) in days	130	122
Time to fill vacant critical business positions in days	75	112
Positions filled internally (internally from within Deutsche Bank Group)	37%	38%
Critical positions filled internally (roles filled internally from within Deutsche Bank Group)	70%	50%

Turnover

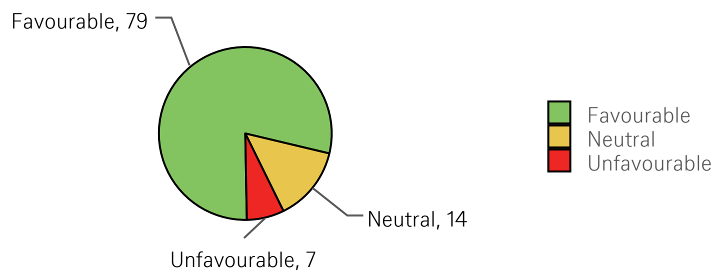
	2022	2021
Turnover	9.7%	7.4%

Leadership and Training

Leadership

The "Empowering and Effective Managers" index is part of the annual DWS people survey and measures the effectiveness of direct managers in areas such as performance recognition, development, ethics, integrity and consistent action.

Empowering and Effective Managers – 2022



Favourable score (+6%) versus 2021

Total training and development costs

	2022	2021
Total expenses for training and development (in € m.)	2.2	2.7

Note: This includes all costs relating to the design and delivery of training, including Compliance Training. It does not include costs relating to the governance of training and development which are allocated to DWS.

Training on Compliance and Ethics

The Group maintains an annual mandatory Regulatory Training curriculum, which is a risk-based training program designed to mitigate Compliance, Anti-Financial Crime (AFC) and other applicable non-financial risks. In 2022, 99.0% of employees completed training on compliance and ethics across a selection of training modules.

Training on compliance and ethics

	31 Dec 2022	31 Dec 2021
Percentage of employees who have completed training on compliance and ethics	99.0%	97.8%

Employee Incident Management

Grievances

The Group strives for high standards of workplace conduct and management of employment processes in relation to the hiring, management and organization of our employees.

The Group maintains clear and consistent processes in relation to handling employee complaints, including regular review of grievance cases at senior management levels to ensure we uphold our values and provide a diverse, inclusive and productive working environment. We do not regard employee complaints as a zero sum game, indeed we actively encourage a speak-up culture, and to that extent we accept that the number of grievance cases may fluctuate over time, although we use our best endeavours to create an optimal working environment for all employees.

The numbers below reflect formal complaints filed and not necessarily whether the complaint was upheld, partially or otherwise.

Grievance cases – formally recorded employee complaints

	2022	2021
Workplace conduct	3	8
Employment Processes	3	1
Total	**6**	**9**

Note: Grievance case data for Germany is not included due to local arrangements and data protection requirements.

Disciplinary Actions

The Group maintains clear and consistent processes to manage situations where employee conduct may not meet the high standards expected of the organization. There are a range of internally governed disciplinary actions the Group may take depending on the circumstances and local country regulations. The type of actions may include formal verbal warnings, written or final written warnings or more serious outcomes that may include compensation impacts and/or termination.

The numbers below reflect those cases considered internally by the Group to warrant a formal disciplinary action in accordance with internally validated governance standards. As can be seen by calculating the percentage of cases to total employee numbers, the overall number of cases is very low, well less than 1%, highlighting our strong culture of integrity and ethical standards.

Internal Disciplinary Actions

	2022	2021
Number	6	12
As a % of total employees	0.1%	0.3%

Note: Two additional cases are pending outcome and may result in a disciplinary action.

Safety Incidents: Disclaimer

Please note: International standards for Human resource management recommend disclosing metrics reflecting lost time injuries, number of occupational accidents and number of people killed during work. These types of serious incidents rarely occur in our operating environment and are more relevant to the safety related reporting of other industries.

Additional Disclosures Investment Firm Regulation (EU) 2019/2033

IFR Articles 49 (1) (a,c), 52 (a-d)

Disclosure of Regulatory Own Funds by Investment Firms

Composition of regulatory own funds (Template EU IF CC1.01)[1]

		(a)	(b)
		Amounts in € m.	Source based on reference numbers/letters of the balance sheet in the audited financial statements
	Common Equity Tier 1 (CET1) capital: instruments and reserves		
1	**OWN FUNDS**	3,041	
2	**TIER 1 CAPITAL**	3,041	
3	**COMMON EQUITY TIER 1 CAPITAL**	3,041	
4	Fully paid up capital instruments	200	Consolidated Balance Sheet, Shareholders' Equity, Item 1
5	Share premium	3,447	Consolidated Balance Sheet, Shareholders' Equity, Item 2
6	Retained earnings	3,261	Consolidated Balance Sheet, Shareholders' Equity, Item 3
7	Accumulated other comprehensive income	432	Consolidated Balance Sheet, Shareholders' Equity, Item 4
8	Other reserves	0	
9	Minority interest given recognition in CET1 capital	0	
10	Adjustments to CET1 due to prudential filters	(46)	
11	Other funds	0	
12	(-)TOTAL DEDUCTIONS FROM COMMON EQUITY TIER 1	(4,251)	
13	(-) Own CET1 instruments	(20)	
14	(-) Direct holdings of CET1 instruments	0	
15	(-) Indirect holdings of CET1 instruments	0	
16	(-) Synthetic holdings of CET1 instruments	(20)	
17	(-) Losses for the current financial year	0	
18	(-) Goodwill	(2,954)	Consolidated Balance Sheet, Assets, Item 8
19	(-) Other intangible assets	(588)	Consolidated Balance Sheet, Assets, Item 8 and Liabilities, Item 8
20	(-) Deferred tax assets that rely on future profitability and do not arise from temporary differences net of associated tax liabilities	(155)	
21	(-) Qualifying holding outside the financial sector which exceeds 15% of own funds	0	
22	(-) Total qualifying holdings in undertaking other than financial sector entities which exceeds 60% of its own funds	0	
23	(-) CET1 instruments of financial sector entites where the institution does not have a significant investment	(106)	
24	(-) CET1 instruments of financial sector entities where the institution has a significant investment	(407)	Consolidated Balance Sheet, Assets, Item 4
25	(-)Defined benefit pension fund assets	(12)	
26	(-) Other deductions	(11)	
27	CET1: Other capital elements, deductions and adjustments	0	

[1] This table should be read together with the disclosure note on regulatory own funds (refer to section 'Our Performance Indicators – Our Financial Position – Regulatory Own Funds').

Own funds: reconciliation of regulatory own funds to our balance sheet (Template EU IF CC2)

		a	b	c
		Balance sheet as in published/audited financial statements	Under regulatory scope of consolidation	Cross reference to EU IF CC1
		As at period end in € m.	As at period end in € m.	
	Assets – Breakdown by asset classes according to the balance sheet in the published/audited financial statements			
1	Cash and bank balances	1,979	1,877	
2	Financial assets at fair value through profit or loss	3,959	2,327	
3	Financial assets at fair value through other comprehensive income	80	80	
4	Equity method investments	415	415	
5	Loans at amortized cost	6	11	
6	Property and equipment	23	23	
7	Right-of-use assets	121	121	
8	Goodwill and other intangible assets	3,749	3,749	Items 18, 19
9	Assets held for Sale	0	0	
10	Other assets	877	868	
11	Assets for current tax	71	71	
12	Deferred tax assets	131	131	
13	**Total Assets**	**11,412**	**9,673**	

		a	b	c
		Balance sheet as in published/audited financial statements	Under regulatory scope of consolidation	Cross reference to EU IF CC1
		As at period end in € m.	As at period end in € m.	
	Liabilities – Breakdown by liability classes according to the balance sheet in the published/auditied financial statements			
1	Financial liabilities at fair value through profit or loss	634	165	
3	Other short-term borrowings	21	13	
4	Lease liabilities	139	139	
5	Liabilities held for sale	0	0	
6	Other liabilities	2,500	1,255	
7	Provisions	36	36	
8	Liabilities for current tax	40	41	
9	Deferred tax liabilities	213	213	Item 19
10	Long-term debt	0	0	
11	**Total Liabilities**	**3,584**	**1,862**	
	Shareholders' Equity			
1	Common shares, no par value, nominal value of EUR 1	200	200	Item 4
2	Additional paid-in capital	3,447	3,447	Item 5
3	Retained earnings	3,720	3,720	Item 6
4	Accumulated other comprehensive income (loss), net of tax	432	432	Item 7
5	**Total Shareholders' equity**	**7,799**	**7,799**	
6	Non-controlling interests	29	12	
7	**Total equity**	**7,828**	**7,811**	

Disclosure of Investment Policy by Investment Firms

Proportion of Voting Rights

Template on proportion of voting rights (Template IF IP1)

Country	Economic sector	Company name	Company Identifier (LEI)	Proportion of voting rights attached to shares held directly or indirectly as set out in Article 52 (2) IFR
a	b	c	d	e
Germany	17 - Finance, insurance and real estate	BROCKHAUS TECHNOLOGIES AG (FORMERLY KNOWN AS BROCKHAUS CAPITAL MGMT AG)	5299007DQ4OLATJQIX97	9.22
Germany	24 - Personal service -, administrative support service- and security and investigation activities	AMADEUS FIRE AG	391200TJJ820ZDHNFJ33	8.72
Germany	19 - Manufacturing of electrical equipment, computer, electronic and optical products	JENOPTIK AG	529900P34GDHGXK6VB37	6.93
Germany	13 - Chemical industry	LANXESS AG	529900PTLRE72EMYIJ77	9.58
Germany	11 - Wholesale and retail trade, renting and leasing	SIXT SE	5299004ZME6CSBR7WP07	5.42
Luxembourg	17 - Finance, insurance and real estate	OBOTECH ACQUISITION SE	222100W9V7IC82G7I598	5.21
Germany	16 - Energy and water supply, sewerage and waste management	SFC Energy AG	3912003HZPSTWYICYA50	5.54
Germany	19 - Manufacturing of electrical equipment, computer, electronic and optical products	Siltronic AG	5299003NKV26NNGHHR90	6.49
Australia	Food, Beverage & Tobacco	DUXTON FARMS LTD	Not available	16.8

Voting Behaviour

Table on the description of voting behaviour (Template IF IP2.01)

Row	Item	Value
1	Number of relevant companies in the scope of disclosure	9
2	Number of general meetings in the scope of disclosure during the past year	9
3	Number of general meetings in the scope of disclosure in which the firm has voted during the past year	9
4	Does the investment firm inform the company of negative votes prior to the general meeting?	If we hold a significant position and decide to vote against a management proposal, we may in principle inform the company in advance. We are with most of the companies in an ongoing active dialogue, sending them our pre-season letters including the voting policy.
5	Proportion of in-person vote used by the firm	0
6	Proportion of vote by mail or electronic vote used by the firm	100%
7	On a consolidated basis, does the investment firm group possess a policy regarding conflicts of interests between relevant entities of the group?	Yes
8	If yes, summary of this policy	https://download.dws.com/download?elib-assetguid=24592e66bb8b4b3684a7cd8f3397f11e

Template on voting behaviour (Template IF IP2.02)

Row	Item	Value	Percentage
1	**General meetings resolutions:**		
2	the firm has approved	46	58
3	the firm has opposed	29	37
4	in which the firm has abstained	4	5
5	General meetings in which the firm has opposed at least one resolution	8	42

Table on explanation of the votes (Template IF IP2.03)

Row	Item	Value
1	Departments or roles in the investment firm that take part in deciding a voting position	Investment Platform and CIO for Responsible Investment
2	Description of the validation process for negative votes	We utilize the services of two Proxy Voting Advisors : Institutional Shareholder Services Europe Limited ("ISS") and IVOX Glass Lewis GmbH. Both service providers analyse general meetings and their agendas based on our dedicated proprietary "Corporate Governance and Proxy Voting Policy"and provide us with voting recommendations and their rationals. IVOX Glass Lewis provides us with recommendations for the general meetings of German-listed companies only, while ISS covers international general meetings and provides us with a online platform to support our proxy voting process. All relevant items on the agenda of shareholder meetings of Investee Companies are examined individually and, where necessary, the above-mentioned departments decide on issues on a case-by-case basis in the best interest of our clients. For the agenda items where the responsible portfolio manager or analyst proposes a recommendation different from our "Corporate Governance and Proxy Voting Policy", our Proxy Voting Group is the ultimate decision-making body. This group is composed of senior managers from the relevant departments to ensure an effective, timely, and consistent voting process. The Proxy Voting Group decides whether a the recommendation to change the vote against the policy is acceptable.
3	Number of full time equivalents used to analyse resolutions and examine voting records, excluding external resources such as proxy advisor firms	More than 50 FTE's are currently in the internal voting process involved.
4	Explanation of any material change in the rate of approval	N/A
5	List of publicly available investment policy documents describing the investment firm's objectives	https://download.dws.com/download?elib-assetguid=ba6cab4eb7ec4c8b8d9fa6b2e57444db&&&&
6	If relevant, certification of the firm's investment policy	Not available

Template on voting behaviour in resolutions by theme (Template IF IP2.04)

Row	Item	Voted for	Voted against	Abstained	Total
1	**Voted resolutions by theme during the past year:**	**46**	**29**	**4**	**79**
2	Board structure	21	18	3	42
3	Executive remuneration	6	6	0	12
4	Auditors	6	4	0	10
5	Environment, social, ethics	0	0	0	0
6	Capital transactions	3	1	1	5
7	External resolutions	0	0	0	0
8	Other	10	0	0	10

Template on the ratio of approved proposals (Template IF IP2.05)

Row	Item	Value
1	Percentage of resolutions put forward by the administrative or management body that are approved by the firm	58
2	Percentage of resolutions put forward by shareholders that are approved by the firm	N/A

Proxy Advisor Firms

Table on the list of proxy advisor firms (Template IF IP3.01)

Name of proxy advisor firm	Identifier of proxy advisor firm	Contract type	Investments associated with the proxy advisor firm	Themes of resolutions in which the proxy firm gave voting recommendations in the past year
a	b	c	d	e
Institutional Shareholder Services Europe Limited (ISS)	Not available	Voting recommendations	DWS holds investments in Deutsche Börse Group, the parent company of ISS	Board structure, Executive compensation, auditors, shareholder rights
IVOX Glass Lewis GmbH	Not available	Voting recommendations		Board structure, Executive compensation, auditors, shareholder rights

Table on the links with proxy advisor firms (Template IF IP3.02)

Name of proxy advisor firm	Identifier of proxy advisor firm	Relevant undertakings with which the proxy advisor firm has links	Type of link	If relevant, policy regarding conflicts of interests with the proxy advisor firm
a	b	c	d	e
N/A				

Voting Guidelines

Table on voting guidelines (Template IF IP4)

Voting guidelines regarding the companies the shares of which are held in accordance with Art. 52 (2): short general summary and, if needed, links to non-confidential documents The Proxy Voting Guidelines expressed in the document published on our website (link attached) shall apply to our investees, which are part of our Proxy Voting Watchlist, globally. (https://dws.com/solutions/esg/corporate-governance/) Download "Corporate Governance and Proxy Voting Policy"

Glossary

Term	Meaning
AFC	Anti-Financial Crime
AIF	Alternative Investment Fund
AIFMD	Alternative Investment Fund Managers Directive
AktG	German Stock Corporation Act (Aktiengesetz)
APAC	Asia-Pacific
APM	Alternative performance measures
AuM	Assets under Management
BaFin	German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht)
BGB	German Civil Code (Bürgerliches Gesetzbuch)
BVI	German Investment Fund Association (Bundesverband Investment und Asset Management e.V.)
BVV	BVV Insurance Association of the Banking Industry (BVV Versicherungsverein des Bankgewerbes a.G.)
CAGR	Compound Annual Growth Rate
CAO	Chief Administration Officer
CDP	Former Carbon Disclosure Project: Sustainability rating with focus on climate change
CEO	Chief Executive Officer
CET 1	Common Equity Tier 1
CFO	Chief Financial Officer
CGU	Cash-generating unit
CIO	Chief Investment Officer
CIR	Cost-income ratio
Company	DWS Group GmbH & Co. KGaA, a German partnership limited by shares (Kommanditgesellschaft auf Aktien)
COO	Chief Operating Officer
COVID-19	Corona Virus Disease 2019
CSR	Corporate social responsibility
CSRD	Corporate Sustainability Reporting Directive
DCF	Discounted cash-flow method
DE&I	Diversity, Equity and Inclusion
Deutsche Bank Group	Deutsche Bank AG and its subsidiaries
DIP	Digital investment platform
DVFA	German Association for Financial Analysis and Asset Management (Deutsche Vereinigung für Finanzanalyse und Asset Management)
DWS European domiciled funds / our EU domiciled funds	Funds of legal entities in scope: DWS Investment GmbH (with discretion to vote for certain assets under management of DWS International GmbH, DWS Investment S.A. (including SICAVs and PLCs) based on delegation agreements). Funds domiciled outside of Europe have their own process based on different local regulatory requirements.

Term	Meaning
DWS Group	DWS Group GmbH & Co. KGaA and its subsidiaries
DWS KGaA	DWS Group GmbH & Co. KGaA
ECB	European Central Bank
ECL	Expected credit losses
EEA	European Economic Area
EEO-1	Employment Information Report that some companies are required to submit to the United States Equal Employment Opportunity Commission
EMEA	Europe, Middle East and Africa
ESEF	European Single Electronic Format
ESG	Environmental, Social and Governance
ESG Framework	Framework for ESG product classification or disclosure
ETF	Exchange traded fund
EU	European Union
Fed	Federal Reserve Bank
FTE	Employee figure calculated on a full-time equivalent basis, meaning we include proportionate numbers of part-time employees.
FX	Foreign exchange
GAAP	Generally Accepted Accounting Principles
GAS	German Accounting Standards (Deutscher Rechnungslegungs Standard – DRS)
GCGC	German Corporate Governance Code (Deutscher Corporate Governance Kodex – DCGK)
GDP	Gross Domestic Product
GRESB	Global Real Estate Sustainability Benchmark
GRI	Global Reporting Initiative
Group	DWS Group GmbH & Co. KGaA and its subsidiaries
GSC	Group Sustainability Council
HGB	German Commercial Code (Handelsgesetzbuch)
HRB	Number in section B of the German Commercial Register; incorporated companies are covered in section B of the register
IAS	International Accounting Standard
IASB	International Accounting Standards Board
IBOR	Interbank Offered Rate
IDW	Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer)
IFD	Directive (EU) 2019/2034 on the prudential supervision of investment firms (Investment Firm Directive)
IFR	Regulation (EU) 2019/2033 on the prudential requirements of investment firms (Investment Firm Regulation)
IFRS	International Financial Reporting Standards
InstVV	Institutional Compensation Ordinance (Institutsvergütungsverordnung)
IPO	Initial Public Offering

Term	Meaning
ISS	Institutional Shareholder Services
IT	Information Technology
K-factor	K-factors means own funds requirements for risks that an investment firm poses to clients, markets and to itself
K-ASA	K-factor related to assets safeguarded and administered
K-AuM	K-factor related to assets under management
K-COH	K-factor related to client orders handled
K-NPR	K-factor related to net position risk
KPI	Key performance indicator
KPMG AG	KPMG AG Wirtschaftsprüfungsgesellschaft (Berlin)
KWG	German Banking Act (Kreditwesengesetz)
LGBTQI	Lesbian, Gay, Bi, Trans, Queer / Lesbian, Gay, Bi, Trans, Queer and Intersex
LoD	Line(s) of defence in context of the risk management model "the three lines of defence" (LoD)
M&A	Mergers and acquisitions
MiFID II	Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU
MRT	Material Risk Taker
N/A	Not applicable
N/M	Not meaningful (in the management report)
NFRD	Non-Financial Reporting Directive – Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups
NZAM	Net Zero Asset Managers initiative
OECD	Organisation for Economic Co-operation and Development
OPIM	Operating Principles for Impact Management
PDF	Portable Document Format
PPT	Percentage points
PRI	Principles for Responsible Investment
PRIIPS	Packaged Retail Investment and Insurance-based Products
PVCC	Principal Valuation Control Council
RCC	Risk and Control Committee
S&P	Standard & Poor's
SAVC	Sustainability Assessment Validation Council
SBTi	Science Based Targets initiative
SDG	Sustainable Development Goal(s) of the United Nations (overview of SDGs: https://sustainabledevelopment.un.org/sdgs)
SFDR	Sustainable Finance Disclosure Regulation
SI	Sustainable investments
TCFD	Task Force on Climate-related Financial Disclosures
UCITS	Undertakings for Collective Investment in Transferable Securities
UK	United Kingdom
UN	United Nations
US / USA	United States (of America)

Term	Meaning
WACI	Weighted Average Carbon Intensity
WpIG	German Investment Firm Act / Securities Institutions Act (Wertpapierinstitutsgesetz)
Xtrackers	Exchange Traded Funds offered within the Passive business of DWS

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This report contains forward-looking statements. Forward-looking statements are statements that are not historical facts; they include statements about our beliefs and expectations and the assumptions underlying them. These statements are based on plans, estimates and projections as they are currently available to the management of DWS Group GmbH & Co. KGaA. Forward-looking statements therefore speak only as of the date they are made, and we undertake no obligation to update publicly any of them in light of new information or future events.

By their very nature, forward-looking statements involve risks and uncertainties. A number of important factors could therefore cause actual results to differ materially from those contained in any forward-looking statement. Such factors include the conditions in the financial markets in Germany, in Europe, in the United States and elsewhere from which we derive a substantial portion of our revenues and in which we hold a substantial portion of our assets, the development of asset prices and market volatility, the implementation of our strategic initiatives, the reliability of our risk management policies, procedures and methods, and other risks.

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