BOOST
The Next Level

Annual Report 2022

BERTELSMANN

BERTELSMANN

At a Glance
2022

Key Figures (IFRS)

in € millions	2022	2021	2020	2019	2018
Business Development					
Group revenues	20,245	18,696	17,289	18,023	17,673
Operating EBITDA	3,192	3,241	3,143	2,887	2,586
EBITDA margin in percent[1)]	15.8	17.3	18.2	16.0	14.6
Bertelsmann Value Added (BVA)[2)]	109	474	355	89	121
Group profit	1,052	2,310	1,459	1,091	1,104
Investments[3)]	1,672	1,954	920	1,240	1,434
Consolidated Balance Sheet					
Equity	15,036	13,606	10,725	10,445	9,838
Equity ratio in percent	45.8	42.8	36.1	38.2	38.8
Total assets	32,818	31,769	29,704	27,340	25,343
Net financial debt	2,249	959	2,055	3,364	3,932
Economic debt[4)]	4,785	3,475	5,207	6,511	6,619
Leverage factor	1.8	1.3	1.9	2.6	2.7
Dividends to Bertelsmann shareholders	220	180	–	180	180
Distribution on profit participation certificates	44	44	44	44	44
Employee profit sharing	63	89	88	96	116

The figures shown in the table are, in some cases, so-called Alternative Performance Measures (APM), which are neither defined nor described in IFRS. Details are presented in the section “Alternative Performance Measures” in the Combined Management Report.
Rounding may result in minor variations in the calculation of percentages.
The prior-year comparatives have been adjusted. Further details are presented in the section “Prior-Year Information.”

1) Operating EBITDA as a percentage of revenues.
2) Bertelsmann uses BVA as a strictly defined key performance indicator to evaluate the profitability of the operating business and return on investment. Bertelsmann Value Added has been calculated excluding the venture capital business of the Bertelsmann Investments division.
3) Taking into account the financial debt assumed, investments amounted to €1,981 million (2021: €1,961 million).
4) Net financial debt less the short-term liquidable investments in a special fund plus pension provisions, profit participation capital and lease liabilities (up to and including the financial year 2021 less 50 percent of the par value of the hybrid bonds).

Bertelsmann is a media, services and education company that operates in about 50 countries around the world. It includes the entertainment group RTL Group, the trade book publisher Penguin Random House, the music company BMG, the service provider Arvato, the Bertelsmann Printing Group, the Bertelsmann Education Group and Bertelsmann Investments, an international network of funds. The company has 165,000 employees worldwide and generated revenues of €20.2 billion in the 2022 financial year. Bertelsmann stands for creativity and entrepreneurship. This combination promotes first-class media content and innovative service solutions that inspire customers around the world. Bertelsmann aspires to achieve climate neutrality by 2030.

www.bertelsmann.com

Interactive Online Report

The Bertelsmann Annual Report can be accessed online at:
ar2022.bertelsmann.com

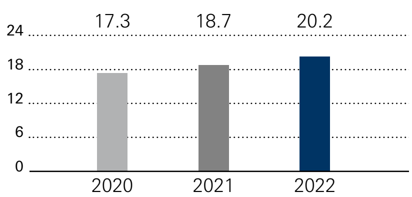
Financial Information

Combined Management Report

Financial Year 2022 in Review

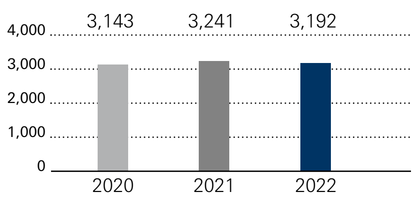
In the 2022 financial year, Bertelsmann achieved the highest revenues in the company's history. Group revenues passed the €20 billion mark and increased by 8.3 percent to €20.2 billion (previous year: €18.7 billion), driven by organic growth of 4.1 percent. Revenues increased in almost all corporate divisions, above all in the service, education, entertainment and music businesses. The Bertelsmann Education Group more than doubled its revenues, mainly due to portfolio-related effects. Bertelsmann's operating EBITDA of €3,192 million remained on a high level (previous year: €3,241 million). Strong earnings growth in the education and music businesses as well as in the service businesses nearly offset higher start-up losses for RTL streaming businesses and lower profits at Penguin Random House and the Bertelsmann Printing Group. The EBITDA margin was 15.8 percent (previous year: 17.3 percent). Group profit amounted to €1,052 million, compared to €2,310 million in the previous year. The previous year figure included high earnings contributions from company disposals and from Bertelsmann Investments.

Revenues in € billions



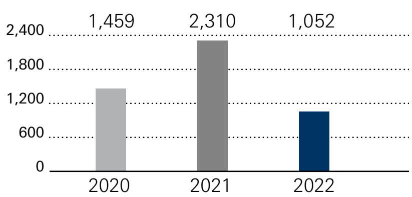
- Revenue of €20.2 billion; organic growth of 4.1 percent
- Revenue increase primarily at Arvato, the Bertelsmann Education Group, RTL Group and BMG

Operating EBITDA in € millions



- At €3,192 million, operating EBITDA reaches the high level of the previous years despite higher streaming start-up losses
- Operating EBITDA margin of 15.8 percent

Group Profit in € millions



- Group profit includes high charges from special items
- Previous year's figure includes high capital gains

Fundamental Information about the Group

In this Management Report, the Group is using the option to combine the Group Management Report and the Management Report of Bertelsmann SE & Co. KGaA. This Combined Management Report outlines the business performance, including the business result and the position of the Bertelsmann Group and Bertelsmann SE & Co. KGaA. Information about Bertelsmann SE & Co. KGaA in accordance with the German Commercial Code (HGB) will be detailed in a separate section. The Combined Management Report will be published instead of the Group Management Report within the Bertelsmann Annual Report.

Corporate Profile

Bertelsmann operates in the core business fields of media, services and education in around 50 countries worldwide. The geographic core markets are Western Europe – in particular, Germany, France and the United Kingdom – and the United States. In addition, Bertelsmann is strengthening its involvement in growth markets such as Brazil, India and China. The Bertelsmann divisions are RTL Group (entertainment), Penguin Random House (books), BMG (music), Arvato (services), Bertelsmann Printing Group (printing), Bertelsmann Education Group (education) and Bertelsmann Investments (international network of funds). As of January 1, 2022, Gruner + Jahr is no longer reported as an independent division. The German magazine businesses and brands have been part of the RTL Group division since the beginning of the year. The remaining Gruner + Jahr activities (particularly Territory, the AppLike Group, DDV Mediengruppe and the investment in the Spiegel Group) were allocated to the Bertelsmann Investments division.

Bertelsmann SE & Co. KGaA is a capital market-oriented but unlisted partnership limited by shares. As a group holding company, it exercises key corporate functions such as the definition and further development of group strategy, capital allocation, financing and management. Internal corporate management and reporting follow the Group's organizational structure, which consists of the operating divisions and Corporate.

RTL Group is one of the leading European entertainment groups in the broadcasting, streaming, content, publishing and digital business, with interests in 56 television channels, nine streaming platforms and 36 radio stations. RTL Group's television channels include RTL Television in Germany, M6 in France and the RTL channels in the Netherlands, Luxembourg and Hungary, as well as a stake in Atresmedia in Spain. The streaming services comprise RTL+ in Germany and Hungary, Videoland in the Netherlands and 6play in France. The content business, Fremantle, is one of the largest international creators, producers and distributors of scripted and unscripted content in the world. The streaming tech company Bedrock and the ad-tech company Smartclip are also part of RTL Group. RTL Group is a listed company and a member of the MDAX.

Penguin Random House is, based on revenue, the world's largest trade book publisher, with more than 300 imprints and book brands across six continents. Its well-known imprints include Doubleday, Riverhead, Viking and Alfred A. Knopf (United States); Ebury, Hamish Hamilton and Jonathan Cape (United Kingdom); Goldmann and Heyne (Germany); Plaza & Janés and Alfaguara (Spain); Sudamericana (Argentina); and the international imprint Dorling Kindersley. Each year Penguin Random House publishes more than 16,000 new titles and sells around 700 million print books, e-books and audiobooks.

BMG is an international music company with 22 offices in 13 core music markets, now representing more than three million titles and recordings, including iconic catalogs and renowned artists and songwriters such as Jason Aldean, Kylie Minogue, Mick Jagger and Keith Richards, Lewis Capaldi, Bebe Rexha, No Angels, Rita Ora, Tina Turner and many more.

Arvato is an international service provider that develops and implements custom-made solutions for all kinds of business processes, for customers in a wide range of sectors in more than 40 countries. These include customer experience, logistics, financial and IT services. The customer experience company Majorel, in which Bertelsmann owns a stake of almost 40 percent, is listed on the stock market.

The Bertelsmann Printing Group unites Bertelsmann's printing and direct marketing activities. They include all the Group's gravure, offset and book printing companies in Germany, the United Kingdom and the United States as well as numerous direct marketing service providers and the storage media producer Sonopress.

Bertelsmann Education Group comprises Bertelsmann's education activities. The group's companies focus on the healthcare sector, in particular education and training, and deliver innovative ways of teaching and learning for students and professionals, and performance management solutions for organizations. Portfolio companies include the US continuing education and workforce management solution provider Relias, the professional practice oriented Alliant University, the Brazilian company Afya, a provider of medical education and training, as well as venture fund investments.

Bertelsmann Investments comprises Bertelsmann's global network of funds, the newly created unit Bertelsmann Next, and the Investments & Participations unit. Investments are largely made through the funds Bertelsmann Asia Investments (BAI), Bertelsmann India Investments (BII) and Bertelsmann Digital Media Investments (BDMI). Furthermore, Bertelsmann Investments also makes key direct and fund investments in the regions South-East Asia, Latin America, Europe and Africa. The Bertelsmann Next unit is driving the entrepreneurial development of new growth sectors and lines of business, in particular in the areas of digital health, app marketing and HR tech. The Investments & Participations unit includes Territory, DDV Mediengrupppe and the stake in the Spiegel-Gruppe.

Regulatory Environment

Bertelsmann has television and radio operations in several European countries that are subject to regulation. In Germany, for example, the media is subject to oversight by the Commission on Concentration in the Media. Bertelsmann Group companies occupy leading market positions in many lines of business, and may therefore have limited potential for growth through acquisition due to antitrust legislation. Moreover, some education activities are subject to regulatory provisions of government authorities and accreditation bodies. Some of the financial services activities are subject to banking supervision regulations.

Because its profit participation certificates and bonds are publicly listed, Bertelsmann is required to comply with capital market regulations applicable to publicly traded companies.

Shareholder Structure

Bertelsmann SE & Co. KGaA is a capital market-oriented but unlisted partnership limited by shares. Three foundations (Bertelsmann Stiftung, Reinhard Mohn Stiftung and BVG-Stiftung) indirectly hold

80.9 percent of Bertelsmann SE & Co. KGaA shares, with the remaining 19.1 percent held indirectly by the Mohn family. Bertelsmann Verwaltungsgesellschaft (BVG) controls all voting rights at the General Meeting of Bertelsmann SE & Co. KGaA and Bertelsmann Management SE (general partner).

Strategy

Bertelsmann's strategic focus is on a fast-growing, digital, international and diversified Group portfolio. Businesses in which Bertelsmann invests should have long-term stable growth, global reach, sustainable business models, high market-entry barriers and scalability. A significant increase in investment is planned over the next few years as part of the Group-wide growth initiative. Existing and new lines of business will be established and expanded through organic initiatives and acquisitions. The strategy pursues five growth priorities: national media champions, global content, global services, education and investment portfolio. The following topics form the basis for the successful implementation of the strategy: tech & data, people, communication and ESG. Further progress was made in the implementation of the strategic priorities in the 2022 financial year.

Further portfolio changes were made in the creation of national media champions. RTL Group completed the combination of RTL Deutschland and Gruner + Jahr at the beginning of the year. The disposals of RTL Belgium and RTL Croatia were also completed in the reporting period. However, the announced mergers of Groupe M6 and Groupe TF1 in France, and of RTL Nederland and Talpa Network in the Netherlands will no longer be pursued after the competent antitrust authorities in the relevant countries have objected to or prohibited, respectively, the said transactions. The growth ambitions and the strategic goal of forming national media champions remain unchanged. In order to respond to the ongoing need for consolidation, alternative scaling paths will be pursued in future to complement the strategy employed to date. These scaling paths include new cooperations in the area of domestic and international advertising marketing, the development of advertising and streaming technology, the expansion of sales partnerships and the creation of shared content. As of year-end, RTL Group had around 5.5 million paying subscribers to its streaming services RTL+ in Germany and Hungary, and Videoland in the Netherlands, representing an increase of 45 percent year on year. With the launch of RTL+ Musik and the integration of a podcast service in Germany, RTL+ became a multimedia provider. RTL Hungary launched its streaming service RTL+ in 2022.

Bertelsmann continued to invest in the expansion of the global content businesses. Fremantle grew organically and through acquisitions, and was thereby able to continue with its international growth strategy. The production company Fremantle completed a number of acquisitions and shareholding increases. Among other transactions, Fremantle acquired 70 percent of Lux Vide, Italy's leading independent TV production company, and a 51 percent stake in the Irish production company Element Pictures. The best-selling books at Penguin Random House were "Atomic Habits" by James Clear and "Where the Crawdads Sing" by Delia Owens. U2 singer Bono's memoir "Surrender" and "The Light We Carry" by Michelle Obama were published by Penguin Random House in November. In addition, preparatory work was carried out at the end of the year for Prince Harry's autobiography "Spare," which went on sale in January 2023. BMG, the world's fourth-largest music business, strengthened its rights portfolio by acquiring further music rights, including those of Scottish rock band Simple Minds and French electronic music pioneer Jean-Michel Jarre, and concluded new contracts with artists such as Rita Ora, Elvis Costello and Julian Lennon. BMG also acquired the German Schlager music label Telamo.

Global services were also further expanded. The growth drivers at Arvato were primarily the logistics and customer experience businesses (CX). In relation to this, Arvato Supply Chain Solutions saw growth primarily in the customer segments of consumer products, healthcare and technology, and continued to expand its distribution centers, including in Germany and Poland. Majorel made several acquisitions in the reporting period, including IST Networks, a CX technology specialist in the Middle East, and the Spanish CX service provider Findasense. Majorel also strengthened its customer relationship with Booking.com. Majorel and Sitel ended talks about a possible merger as they were unable to reach a final agreement. The financial services business implemented its strategic realignment under the name Riverty (previously Arvato Financial Solutions). Arvato Systems expanded its technology range and customer relationships in the energy sector and in cloud services. In light of rapidly rising paper and energy prices, the Bertelsmann Printing Group focused on increasing the competitiveness of the printers.

Bertelsmann strengthened its global education business by increasing its stake in Afya. The NASDAQ-listed education company is a leading provider of medical education and training and digital solutions for medical practitioners in Brazil and, since this increase, is for the first time fully consolidated under the Bertelsmann Education Group division. During the reporting period, Afya also announced the acquisition of two additional medical universities in Brazil. The Bertelsmann Education Group benefited from high demand for the digital education and training services offered by Relias and Alliant and continued to invest in developing the range of digital learning solutions of its e-learning provider Relias, while Alliant International University continued to expand its range of online courses.

Bertelsmann expanded its investment portfolio by investing in around 54 new and 31 follow-on investments during the reporting period. As of the end of 2022, Bertelsmann Investments held a total of 333 investments through its three international funds. Bertelsmann Next increased its engagement in the digital health sector through various direct and follow-on investments. Former Gruner + Jahr companies including the AppLike Group, Territory and the DDV Mediengruppe have also been assigned to the Bertelsmann Investments division since the beginning of 2022. Since June 1, 2022, CEO Carsten Coesfeld has headed up the Bertelsmann Investments division and is thereby responsible for the network of funds and the newly established unit Bertelsmann Next.

Bertelsmann is continually developing its strategy. Compliance with and achievement of the strategic development priorities are examined by the Executive Board and at the divisional level, through regular meetings of the Strategy and Business Committees and as part of the annual Strategic Planning Dialogue between the Executive Board and the Supervisory Board. In addition, relevant markets and the competitive environment are analyzed on an ongoing basis in order to draw conclusions concerning the further development of the Group's strategy. The Executive Board is also supported by the Group Management Committee (GMC) on issues of corporate strategy and development. This Committee is composed of executives representing key businesses, countries and regions, and select Group-wide functions.

The Group's content-based and entrepreneurial creativity is also very important for the implementation of its strategy. Bertelsmann will therefore continue to invest in the creative core of its businesses. Simultaneously, innovation competence is very important for Bertelsmann and is a key strategic component (see the section "Innovations").

Value-Oriented Management System

Bertelsmann's primary objective is continuous growth of the company's value through a sustained increase in profitability with efficient capital investment at the same time. To manage the Group, Bertelsmann has been using a value-oriented management system for many years, which focuses on revenues, operating earnings and optimal capital investment. For formal reasons, Bertelsmann makes a distinction between strictly defined and broadly defined operational performance indicators.

Strictly defined operational performance indicators, including revenues, operating EBITDA and Bertelsmann Value Added (BVA), are used to directly assess current business performance and are correspondingly used in the outlook. BVA is used primarily for management at the Group level, whereas revenues and operating EBITDA, above all, are more meaningful performance indicators for the divisions. As distinguished from strictly defined performance indicators, broader performance indicators are also used and are partially derived from the above-mentioned indicators or are strongly influenced by them. These include the EBITDA margin (operating EBITDA as a percentage of revenue) and the cash conversion rate. The financial management system, with defined internal financing targets, is also part of the broadly defined value-oriented management system. Details of the expected development of performance indicators used in the broader sense are provided at best as additional information and are not included in the outlook.

To explain the business performance, and to control and manage the Group, Bertelsmann uses additional alternative performance measures that are not defined in accordance with IFRS (more details are given in the section "Alternative Performance Measures").

Strictly Defined Operational Performance Indicators

To control and manage the Group, Bertelsmann uses revenues, operating EBITDA and BVA as performance indicators. Revenue is used as a growth indicator of businesses. In the 2022 financial year, Group revenues rose by 8.3 percent to €20.2 billion (previous year: €18.7 billion). Organic growth was 4.1 percent, after 11.4 percent in the previous year.

A key performance indicator for measuring the profitability of the Group and the divisions is operating EBITDA. Operating EBITDA dropped slightly during the reporting period by 1.5 percent to €3,192 million (previous year: €3,241 million).

Bertelsmann uses BVA for assessing the profitability of operations and return on invested capital. BVA measures the profit realized above and beyond the appropriate return on invested capital. At €109 million, BVA in the financial year 2022 was below the previous year's figure of €474 million.

Broadly Defined Performance Indicators

To assess business development, other performance indicators are used that are partially derived from revenues and operating EBITDA or are strongly influenced by these figures.

The cash conversion rate serves as a measure of cash generated from business activities, which should be between 90 percent and 100 percent as a long-term average. In the 2022 financial year, the cash conversion rate was 42 percent (previous year: 107 percent).

The EBITDA margin is used as an additional criterion for assessing business performance. In the 2022 financial year, the EBITDA margin was 15.8 percent, below the previous year's figure of 17.3 percent.

Bertelsmann's financial management system is defined by the internal financial targets outlined in the section "Net Assets and Financial Position." These financing principles are pursued in the management of the Group and are included in the broadly defined value-oriented management system.

The non-financial performance indicators (employees, corporate responsibility and similar topics) are not included in the broadly defined value-oriented management system. As they can still only be measured to a limited extent, it is not possible to make any clear quantifiable statements concerning interrelated effects and value increases. For this reason, the non-financial performance indicators have not yet been used for the management of the Group but are gaining in relevance for Bertelsmann's businesses.

Non-Financial Performance Indicators

The following section refers to the non-financial performance indicators at Bertelsmann. For more information about the organization, management and key topics of corporate responsibility, including additional information on employee concerns, please refer to the section "Combined Non-Financial Statement."

Employees

Bertelsmann's employees are the most important key for the company's long-term success. At the end of the financial year 2022, Bertelsmann employed 164,691 members of staff worldwide.

Further information and employee-related non-financial performance indicators are presented in the "Employee Matters" section (Combined Non-Financial Statement).

Innovations

Businesses invest in the research and the development of new products in order to ensure their long-term competitiveness. Bertelsmann has a similar imperative to create innovative media content, media-related products, and services and educational offerings in a rapidly changing environment. Instead of conventional research and development activities, Bertelsmann views the company's own innovative power as particularly important for business development. The long-term success of the Group depends heavily on product innovations, investing in growth markets and integrating new technologies. Furthermore, innovative expertise is very important for strategy implementation.

Bertelsmann relies on innovation and growth in core operations and new business fields. The key success factors of Bertelsmann's innovation management include continuously following cross-industry trends and observing new markets. At the Group level, Bertelsmann works with the divisions to continuously identify and implement innovative business strategies. Alongside market-oriented activities, support is given to Group-wide initiatives that actively promote knowledge transfer and collaboration. Furthermore, cooperation is being expanded among the divisions.

Innovations at RTL Group focus on three core topics: continuously developing new, high-quality TV formats; using all digital distribution channels; and better monetization of RTL Group's audience reach by personalization, recommendations and addressing target groups. RTL Deutschland is pursuing the goal of providing cross-media services that represent a unique selling proposition in the German-speaking market. In 2022, in addition to the existing RTL+ services focused on video content, the app RTL+ Musik was launched, offering RTL+ users access to music titles, radio streams, podcasts and audiobooks. Another innovative focus point is addressable TV advertising, which combines the broad reach of linear TV with targeted digital advertising. In May 2022, the ad-tech business Smartclip acquired the French ad-tech company Realytics, which analyzes the impact of TV advertising on the use of the websites of advertisers. In addition, since December 2022, Smartclip and Ad Alliance have enhanced advertising impact by personalizing TV ads through addressable TV pop-up ads. RTL Group's advertising marketers are continuously working on innovative formats such as "programmatic print" advertising by Ad Alliance in Germany, and the new augmented reality technology 6scan introduced by M6 Publicité in France.

Innovations at Penguin Random House focus on identifying and developing strategies and techniques that enhance the reading experience, expand readership and retain readers over the long term. In 2022, Penguin Random House US continued its "All Ways Black" campaign as a holistic initiative on various platforms. The initiative aims to raise awareness with respect to the many positive contributions of black people to society as a whole and to literature in particular. In order to involve the younger generation more, Penguin Random House launched a new tool on TikTok under the hashtag "BookTok" that allows readers to tag books directly through a link in their videos that leads to an info page about the work. As a result of Penguin Random House's continuous efforts to analyze market trends and the interests of readers, the company launched the apps Lighthouse in Germany and CAT (Composite Analysis Tool) in North America. Both apps aim to gain insights for the marketing of titles.

Innovations at BMG are based on the company's unique market position and the core values of service, fairness and transparency. BMG relies on cutting-edge technologies to optimize existing services further and to adapt to new requirements on an ongoing basis. The most significant developments in this area include the migration of systems to the cloud to handle the increasing data volumes of streaming platforms and the partnership with Cyanite to make the company's music catalog even more searchable and usable for entertainment and advertising use through AI tagging. Technical improvements led to a substantial reduction of the processing time for royalty settlements. Innovations in the service business included the signing of a contract for events in Berlin's Theater des Westens to incorporate it into the growing live events business and to offer it for use to German and international artists.

In the past financial year, innovations at Arvato included further improving existing services, and developing new industry and customer solutions. Aiming at further digitalizing the entire supply chain, Arvato Supply Chain Solutions made major investments in cutting-edge automation and robotics technology and in the expansion of its cloud infrastructure. In the 2022 financial year, Majorel launched an innovative platform called Majorel X to provide CX transformation services. The portfolio of the new business unit comprises a broad range of solutions in the areas of consulting, technology and design & creative services. In 2022, Arvato Systems continued to expand its service portfolio in the emerging fields of cloud computing, artificial intelligence and IT security.

Innovations at the Bertelsmann Printing Group focused on further developing existing processes with new technologies and digital solutions, and also on expanding its portfolio of products and services.

The IT department of the Bertelsmann Printing Group launched the "Data Democracy" project and converted a number of traditional reporting formats to modern Tableau dashboard solutions. In addition, Mohn Media introduced an AI-based system that automatically identifies paper web breaks, thereby increasing the recourse rate. In its procurement of replacement parts, Vogel Druck increasingly opted for innovative 3D-print technologies, while DeutschlandCard added innovative digital services such as "Prospekte-Welt" to its product portfolio.

Innovations at the Bertelsmann Education Group mainly consisted of developing digital, technology-based and customized education and service offerings to provide an effective process for training and continuing education and to address the increasing lack of healthcare professionals. Afya combines digital and classroom-based teaching for the education of medical practitioners and is able to provide customized learning paths through data collection and analysis. At Relias, teaching content and platforms were developed by health experts (including doctors, nurses and therapists) as well as data analysts and developers, for training skills specific to hospital and nursing home personnel. In the university education segment, Alliant developed new courses in the areas of nursing and mental health.

Innovations at Bertelsmann Investments were advanced through investments in growing digital businesses worldwide, promoting entrepreneurial talent, the exchange of knowledge within the Group and tapping into new lines of business. Last year, for example, the division invested in 54 start-ups, supported the development and expansion of proprietary technology solutions at app marketing specialist AppLike Group, and made its first investments in the growth market of digital health solutions as part of the Bertelsmann Next unit.

Report on Economic Position

Corporate Environment

Overall Economic Developments

In 2022, global economic development weakened considerably due to the impact of the war in Ukraine, high inflation rates, the continuation of some of the pandemic-related restrictions, above all in China, and the persisting disruptions in the supply chains. The real gross domestic product (GDP) rose by 3.4 percent, after 5.9 percent in 2021.

High inflation and the effects of the war in Ukraine also hampered economic recovery in the eurozone. Real GDP rose 3.5 percent in 2022, compared to 5.2 percent in the previous year.

In Germany, the purchasing power of private households was negatively affected by high energy prices which subdued private consumption. Despite the challenging background, the Germany economy held up well overall in 2022. Real GDP rose 1.8 percent in 2022, after 2.6 percent in the previous year. In France, real GDP rose 2.6 percent in 2022, after 6.8 percent in the previous year. The economy of the United Kingdom also grew more slowly than in the previous year. Real GDP rose 4.0 percent there, after 7.5 percent in the previous year.

Economic development in the United States was impacted by a tight monetary policy. As of year-end 2022, the US economy recorded solid growth again. Real GDP rose 2.9 percent in 2022, after 5.7 percent in the previous year.

Developments in Relevant Markets

The following analysis focuses on markets and regions that are of a sufficient size and are strategically important from a Group perspective.

The European television advertising markets saw mixed development in 2022. While the German market showed a strong decline and France a moderate decrease, TV advertising markets in the Netherlands grew significantly and in Hungary moderately. The streaming markets in both Germany and the Netherlands posted strong growth.

The markets for printed books also showed a mixed development in 2022. In the United States, printed books revenues – after reaching a record high in the previous year – fell strongly, and a slight decline was recorded in Germany. In the United Kingdom the market for printed books were stable, while the Spanish-language market saw a significant rise, primarily driven by strong growth in Mexico. The market for e-books declined significantly in the United States and decreased strongly the United Kingdom. In contrast, revenues with digital audiobooks grew significantly in the United States and were stable in the United Kingdom.

The global music market recorded significant growth in the publishing market segment in 2022, and strong growth in the recordings market segment.

The service markets relevant for Arvato – customer experience solutions, financial services and IT solutions – were characterized by moderate to significant growth, while the market for supply chain solutions only recorded slight growth largely due to the normalization of the pandemic-related high e-commerce volumes.

In 2022, the European printing markets recorded a moderate decline in the offset business and strong declines in the gravure printing business. The North American book printing market saw revenues decline significantly.

The education markets in the United States where Bertelsmann is involved, namely training in healthcare and university education, as well as the Brazilian market for medical university courses exhibited moderate to strong growth in 2022.

Significant Events in the Financial Year

In February 2022, Majorel announced the expansion of the partnership with Booking.com and acquired 12 of Booking.com's 14 internal customer experience service centers. This consolidates the company's existing presence in the existing markets while also expanding its geographic presence by entering into four new countries. The implementation was completed on June 1, 2022.

In March 2022, Fremantle acquired 70 percent of the shares in Lux Vide, Italy's leading independent television production company. The acquisition of Lux Vide forms part of Fremantle's wider international growth strategy of investing in premium production companies and talent from around the world.

At the end of March 2022, the Belgian antitrust authority approved the disposal of RTL Belgium to the media companies DPG Media and Groupe Rossel. The transaction announced by RTL Group at the end of June 2021 was thereby concluded as of April 1, 2022.

In May 2022, Fremantle acquired 51 percent of the Irish film and television production company Element Pictures, the company behind award-winning films such as "The Favourite" and "Room," the dramatic production "Normal People" and the mini-series "Conversations with Friends."

In May 2022, Bertelsmann increased its stake in Nasdaq-listed education company Afya. The leading provider of medical education and training in Brazil has been consolidated since the stake was increased and is assigned to the Bertelsmann Education Group. After the acquisition of the additional shares and as of the end of the reporting period, Bertelsmann holds 59 percent of the voting rights in Afya. Bertelsmann had been involved in expanding Afya since 2014.

In late May 2022, the Croatian antitrust authority approved the disposal of RTL Croatia to Central European Media Enterprises (CME). With this, the transaction announced by RTL Group in February 2022 was concluded as of June 1, 2022.

Effective October 20, 2022, Jens Maier, Chairman of the Corporate Works Council of RTL Deutschland, and Ilka Stricker, Vice Chairwoman of the Corporate Works Council of Bertelsmann SE & Co. KGaA, were appointed to the Supervisory Board of Bertelsmann SE & Co. KGaA. They took over as employee representatives from Kai Brettmann, former Chairman of the Group Works Council of RTL Deutschland, and Christiane Sussieck, Chairwoman of the Corporate General Works Council of Bertelsmann SE & Co. KGaA, both of whom have stepped down from the Bertelsmann Supervisory Board.

In November 2022, Fremantle acquired a majority stake in 72 Films, an independent TV production company that produced the globally successful sports documentary series "All or Nothing: Arsenal" and the Emmy-winning historical documentary "9/11: One Day in America."

At the end of 2022, Markus Dohle stepped down as CEO of Penguin Random House and at the same time resigned his seat on the Bertelsmann Executive Board. Nihar Malaviya, who was previously President & Chief Operating Officer of Penguin Random House US, was appointed his interim successor as the CEO of Penguin Random House.

In the reporting period and subsequent months, the following decisions were made regarding planned transactions. The announced mergers of Groupe M6 and Groupe TF1 in France, and of RTL Nederland and

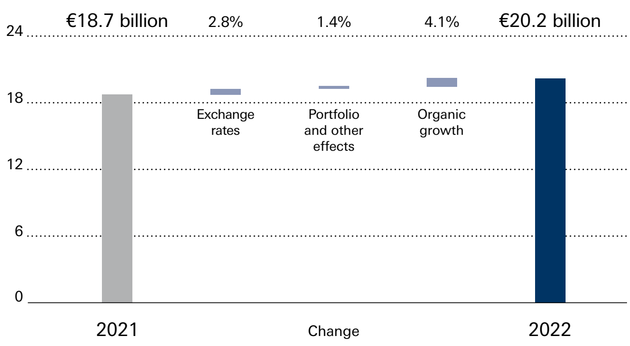
Talpa Network in the Netherlands, will no longer be pursued after the competent antitrust authorities in the relevant countries have objected to or prohibited, respectively, the said transactions. Majorel and Sitel also ended talks regarding a possible merger after failing to reach a final agreement. Furthermore, Bertelsmann announced that the Group no longer intends to pursue the previously planned merger of Penguin Random House and Simon & Schuster after the US District Court in Washington, D.C., enjoined the transaction. In November 2020, Penguin Random House announced the acquisition of the book publisher Simon & Schuster from media company Paramount Global (formerly ViacomCBS). The transaction was subject to approval of antitrust authorities. On November 2, 2021, the Department of Justice filed a suit before the District Court in Washington, D. C., to prohibit the transaction, citing concerns about monopsony in relation to the acquisition of author rights. The acquisition was enjoined by court ruling dated November 1, 2022. The contractually agreed "regulatory termination fee" of US$200 million was paid to Paramount Global in the reporting period.

Results of Operations

Revenue Development

Group revenues increased in the financial year 2022 by 8.3 percent to €20.2 billion (previous year: €18.7 billion). Revenues increased in almost all corporate divisions, above all in the service, education, entertainment and music businesses. Adjusted by exchange rate, portfolio and other effects, the Group's organic growth was 4.1 percent.

Revenue Breakdown



Revenues at RTL Group grew by 3.0 percent to €7,224 million (previous year: €7,016 million). Organic growth was 1.3 percent. The revenue increase can be attributed to the continued expansion of Fremantle, the positive business development of RTL Nederland, and portfolio effects at RTL Deutschland, as well as positive currency effects. Portfolio effects from the sale of RTL Belgium and RTL Croatia, however, negatively affected revenues. Revenues at Penguin Random House rose 4.8 percent to €4,223 million (previous year: €4,030 million), largely due to exchange rate effects. The organic decline was 3.3 percent. In contrast, organic revenues increased primarily at the publishers of Grupo Editorial. BMG revenues rose 30.6 percent to €866 million (previous year: €663 million). Organic growth was 22.8 percent. Organic revenue growth was evident both in the publishing and in the recording business, a result of factors such as the substantial investments made in catalog acquisitions. Revenues at Arvato grew by 10.5 percent to €5,564 million (previous year: €5,035 million). Organic growth was 9.3 percent. This can be attributed in particular to the CX company Majorel and the supply chain management businesses. The Bertelsmann Printing Group's revenues were up 9.8 percent to €1,448 million (previous year: €1,319 million), mainly due to passing on price increases. Organic growth was 8.1 percent. Revenues at the Bertelsmann Education Group increased to €622 million (previous year: €283 million), primarily driven by portfolio effects following the consolidation of Afya. Organic growth was 5.5 percent. Revenues at the Bertelsmann Investments division are largely generated through the former Gruner + Jahr businesses DDV Mediengruppe, Territory as well as the AppLike Group, which have been assigned to the

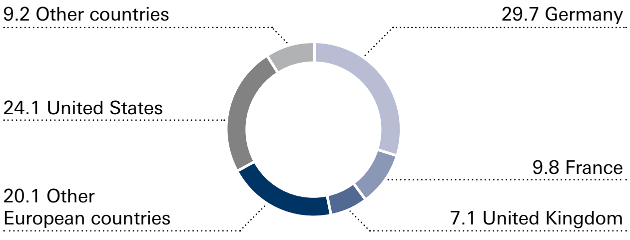
Bertelsmann Investments division since the beginning of 2022. Revenues at Bertelsmann Investments amounted to €535 million (previous year: €589 million). The decline in revenues is mainly the result of the divestment of G+J France in the previous year.

Revenues by Division

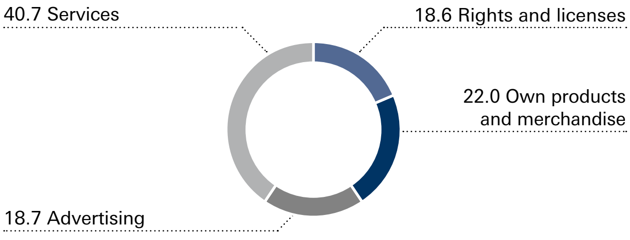
in € millions			2022			2021 (adjusted)
	Germany	International	Total	Germany	International	Total
RTL Group	2,615	4,609	7,224	2,672	4,344	7,016
Penguin Random House	298	3,925	4,223	281	3,749	4,030
BMG	69	797	866	40	623	663
Arvato	1,952	3,612	5,564	1,851	3,184	5,035
Bertelsmann Printing Group	870	578	1,448	787	532	1,319
Bertelsmann Education Group	4	618	622	3	280	283
Bertelsmann Investments	360	175	535	330	259	589
Total divisional revenues	6,168	14,314	20,482	5,964	12,971	18,935
Corporate/Consolidation	(148)	(89)	(237)	(244)	5	(239)
Continuing operations	6,020	14,225	20,245	5,720	12,976	18,696

There were slight changes in the geographical breakdown of revenues compared to the previous year. The share of revenues generated in Germany was 29.7 percent compared to 30.6 percent in the previous year. The revenue share generated by France amounted to 9.8 percent (previous year: 11.0 percent). In the United Kingdom, the revenue share was 7.1 percent (previous year: 7.0 percent). The share of total revenues generated by the other European countries was 20.1 percent, compared to 20.6 percent in the previous year. The revenue share generated by the United States was 24.1 percent (previous year: 23.3 percent), and the other countries achieved a revenue share of 9.2 percent (previous year: 7.5 percent). This means that the share of total revenues generated by foreign business rose slightly to 70.3 percent (previous year: 69.4 percent). Year on year, there was a slight change in the ratio of the four revenue sources (own products and merchandise, services, advertising, rights and licenses) to overall revenue.

Consolidated Revenues by Region in percent



Consolidated Revenues by Category in percent



Operating EBITDA

Bertelsmann achieved operating EBITDA of €3,192 million in the 2022 financial year (previous year: €3,241 million). Strong earnings growth in the education and music businesses as well as in the service businesses nearly offset higher start-up losses at RTL Group in connection with the expansion of its streaming businesses and lower profits at Penguin Random House and the Bertelsmann Printing Group that were primarily down to market conditions and inflation. The EBITDA margin was 15.8 percent (previous year: 17.3 percent).

Operating EBITDA at RTL Group fell 6.5 percent to €1,323 million (previous year: €1,416 million). The decline is mainly down to higher start-up losses for the accelerated expansion of streaming businesses. In addition, RTL Deutschland and Groupe M6 recorded declines in earnings against a challenging macro-economic background, with corresponding effects on advertising markets. Operating EBITDA at Penguin Random House declined by 11.7 percent to €666 million (previous year: €755 million), due in particular to a primarily market- and inflation-related decline in earnings in the US business. At BMG, operating EBITDA grew 34.9 percent to €195 million (previous year: €144 million) as a result of strong organic growth and increased investment activity. Arvato recorded an operating EBITDA of €877 million (previous year: €825 million). The 6.4 percent increase in earnings is primarily attributable to the CX company Majorel as well as the Arvato Supply Chain Solutions business area. Operating EBITDA at the Bertelsmann Printing Group was down 57.4 percent to €26 million (previous year: €60 million). The main reasons for the strong decline were that cost increases could only be passed on to a limited degree and that capacity utilization was lower. At the Bertelsmann Education Group, operating EBITDA increased significantly to €192 million (previous year: €86 million). The rise is largely attributable to portfolio effects following the increase in the shareholding in Afya in the reporting period. Earnings from operational activities at Bertelsmann Investments declined, in part as a result of portfolio effects, to €22 million (previous year: €68 million).

Results Breakdown

in € millions	2022	2021 (adjusted)
Operating EBITDA by division		
RTL Group	1,323	1,416
Penguin Random House	666	755
BMG	195	144
Arvato	877	825
Bertelsmann Printing Group	26	60
Bertelsmann Education Group	192	86
Bertelsmann Investments	22	68
Total operating EBITDA by division	3,301	3,354
Corporate/Consolidation	(109)	(113)
Operating EBITDA	3,192	3,241
Amortization/depreciation, impairments/reversals of impairment losses on intangible assets and property, plant and equipment not included in special items	(1,077)	(880)
Special items	(562)	963
EBIT (earnings before interest and taxes)	1,553	3,324
Financial result	(258)	(352)
Earnings before taxes	1,295	2,972
Income tax expense	(246)	(662)
Earnings after taxes from continuing operations	1,049	2,310
Earnings after taxes from discontinued operations	3	–
Group profit or loss	1,052	2,310
attributable to: Earnings attributable to Bertelsmann shareholders	671	1,800
attributable to: Earnings attributable to non-controlling interests	381	510

Special Items

Special items in the financial year 2022 totaled €-562 million compared to €963 million in the previous year. They consist of impairments or reversals on investments accounted for using the equity method amounting to €-7 million (previous year: €2 million), impairments on other financial assets at amortized cost amounting to €-32 million (previous year: €-1 million), impairments on goodwill and other intangible assets with indefinite useful life as well as gains from business combinations amounting to €-7 million (previous year: –), results from disposals of investments amounting to €136 million (previous year: €786 million), fair value measurement of investments amounting to €-232 million (previous year: €483 million), as well as restructuring expenses and other special items totaling €-420 million (previous year: €-301 million). There were no adjustments of the carrying amounts of assets held for sale in the reporting period (previous year: €-6 million). Due to the current political and economic situation in Russia, impairment losses were recognized on assets located in Russia in the Arvato division that are of minor significance for the Bertelsmann Group. The results from disposals of investments include disposal proceeds from the sale of RTL Belgium. The high value of the same period in the previous year is primarily related to the sale of SpotX. The increase in restructuring expenses and other special items is mainly the result of expenses in connection with the enjoined takeover of Simon & Schuster with respect to the contractually agreed payment of a "regulatory termination fee" of US$200 million to Paramount Global plus legal fees.

EBIT

EBIT amounted to €1,553 million in the financial year 2022 (previous year: €3,324 million) after adjusting operating EBITDA for special items totaling €-562 million (previous year: €963 million) and amortization, depreciation, impairments and reversals of impairment losses on intangible assets, property, plant and equipment and right-of-use assets totaling €-1,077 million (previous year: €-880 million), which were not included in the special items.

Group Profit

The financial result was €-258 million, compared with the previous year's amount of €-352 million. The income tax expense decreased to €-246 million compared to €-662 million in the previous year. The deviation is attributable to one-off negative special items from transactions in the previous year. The earnings after taxes from continued operations totaled €1,049 million (previous year: €2,310 million). The earnings after taxes from discontinued operations of €3 million (previous year: –) include follow-on effects from the sale of the businesses of the former Direct Group, which were previously accounted as discontinued operations. Taking into consideration the earnings after taxes from discontinued operations, the Group profit is €1,052 million (previous year: €2,310 million). The share of Group profit attributable to non-controlling interests came to €381 million (previous year: €510 million). The share of Group profit attributable to Bertelsmann shareholders was €671 million (previous year: €1,800 million). For the 2022 financial year, a dividend payout of €220 million (previous year: €220 million) will be proposed at the Annual General Meeting of Bertelsmann SE & Co. KGaA.

Net Assets and Financial Position

Financing Guidelines

The primary objective of Bertelsmann's financial policy is to achieve a balance between financial security, return on equity and growth. For this, Bertelsmann bases its financing policy on the requirements of a solid investment grade credit rating and the associated qualitative and quantitative criteria. Credit ratings and capital market transparency make a considerable contribution to the company's financial security and independence.

In accordance with the Group structure, the capital allocation is made centrally by Bertelsmann SE & Co. KGaA, which provides the Group companies with liquidity and manages the issuance of guarantees and letters of comfort for them. The Group consists largely of a single financial unit, thereby optimizing the raising of capital and investment opportunities.

Bertelsmann utilizes a financial management system employing quantitative financial targets concerning the Group's economic debt and, to a lesser extent, its capital structure. One of the financial targets is a dynamic leverage factor limited to the defined maximum of 2.5. As of December 31, 2022, the leverage factor was 1.8, which was above the previous year's level (December 31, 2021: 1.3). This was mainly a result of the changed consideration of hybrid bonds in the calculation of economic debt. Following the public repurchase offer for the hybrid bond that may be terminated for the first time in April 2023, the par value of all still outstanding hybrid bonds is no longer included in equity at a proportion of 50 percent.

As of December 31, 2022, economic debt increased to €4,785 million compared to €3,475 million in the previous year. Net financial debt also increased to €2,249 million compared to €959 million as of December 31, 2021. As of December 31, 2022, recognized lease liabilities were €1,538 million (December 31, 2021: €1,356 million). Provisions for pensions and similar obligations declined to €710 million as of December 31, 2022 (December 31, 2021: €1,474 million). The main reason for this strong decrease is the rise of the discount rate. Short-term liquidable investments in a special fund amounted to €125 million (December 31, 2021: €102 million).

Another financial target is the (interest) coverage ratio. This is calculated as the ratio of operating EBITDA, used to determine the leverage factor, to financial result, and should exceed four. In the reporting period, the coverage ratio was 11.1 (previous year: 8.3). The Group's equity ratio rose to 45.8 percent (December 31, 2021: 42.8 percent), remaining significantly above the self-imposed minimum of 25 percent.

Financial Targets

	Target	2022	2021
Leverage Factor: Economic debt/Operating EBITDA[1]	≤ 2.5	1.8	1.3
Coverage ratio: Operating EBITDA/Financial result[1]	> 4.0	11.1	8.3
Equity ratio: Equity as a ratio to total assets (in percent)	≥ 25.0	45.8	42.8

1) After modifications.

Financing Activities

In January 2022, Bertelsmann repaid parts of bonds due in August 2022, October 2024, September 2025, and April 2026 in a total nominal amount of €146 million ahead of schedule as part of a public repurchase offer. In August, a maturing bond totaling a nominal amount of €750 million with a balance after partial repayments of €539 million was repaid on schedule from existing liquidity. In addition, in November 2022, a nominal amount of €504 million of the hybrid bond subject to a termination option in April 2023 was repaid ahead of schedule within the context of a public repurchase offer. In November 2022, a benchmark bond in the amount of €750 million also was issued with a coupon of 3.5 percent and a term of 6.5 years. In addition, the Brazilian education company Afya, which belongs to the Bertelsmann Group, placed a publicly listed bond for BRL 500 million in December 2022. The nominal volume of the bond is due in two equal tranches in 2027 and 2028.

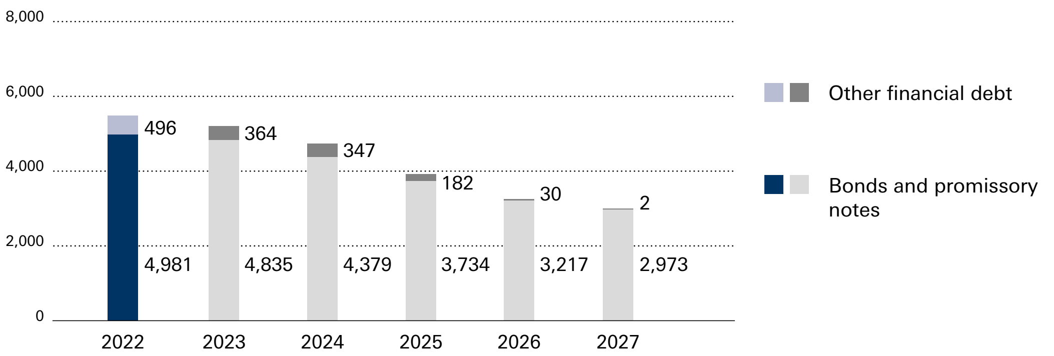
Rating

Bertelsmann has been rated by the rating agencies Moody’s and Standard & Poor’s (S&P) since 2002. The issuer ratings facilitate access to the international capital markets and are therefore a key element of Bertelsmann’s financial security. Bertelsmann is currently rated by Moody’s as “Baa2” (outlook: stable) and by S&P as “BBB” (outlook: stable). Both credit ratings are in the investment-grade category. Bertelsmann’s short-term credit quality rating is “P 2” from Moody’s and “A 2” from S&P.

Credit Facilities

In addition to available liquidity, the Bertelsmann Group has access to a syndicated credit facility with 15 banks. This credit facility that was unutilized as of December 31, 2022, forms the backbone of the strategic credit reserve; Bertelsmann can utilize this with a term until 2026 to draw up to €1.2 billion of revolving funds in euros and US dollars.

Maturity Structure of Financial Debt in € millions



Cash Flow Statement

During the reporting period, cash flow from operating activities was generated in the amount of €1,382 million (previous year: €1,820 million). The difference compared with the previous year’s high figure can be attributed in part to an overall higher amount of funds tied up in net working capital. This was offset by the reduction in taxes paid. The sustainable operating free cash flow, adjusted for special effects, was €876 million (previous year: €2,457 million), and the cash conversion rate was 42 percent (previous year: 107 percent); see also the section “Broadly Defined Performance Indicators.” The cash flow from investing activities was €-1,118 million (previous year: €-267 million). Of that amount, €-1,408 million (previous year: €-1,699 million) was attributable to investments in intangible assets, property, plant and equipment, and financial assets. Purchase price payments for consolidated investments (less acquired cash and cash equivalents) were €-264 million (previous year: €-255 million). Payments from the sales of subsidiaries and other business units as well as of other non-current assets were €554 million (previous year: €1,687 million). The previous year’s high figure is due in particular to the sale of SpotX. The cash flow from financing activities was €-1,734 million (previous year: €-1,695 million). Dividend payments to Bertelsmann SE & Co. KGaA shareholders totaled €-220 million (previous year: €-180 million). Dividends paid to non-controlling interests and other shareholders amounted to €-293 million (previous year: €-230 million). As of December 31, 2022, Bertelsmann had cash and cash equivalents of €3.2 billion (previous year: €4.6 billion).

Consolidated Cash Flow Statement (Summary)

in € millions	2022	2021
Cash flow from operating activities	1,382	1,820
Cash flow from investing activities	(1,118)	(267)
Cash flow from financing activities	(1,734)	(1,695)
Change in cash and cash equivalents	1,470	(142)
Exchange rate effects and other changes in cash and cash equivalents	29	168
Cash and cash equivalents as of 1/1	4,669	4,643
Cash and cash equivalents as of 12/31	3,228	4,669
Less cash and cash equivalents included within assets held for sale	–	(24)
Cash and cash equivalents as of 12/31 (according to the consolidated balance sheet)	3,228	4,645

Off-Balance-Sheet Liabilities

The off-balance-sheet liabilities include contingent liabilities and other financial commitments, almost all of which result from operating activities conducted by the divisions. The off-balance-sheet liabilities increased compared with the previous year. The off-balance-sheet liabilities existing as of December 31, 2022, had no significant negative effects on the Group's net assets, financial position or results of operation for the past or the following financial year.

Investments

Total investments, including acquired financial debt of €309 million (previous year: €7 million), amounted to €1,981 million in the 2022 financial year (previous year: €1,961 million). Investments as reported in the cash flow statement amounted to €1,672 million (previous year: €1,954 million). As in previous years, the majority of the €450 million investments in property, plant and equipment (previous year: €327 million) stemmed from Arvato. Investments in intangible assets came to €586 million (previous year: €482 million) and were primarily attributable to BMG for the acquisition of music catalogs and RTL Group for investments in film rights. The sum of €372 million was invested in financial assets (previous year: €890 million). This includes in particular the investments by Bertelsmann Investments in start-ups. Purchase price payments for consolidated investments (less acquired cash and cash equivalents) totaled €264 million in the reporting period (previous year: €255 million) and refer in particular to the stake increase in Afya.

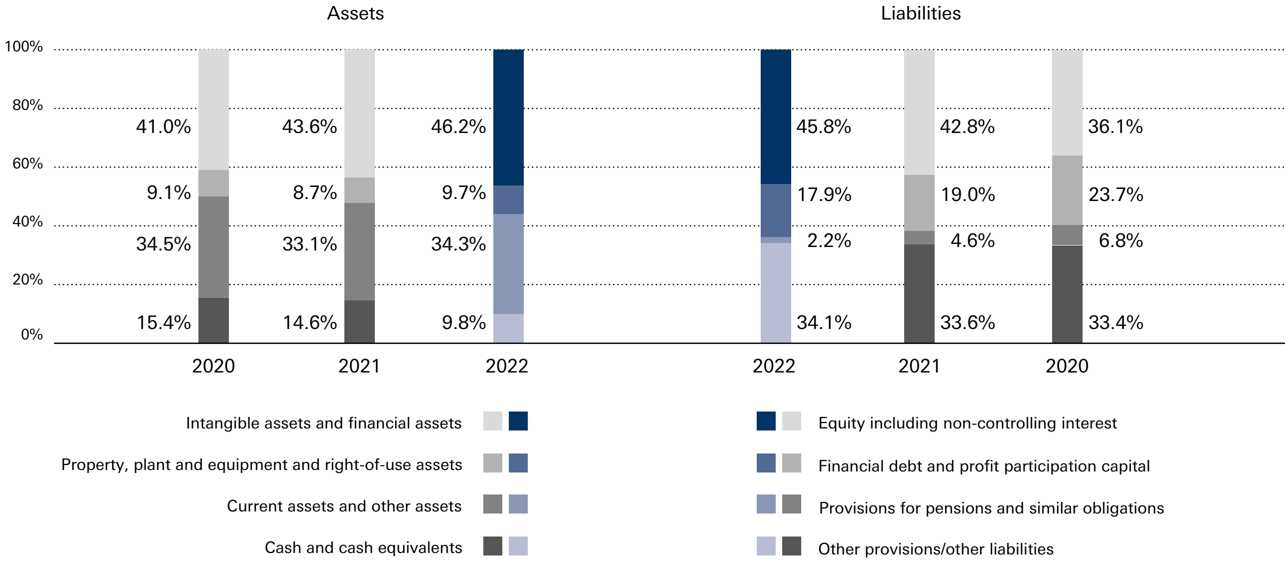
Investments by Division

in € millions	2022	2021 (adjusted)
RTL Group	196	602
Penguin Random House	104	116
BMG	372	248
Arvato	345	321
Bertelsmann Printing Group	37	37
Bertelsmann Education Group	136	19
Bertelsmann Investments	221	708
Total investments by divisions	1,411	2,051
Corporate/Consolidation	261	(97)
Total investments	1,672	1,954

Balance Sheet

Total assets increased to €32.8 billion as of December 31, 2022 (previous year: €31.8 billion). The rise can primarily be attributed to the acquisitions, which led to an increase in intangible assets. Cash and cash equivalents totaled €3.2 billion (previous year: €4.6 billion). Equity increased to €15.0 billion, compared to €13.6 billion in the previous year. This resulted in an equity ratio of 45.8 percent (previous year: 42.8 percent). Equity attributable to Bertelsmann SE & Co. KGaA shareholders was €12.5 billion (previous year: €11.6 billion). Provisions for pensions and similar obligations dropped to €710 million (previous year: €1,474 million). The main reason for this decrease is the rise in the discount rate. Gross financial debt totaled €5,477 million, compared to €5,604 million as of December 31, 2021. Apart from that, the balance sheet structure remained largely unchanged from the previous year.

Balance Sheet



Profit Participation Capital

Profit participation capital had a par value of €301 million as of December 31, 2022, as in the previous year. If the effective interest method is applied, the carrying amount of profit participation capital was €413 million as of December 31, 2022 (previous year: €413 million). The 2001 profit participation certificates (ISIN DE0005229942) account for 94 percent of par value of profit participation capital, while the 1992 profit participation certificates (ISIN DE0005229900) account for the remaining 6 percent.

The 2001 profit participation certificates are officially listed for trading on the Regulated Market of the Frankfurt Stock Exchange. Their price is listed as a percentage of par value. The highest closing rate of the 2001 profit participation certificates during the 2022 financial year was 362.00 percent in January; their lowest was 246.00 percent in October.

Under the terms and conditions of the 2001 profit participation certificates, the payout for each full financial year is 15 percent of par value, subject to the availability of sufficient Group profit and net income at the level of Bertelsmann SE & Co. KGaA. These conditions were met in the past financial year. Accordingly, a payout of 15 percent of the par value of the 2001 profit participation certificates will also be made for the financial year 2022.

The 1992 profit participation certificates, approved for trading on the Regulated Market in Frankfurt, only have a limited liquid trading on the stock exchange due to their low volume. Payouts on the 1992 profit participation certificates are based on the Group's return on total assets. Because the return on total assets for the 2022 financial year was 4.18 percent (previous year: 9.88 percent), the payout on the 1992 profit participation certificates for the 2022 financial year will be 5.18 percent of their par value (previous year: 10.88 percent).

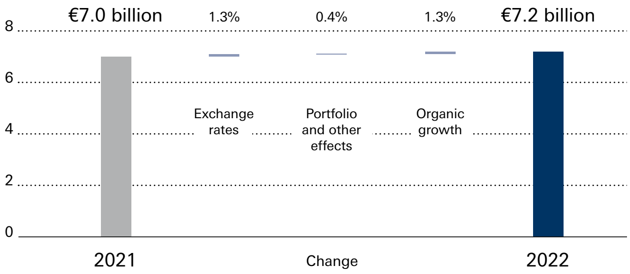
The payout distribution date for both profit participation certificates is expected to be May 9, 2023. Under the terms and conditions of the profit participation certificates, the auditors appointed by Bertelsmann SE & Co. KGaA are responsible for verifying whether amounts to be distributed have been calculated correctly. The auditors of both profit participation certificates provide confirmation of this.

Performance of the Group Divisions

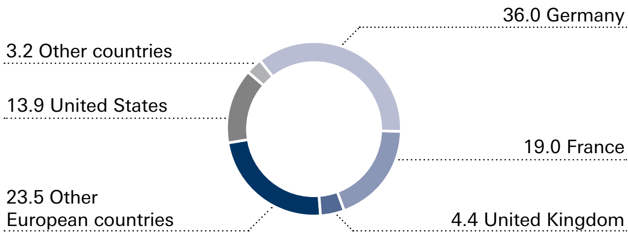
RTL Group

RTL Group increased its revenues significantly above €7 billion in a challenging environment. Drivers included portfolio effects, particularly at RTL Deutschland and Fremantle, and a very positive business performance at Fremantle and RTL Nederland. Operating EBITDA decreased significantly against the backdrop of higher streaming start-up losses and declining advertising markets in Germany and France. RTL Group's TV advertising revenues were down 4.4 percent year-on-year. Meanwhile, the number of paying subscribers and revenues from the streaming business grew at double-digit rates.

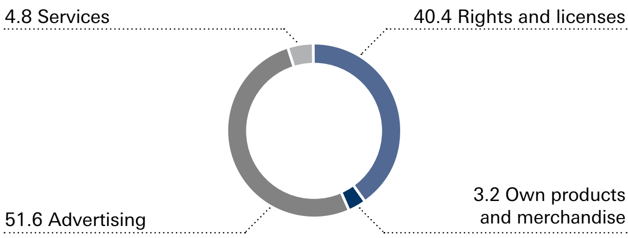
Revenue Breakdown



Revenues by Region in percent (without intercompany revenues)



Revenues by Category in percent



RTL Group's total revenues increased by 3.0 percent to €7.2 billion in 2022 (previous year adjusted: €7.0 billion), while operating EBITDA decreased by 6.5 percent to €1.32 billion (previous year adjusted: €1.42 billion). The group achieved organic sales growth of 1.3 percent compared with the previous year. Its EBITDA margin was 18.3 percent, compared with 20.2 percent in the previous year.

RTL Group completed the combination of RTL Deutschland and Gruner + Jahr on January 1, 2022; the streaming business and the cross-media offering in Germany were expanded. RTL Belgium and RTL Croatia, as well as the shares in the software and data company VideoAmp, were sold during the reporting period. In France, Groupe Bouygues, RTL Group, Groupe TF1, and Groupe M6 decided in September to abandon their plan to merge Groupe TF1 and Groupe M6 in view of far-reaching demands from the French competition authority. In the Netherlands, too, the merger process of RTL Nederland and Talpa Network was stopped as the Dutch competition authority informed both parties that it will not approve the proposed transaction.

The streaming services RTL+ in Germany and Hungary and Videoland in the Netherlands increased their paying subscriber base by 44 percent to a combined 5.5 million; streaming revenues grew by 19.7 percent to €267 million. In Germany, this was driven by the continued distribution partnership with Deutsche Telekom, reality TV formats, football matches of the UEFA Europa League and the growing number of original formats such as "Sisi" and "Der König von Palma". In the Netherlands, too, exclusive content such as the series "Sleepers" and "Mocro Maffia" and live kickboxing events attracted new subscribers. RTL Hungary launched the direct-to-consumer streaming platform RTL+ featuring several locally produced series and shows.

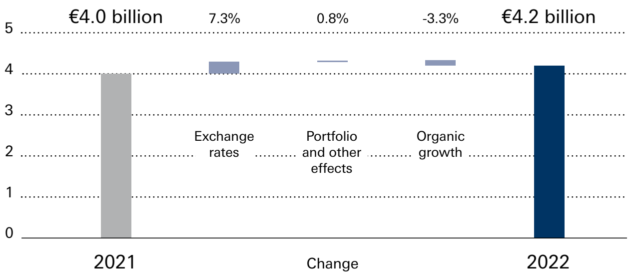
The families of channels in Germany and the Netherlands increased their audience shares in the year under review, while in France, the Groupe M6 channels saw a slight dip in viewer interest.

The group's global content business Fremantle achieved double-digit growth in its revenues and earnings in 2022. Revenue growth was driven by several acquisitions and share increases, strong organic development and positive exchange rate effects. Fremantle acquired majority stakes in the production companies Lux Vide, Dancing Ledge Productions, Element Pictures, 72 Films, Wildstar Films, and Silvio Productions during the reporting period. Fremantle also increased its stakes in Eureka and acquired a stake in Fabel Entertainment as part of its efforts to expand its capacity in the drama and documentary sectors. Fremantle inked a three-year talent deal with Academy Award winner Angelina Jolie covering multiple joint film, documentary and series projects.

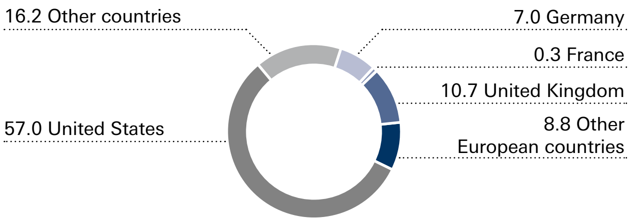
Penguin Random House

Penguin Random House reported an increase in revenues in 2022, driven by positive currency effects; the operating result declined due to higher costs, including inflation, as well as reduced sales levels. Adjusted for exchange rate effects, revenues also softened, mainly due to normalization of book markets. Revenues reached €4.2 billion, up 4.8 percent from €4.0 billion in the previous year. Operating EBITDA for the year was €666 million (previous year: €755 million, -11.7 percent). The EBITDA margin was 15.8 percent (previous year: 18.7 percent).

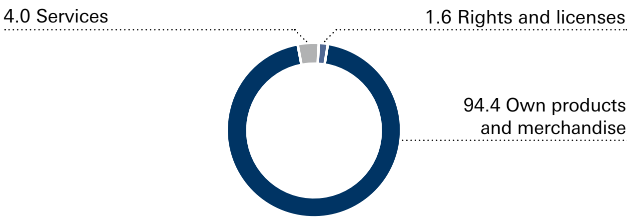
Revenue Breakdown



Revenues by Region in percent (without intercompany revenues)



Revenues by Category in percent



In November, Bertelsmann announced that it would no longer pursue the proposed acquisition by Penguin Random House of the international book publishing group Simon & Schuster. Previously, the US District Court in Washington, D.C., had upheld a lawsuit filed by the U.S. Department of Justice opposing the purchase. Bertelsmann paid a contractually agreed termination fee to Paramount Global. At the end of the year, Markus Dohle stepped down as CEO of Penguin Random House; Nihar Malaviya, previously President & COO of Penguin Random House U.S., was appointed his interim successor.

The publishing business in the United States reflected the normalization of demand following the strong sales of the pandemic years, as well as the challenges posed by inflation and supply-chain pressures. The year's biggest bestsellers included Michelle Obama's nonfiction book "The Light We Carry," which topped the bestseller lists upon its release in mid-November and sold more than 1.8 million copies worldwide, across all formats, by the end of the year. Other new releases, including "Surrender" by Bono and "The Boys from Biloxi" by John Grisham, became top sellers, too. Penguin Random House also profited from backlist titles that continued selling strongly, among them "Atomic Habits" by James Clear and "Where the Crawdads Sing" by Delia Owens. In children's books, "Dr. Seuss" classics sold more than nine million copies.

Penguin Random House UK recorded moderate growth despite negative macroeconomic effects. The year's best-selling titles were "Atomic Habits" by James Clear, Richard Osman's "The Bullet That Missed," "The Thursday Murder Club," and "The Man Who Died Twice," and "One" by Jamie Oliver. The DK Publishing group also grew, thanks to a strong publishing lineup; its top sellers were "The Natural History Book" and "The Mysteries of the Universe." DK also acquired Phonic Books, one of the United Kingdom's leading specialist-education publishers.

Penguin Random House Grupo Editorial achieved growth with strong book sales in Spain, Portugal, and Latin America. The publishing group acquired the remaining shares in PRH Grupo Editorial Portugal and launched Distrito Manga, a new imprint for the Spanish-language market. Top-selling titles included "Violeta" by Isabel Allende, "Revolución" by Arturo Pérez-Reverte and "Roma soy yo" by Santiago Posteguillo.

In a declining book market, the German-language Penguin Random House Verlagsgruppe achieved revenues that were nearly on par with the previous year, thanks to an upturn in sales at the end of the year and positive portfolio effects. The best-selling books were, again, "Der Gesang der Flusskrebse" by Delia Owens, and "Das Kind in Dir muss Heimat finden" by Stephanie Stahl, as well as the new releases "Einsame Nacht" by Charlotte Link and "Zur See" by Dörte Hansen.

Numerous Penguin Random House authors were recognized with major awards for their work, including Andrea Elliott, who won a Pulitzer Prize for Nonfiction for "Invisible Child."

BMG

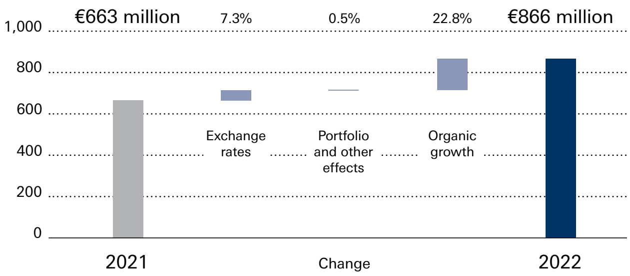
Bertelsmann's music subsidiary BMG saw a strong increase in both revenues and operating EBITDA in 2022. The increases are attributable to organic growth in its recorded and publishing businesses and were supported by an investment offensive. BMG invested a record €509 million in the acquisition of music catalogs and artist signings in 2022, primarily as part of Bertelsmann's Boost strategy.

Revenues grew 30.6 percent to €866 million (previous year: €663 million), while operating EBITDA surged 34.9 percent to €195 million (previous year: €144 million); both figures represent an all-time high. The EBITDA margin increased to 22.5 percent (previous year: 21.7 percent), while the share of digital revenues in BMG's total revenues increased to 70 percent (previous year: 63 percent).

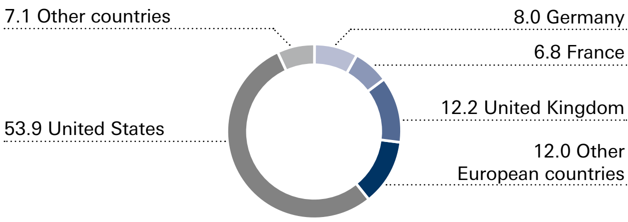
During the financial year, BMG made 45 acquisitions in the catalog sector alone; purchases included the catalogs and licensing rights of iconic artists such as Peter Frampton, Jean-Michel Jarre, Fools Garden, Harry Nilsson, Simple Minds, Primal Scream, and Chris Rea.

In the recorded business, BMG concluded new contracts or extended existing ones with renowned

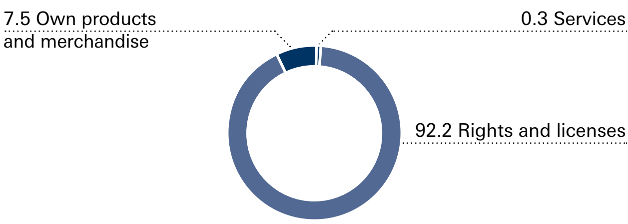
Revenue Breakdown



Revenues by Region in percent (without intercompany revenues)



Revenues by Category in percent



artists including Rita Ora, Logic, Julian Lennon, Marteria, Stefflon Don, Nickelback, and Jason Aldean. Top-selling albums in 2022 included releases by Jason Aldean, Louis Tomlinson, Mötley Crüe, 5 Seconds of Summer, Backstreet Boys, Buena Vista Social Club, Kylie Minogue, and Bryan Adams. This line of business grew by 38 percent.

In the publishing business, the catalogs of Bruno Mars, Mick Jagger and Keith Richards, Juice WRLD, Kurt Cobain and Roger Waters in particular generated high revenues. The year’s top-selling new releases came from artists including DJ Khaled, Kontra K, George Ezra, Carly Pearce, Maxwell, Riccardo Zanotti, Peter Fox, RAF Camora, Kraftklub, Max Giesinger and Johannes Oerding. New contracts or contract extensions/renewals were signed with Halsey, Elvis Costello, Robin Kadir, Bazzazian, Slowthai, Jessie Reyez, Afrojack, Montez, and Lucry. The publishing business increased by 26 percent year-on-year.

In September, BMG acquired the leading German Schlager music label Telamo, its largest label acquisition in Germany to date. Telamo, home to numerous Schlager music stars such as Giovanni Zarrella, Die Amigos, Florian Silbereisen, and Marianne Rosenberg, also includes the “Schlager für Alle” digital offering which has around 1.7 million users on Facebook, Instagram, YouTube and TikTok.

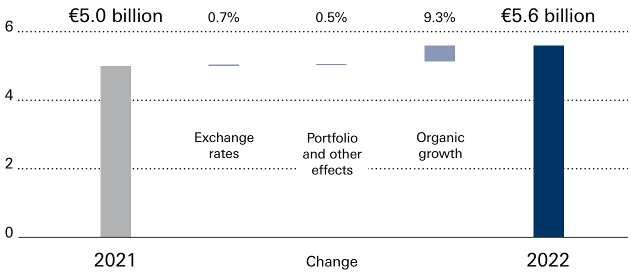
Both the live business and the activities in the film business were expanded. BMG announced a second musical project, “Romeo & Juliet,” following the award-winning musical “Ku’damm 56” in Germany, and took over the artistic direction of Berlin’s oldest musical theater, “Theater des Westens,” for the next two years. Also in Germany, the BMG subsidiary Undercover staged 441 live shows and concerts with high ticket sales following the years of pandemic-related restrictions. In the United States, BMG presented its first American musical, “Punk Rock Girl.”

“Moonage Daydream,” a documentary about rock legend David Bowie released by BMG in the fall, became the most successful documentary of 2022, with worldwide revenues of €12.2 million.

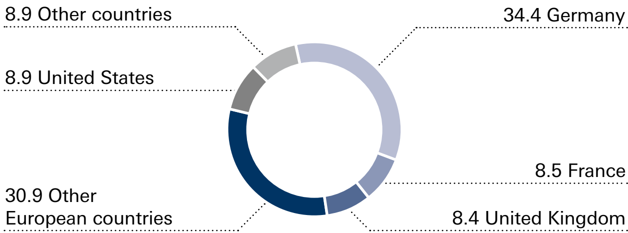
Arvato

Bertelsmann's services businesses, which are bundled in the Arvato division, reported a positive overall development in the past financial year. The main drivers were Arvato's supply chain businesses and Majorel's CX business. Overall, the global services group again significantly improved both its revenues and operating profit. Revenues grew by 10.5 percent to €5.6 billion (previous year: €5.0 billion), while operating EBITDA increased by 6.4 percent to €877 million (previous year: €825 million). The EBITDA margin was 15.8 percent, compared with 16.4 in the previous year.

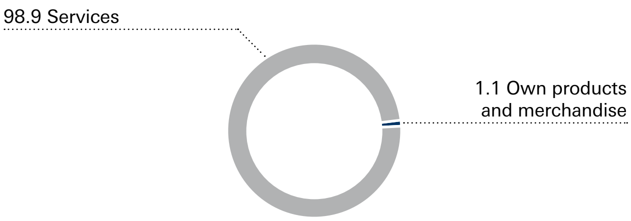
Revenue Breakdown



Revenues by Region in percent (without intercompany revenues)



Revenues by Category in percent



Arvato's supply chain management businesses again saw dynamic and profitable growth in the 2022 financial year. New customers were acquired in the healthcare, tech, and large-scale fashion sectors, among others. Meanwhile, the global distribution network was further expanded. Among other things, eight new logistics centers were opened, including the first warehouse in Australia and the largest location in the United States. The company also invested heavily in modern automation and robotics technology, and in the expansion of its cloud infrastructure.

In the reporting period, Arvato's financial services unit pressed ahead with the further development of existing business models and the development of innovative new ones, completed the accompanying strategic realignment, and implemented a name change. In October, the Arvato Financial Solutions brand and all sub-brands, such as Paigo, AfterPay and AQOUNT, were replaced by the Riverty brand. Revenues from financial services increased in the financial year, while the operating result declined slightly, partly as a result of government regulations in the area of receivables management.

The revenues of the IT services provider Arvato Systems declined in the past financial year against the backdrop of difficult economic conditions. The operating result was also down year-on-year. The unit used 2022 primarily to complete its strategic and organizational focus on six key customer industries and to further expand its own service portfolio. The focus was on industries including energy and healthcare, with the company expanding its offerings for the digitization of healthcare on the one hand, and broadening its customer base on the other. Arvato Systems also grew its portfolio of cloud services and won various high-profile awards in areas including IT security and cloud services.

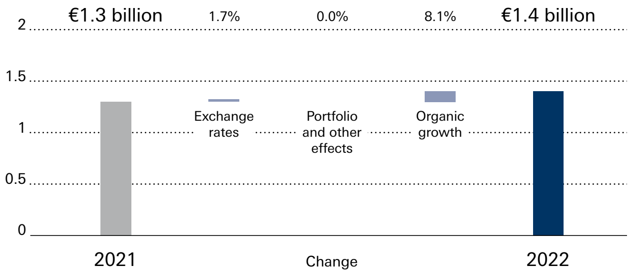
Majorel, a leading global customer experience company listed on Euronext Amsterdam, consistently delivered double-digit growth during the 2022 financial year against a background of increasingly challenging market conditions. Through a systematic focus on executing its proven strategy, Majorel added

13 new countries, grew its business with existing clients and won new clients, and expanded its workforce by more than 13,000 to over 82,000. Majorel also completed four acquisitions and launched Majorel X as a platform for CX transformation services.

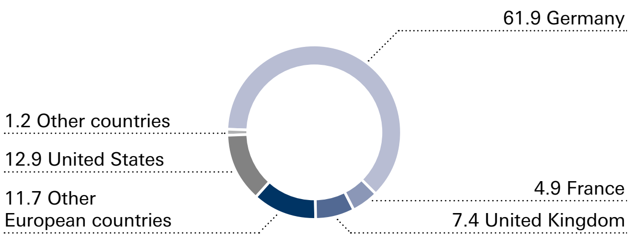
Bertelsmann Printing Group

Bertelsmann Printing Group, the international provider of printing and marketing services, was confronted with in some cases steeply rising prices for energy, paper and other production materials in the 2022 financial year. In particular, the resulting increase in production costs led to declining demand across almost all areas. The fact that the Group's revenues of €1.45 billion (previous year: €1.32 billion) were nevertheless 9.8 percent higher year-on-year is mainly due to the passing on of paper price and other material cost increases to customers wherever possible. Operating EBITDA, on the other hand, fell to €26 million (previous year: €60 million). The EBITDA margin was 1.8 percent, compared with 4.5 percent in the previous year.

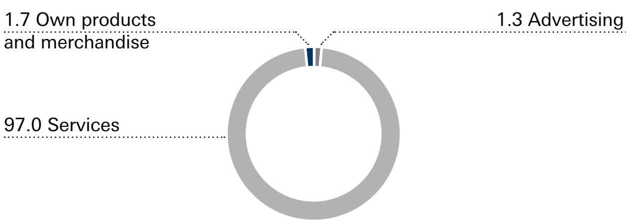
Revenue Breakdown



Revenues by Region in percent (without intercompany revenues)



Revenues by Category in percent



Overall, the offset printing businesses recorded a significant decline in earnings. This was mainly due to the high increase in production costs (especially paper and energy) and the resulting decline in demand for catalogs. In the gravure segment, the decline in the market for high-volume catalogs and magazines and supplements that has been evident for years continued at a rapid pace. This resulted in an even lower utilization of the production capacities of the Prinovis sites in Germany and the United Kingdom. In response to this prolonged negative market development, Bertelsmann Printing Group continued to drive forward the downsizing of its rotogravure printing business. The closure of the Prinovis site in Dresden announced in 2021 was completed at the end of 2022. In addition, a decision was reached to close the gravure printing site in Liverpool as of June 30, 2023. In January 2023, it was announced that the Ahrensburg location would also close on January 31, 2024.

The business performance of the printing activities in the Unites States was also impacted by the considerable increases in material and other factor costs as well as a weaker U.S. book publishing market in 2022 following two strong years in 2020 and 2021. Lower volumes led to a decline in earnings. A comprehensive investment program for the book printing business aims to significantly improve productivity in the future and effectively expand capacity for publishing customers in the United States.

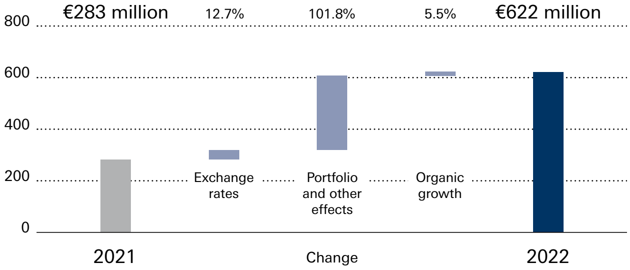
In the marketing services business, the positive trend of previous years continued in 2022. Partnerships with existing customers were further expanded in the reporting period, new customers were acquired and new services were successfully established on the market. As a result, both revenues and operating profit improved year-on-year. This applies overall to Dialog’s multichannel marketing services, the Deutschland-Card multi-partner rewards program, and Campaign’s campaign-management businesses.

The replication and packaging specialists at Bertelsmann Printing Group held their own in a market that continued to decline, although they registered declining volumes and earnings due to market conditions. By contrast, the business with sustainable packaging solutions for the food industry and the vinyl services business were further expanded.

Bertelsmann Education Group

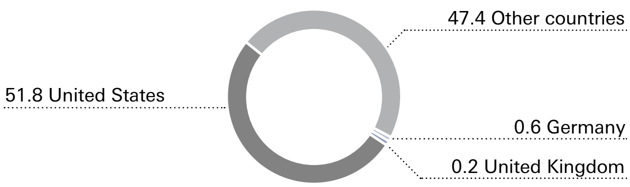
Bertelsmann’s education businesses saw strong growth in revenue and operating EBITDA in 2022, largely driven by the increase in the shareholding and subsequent full consolidation of the Brazilian education provider Afya. At the same time, the e-learning provider Relias, which specializes in professional education and training in the healthcare sector, and the clinical practice-oriented Alliant International University further expanded their offerings.

Revenue Breakdown

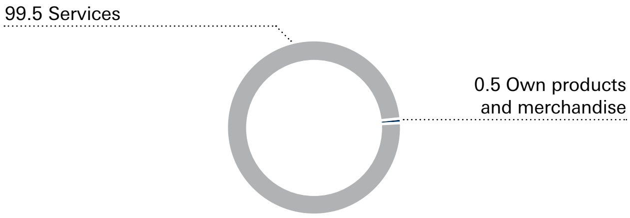


Bertelsmann Education Group generated total revenues of €622 million (previous year: €283 million), up 120 percent. Operating EBITDA increased by 122 percent to €192 million (previous year: €86 million). The EBITDA margin was once again high at 30.8 percent (previous year: 30.6 percent).

Revenues by Region in percent (without intercompany revenues)



Revenues by Category in percent



In May 2022, Bertelsmann increased its stake in the Nasdaq-listed education company Afya to initially 57 percent of the voting rights; the holding has since been consolidated as part of Bertelsmann Education Group. Through ongoing further transactions in the open market, Bertelsmann held 59 percent of the voting rights by the end of the year, and 40 percent of the equity. With 35 locations, Afya is Brazil’s largest medical education provider; its focus is on the professional education and advanced training of physicians. At the same time, Afya is increasingly focusing on digital solutions for the medical profession, such as tools to support patient diagnosis or practice management. In October 2022, Afya announced the acquisition of two universities in northeastern Brazil, which together provide 340 medical school seats per year. The transaction, which increases Afya’s total medical school seats to 3,163 per year, closed on Jan 2, 2023. Given that medical studies take six to seven years, Afya will be able to simultaneously provide more than 22,000 students with the opportunity to study medicine.

Relias strengthened its position as the leading digital platform for training healthcare workers. The company launched a new mobile app for learners and a new web offering. Many courses were enhanced using innovative technologies such as virtual reality and 3D simulations. Healthcare facilities benefited from new offerings that, for example, make it faster and easier to assign compliance training and track it in a legally compliant manner.

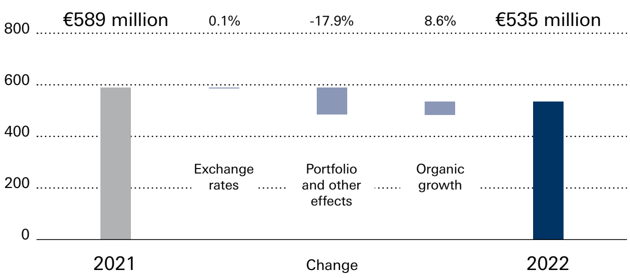
Alliant International University in California saw increased student enrollments in both online and offline programs, with particularly strong enrollment growth in teaching degrees. At the end of the year, approximately 4,000 students were enrolled in mental health and teaching degree programs at Alliant's seven campuses. Furthermore, Alliant launched a new School of Nursing and Health Sciences in Phoenix, Arizona. The new campus expands the university's offerings in an area that is increasingly suffering from a shortage of skilled workers. Alliant is seeking its accreditation for degree programs in several nursing professions, e.g., Bachelor of Science in Nursing, Family Nurse Practitioner, Master's in Nursing Administration, and Master's in Occupational Therapy.

In fall 2022, Bertelsmann announced a new Tech & Data Scholarship initiative, under which the Group will award more than 50,000 scholarships to interested individuals from all over the world over the next three years. Participants will receive advanced training at the online education provider Udacity in the emerging technologies of data management and artificial intelligence, software development and engineering, and cybersecurity.

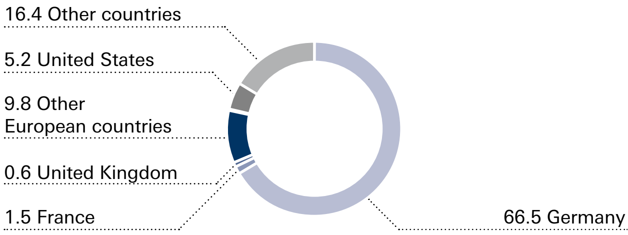
Bertelsmann Investments

Bertelsmann Investments (BI) comprises Bertelsmann's global network of funds, the newly created Bertelsmann Next unit, and the Investments & Participations unit, and has been led by Carsten Coesfeld as CEO since June 2022. BI's revenues amounted to €535 million (previous year: €589 million), and its operating EBITDA was €22 million (previous year: €68 million). Since the merger of RTL Deutschland and Gruner + Jahr at the beginning of 2022, the AppLike Group, the communications agency Territory and associated employability specialist Embrace, the majority stake in DDV Mediengruppe, and a stake in Spiegel Group have also been part of Bertelsmann Investments. The business development of the venture capital business is determined primarily on the basis of EBIT. Mainly due to exchange rate effects and impairments of investments resulting from market conditions, EBIT in the amount of €-70 million was below the previous year's value (€430 million), which included capital gains and strong increases in the value of investments.

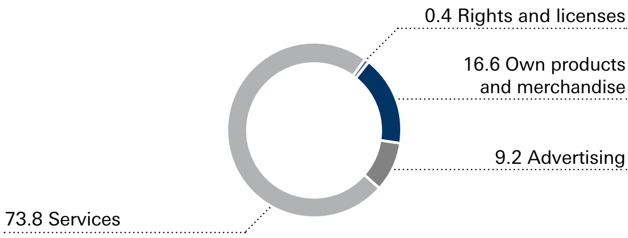
Revenue Breakdown



Revenues by Region in percent (without intercompany revenues)



Revenues by Category in percent



BI expanded its network of funds to 333 active investments with a total of 54 new and 31 follow-on investments, and realized several exits.

Bertelsmann Asia Investments (BAI) made 15 new investments in financial year 2022, including in Clear Motion, a technology company in the automotive sector, and nine follow-on investments. One follow-on investment saw BAI increase its stake in the Latin American neobank Stori.

Since BAI's initial investment in 2019, Stori has achieved significant growth, with its valuation surpassing $1 billion in 2022.

In connection with the Group-wide Boost strategy, Bertelsmann India Investments (BII) will focus its investment activity on the e-commerce, health tech, ed tech, HR tech and fintech sectors in the years ahead. During the reporting year, BII invested in the CRM software company Vymo and the health tech provider Orange Health, among others. Further investments were made in the sales outsourcing platform SquadStack and the agritech platform Bijak. BII also made follow-on investments in existing portfolio companies, including Rupeek, LetsTransport and Shiprocket.

Bertelsmann Digital Media Investments (BDMI) made 28 new and 17 follow-on investments, including in the market intelligence platforms Suzy and Antenna, and in the digital asset management provider Tenovos. BDMI also successfully realized several exits, including the sale of stakes in subscription management provider Zephr, content platform Clique Media, and sports reporter The Athletic.

Beyond the activity of its three main funds BAI, BII and BDMI, BI also expanded its central investment activities. For example, BI made its first direct investments in Southeast Asia by acquiring shares in the healthcare companies Speedoc and Naluri, and also invested in funds operated by Vertex Ventures and Openspace Ventures. Apart from this, BI also strengthened its commitment in Brazil through fund investments in Monashees and Crescera.

During the 2022 financial year, BI was expanded to include the newly created Bertelsmann Next unit. The Next initiative was set up to drive the development of new and existing growth businesses, particularly in the digital health, app economy and HR tech sectors. In the field of Digital Health, Bertelsmann Next made its first direct investments and participated in several funds. These included capital commitments to digital health funds such as General Catalyst, YZR and Rock Health, as well as share purchases in innovative companies in the health sector, including Ada Health and SubjectWell. The revenues of the AppLike Group, which has been assigned to the App Economy section of Bertelsmann Next since 2022, continued to increase.

General Statement by Company Management on the Economic Situation

The past financial year 2022 was mainly dominated by geopolitical and economic challenges. Nevertheless, Bertelsmann achieved a positive business development overall. The Group increasingly benefited from its growth strategy and generated revenues of more than €20 billion. Earnings performance was characterized by strong increases in the education and music businesses and in the service businesses, but also by higher start-up losses at RTL Group for expanding the streaming businesses as well as a drop in earnings at Penguin Random House and the Bertelsmann Printing Group primarily attributable to market conditions and inflation.

Group revenues in the reporting period rose strongly as expected by 8.3 percent to €20.2 billion from €18.7 billion in the previous year (forecast in the 2021 Annual Report: moderate increase in revenues/ adjusted forecast in the 2022 Interim Report: more significant to strong increase in Group revenues). Apart from organic growth of 4.1 percent, the increase is also attributable to portfolio effects, in particular the increase in the shareholding in Afya and positive exchange rate effects. At €3,192 million, operating EBITDA was only slightly below the previous year's high level of €3,241 million (forecast in the

2021 Annual Report: moderate decline). Excluding start-up losses for the expansion of RTL Group's streaming businesses, a stable operating EBITDA of €3,404 million was achieved, compared to €3,393 million in the previous year (forecast in the 2021 Annual Report: stable development before start-up losses). At €109 million, the BVA used for Group management was strongly below the previous year's figure of €474 million, in part due to start-up losses (forecast in the 2021 Annual Report: strongly declining BVA).

In 2022, Bertelsmann continued to implement its Boost strategy. A Group-wide surge in growth has already been achieved against the backdrop of the strategic measures initiated up to now. The growth initiatives also support the further development and the continuing expansion of the five growth priorities: national media champions, global content, global services, education and investment portfolio. Even though it was not possible to implement some of the announced transactions in 2022 as planned, the company forged ahead with its strategic priorities for establishing national media champions and for expanding global content, in the book publishing field in particular, also along alternative scaling paths. The other strategic priorities were expanded as planned. RTL Group's streaming services grew the number of paying subscribers to 5.5 million. The content businesses also expanded further, both organically and through acquisitions. As part of its international growth strategy, Fremantle made a number of acquisitions during the reporting period, taking over several production companies including LuxVide, Element Pictures and 72 Films. BMG expanded its portfolio, including through the takeover of the music label Telamo and the acquisition of further music catalogs. The global services business was strengthened by the establishment of further sites and through acquisitions. Arvato Supply Chain Solutions continued to expand its distribution network, including in Germany and Poland, while Majorel acquired the Spanish CX service provider Findasense. In the education sector, 2022 saw the acquisition of a controlling interest in the Brazilian medical education company Afya. The Bertelsmann Education Group also benefited from continued high demand for digital education and training courses. In 2022, Bertelsmann Investments continued to invest in young companies and funds around the world, and also expanded through the addition of the Bertelsmann Next unit, which will focus on tapping into new business areas and on establishing and developing growth businesses.

Net assets and financial position remain strong. Bertelsmann's leverage factor of 1.8 continued to be considerably lower than the defined level of 2.5 (December 31, 2021: 1.3). As of December 31, 2022, the cash and cash equivalents were reported at €3.2 billion (December 31, 2021: €4.6 billion). The rating agencies Moody's and S&P continue to rate Bertelsmann as "Baa2" and "BBB," respectively, with a stable outlook.

Alternative Performance Measures

In this Combined Management Report, the following Alternative Performance Measures, which are not defined in accordance with IFRS, are used to explain the results of operations and/or net assets and financial position. These should not be considered in isolation but as complementary information for evaluating Bertelsmann's business situation, and they are differentiated in terms of strictly defined and broadly defined key performance indicators, in the same way as in the value-oriented management system.

Organic Revenue Growth

in percent	2022	2021
Organic revenue growth	4.1	11.4
Exchange rate effect	2.8	(0.7)
Portfolio effects and other effects	1.4	(2.6)
Reported revenue growth	8.3	8.1

The organic growth is calculated by adjusting the reported revenue growth for the impact of exchange rate effects, corporate acquisitions and disposals, as well as other effects. When determining the exchange rate effects, the functional currency that is valid in the respective country is used. The other effects include changes in methods and presentation, for example. Exchange rate effects are calculated by comparing the revenues of the current year with the exchange rates of the previous year. Portfolio effects are calculated to the exact month: in the case of acquisitions, the relevant months in the current year and in the following year are adjusted; in the case of sales, the non-comparable months in the previous year of the current year and in the previous year of the following year are excluded.

Operating EBITDA

in € millions	2022	2021 (adjusted)
EBIT (earnings before interest and taxes)	1,553	3,324
Special items	562	(963)
attributable to: RTL Group	94	(769)
attributable to: Penguin Random House	272	32
attributable to: BMG	7	14
attributable to: Arvato	22	139
attributable to: Bertelsmann Printing Group	25	60
attributable to: Bertelsmann Education Group	46	(59)
attributable to: Bertelsmann Investments	75	(384)
attributable to: Corporate/Consolidation	21	4
Amortization/depreciation, impairment and reversals on intangible assets, property, plant and equipment and right-of-use assets	1,099	909
Adjustments on amortization/depreciation, impairment and reversals on intangible assets, property, plant and equipment and right-of-use assets included in special items	(22)	(29)
Operating EBITDA	3,192	3,241

Operating EBITDA is determined as earnings before interest, tax, depreciation, amortization, and impairment losses and reversals of impairment losses, and is adjusted for special items. The adjustments for special items serve to determine a sustainable operating result that could be repeated under normal economic circumstances and is not affected by special factors or structural distortions. These special items primarily include impairment losses and reversals of impairment losses, fair value measurements, restructuring expenses and results from disposals of investments. This means operating EBITDA is a meaningful performance indicator. Not included in the special items are disposal effects of real estate transactions. To preclude a double adjustment, amortization/depreciation, impairment and reversals already included in the special items are eliminated by means of a correction.

BVA

in € millions	2022	2021
Operating EBITDA	3,192	3,241
Amortization/depreciation, impairments/reversals of impairment losses on intangible assets, property, plant and equipment, and right-of-use assets not included in special items	(1,077)	(880)
Operating EBIT	2,115	2,361
Flat taxes (30 percent)	(634)	(708)
NOPAT (Net Operating Profit After Tax)	1,481	1,653
Average invested capital	18,613	16,166
Cost of capital (8 percent)	1,489	1,293
Correction venture capital business of Bertelsmann Investments	117	114
BVA	109	474

BVA measures the profit realized above and beyond the appropriate return on invested capital. This form of value orientation is reflected in strategic investment and portfolio planning and in the management of operations and, together with qualitative criteria, provides the basis for measuring the variable portion of management remuneration. BVA is used for control essentially at the Group level. BVA is calculated as the difference between net operating profit after tax (NOPAT) and the cost of capital. NOPAT is calculated on the basis of operating EBITDA. The NOPAT figure used to calculate BVA is determined by deducting depreciation and amortization, provided that they are not included in special items, and a flat 30 percent tax. Cost of capital is the product of the weighted average cost of capital (WACC) and the average level of capital invested. The uniform WACC after taxes is 8 percent. The average invested capital is calculated quarterly on the basis of the Group's operating assets less non-interest-bearing operating liabilities. For determining BVA, the venture capital business of the Bertelsmann Investments division is excluded, since business performance is represented primarily on the basis of EBIT. Accordingly, the method does not include a pro rata NOPAT contribution for this division's venture capital business. To maintain consistency, the invested capital of the venture capital business will be adjusted for the Bertelsmann Investments division; hence, capital costs will be neutralized.

Cash Conversion Rate

in € millions	2022	2021
Cash flow from operating activities	1,382	1,820
Income taxes paid	339	807
Change in provisions for pensions and similar obligations	97	276
Investments in intangible assets and property, plant and equipment (less proceeds from the sale of non-current assets)	(993)	(459)
Lease payments	(358)	(317)
Further adjustments	409	330
Operating free cash flow	876	2,457
Operating EBITDA	3,192	3,241
Amortization/depreciation, impairments/reversals of impairment losses on intangible assets, property, plant and equipment, and right-of-use assets not included in special items	(1,077)	(880)
Operating EBIT	2,115	2,361
Cash Conversion Rate (in percent) Operating free cash flow/operating EBIT	42	107

The cash conversion rate serves as a measure of cash generated from business activities and is calculated as the ratio of operating free cash flow to operating EBIT. The operating free cash flow is determined on the basis of the cash flow from operating activities as reported in the consolidated cash flow statement, whereby the impact of paid income taxes and the change in provisions for pensions and similar obligations on cash flow from operating activities is offset. Operating free cash flow is also reduced by investments in intangible assets and property, plant and equipment as well as lease payments, and increased by proceeds from the sale of non-current assets. Further adjustments are made to ensure an allocation of capital flows to the relevant periods, and to offset the impact of payment flows resulting from special items on the operating free cash flow in a way that is methodically consistent with operating EBITDA. Operating EBITDA is used to calculate operating EBIT by deducting amortization and depreciation, provided that these are not included in special items. The Group aims to maintain a cash conversion rate of 90 percent to 100 percent as a long-term average.

Economic Debt

in € millions	2022	2021
Gross financial debt	5,477	5,604
Less cash and cash equivalents	(3,228)	(4,645)
Net financial debt	2,249	959
Less 50 percent of the par value of the hybrid bonds	n/a	(625)
Less investments in special funds	(125)	(102)
Pension provisions	710	1,474
Profit participation capital	413	413
Lease liabilities	1,538	1,356
Economic debt	4,785	3,475

Net financial debt is calculated on the basis of gross financial debt, which comprises the balance sheet items current and non-current financial debt, minus cash and cash equivalents. Economic debt is defined as net financial debt less the investments in a special fund that can be converted into cash at short notice (see also section "Minority Stakes and Other Financial Assets" in the notes to the consolidated financial statements), plus provisions for pensions, profit participation capital and lease liabilities. As of the end of the 2022 financial year, the hybrid bonds are no longer corrected at a proportion of 50 percent when calculating economic debt. Following the public repurchase offer executed in November 2022 in relation to the hybrid bonds that may be terminated in April 2023, the equity portion of the outstanding hybrid bonds was taken into account differently by the rating agencies. Economic debt is modified for the purposes of calculating the leverage factor.

Leverage Factor

in € millions	2022	2021
Economic debt	4,785	3,475
Modifications	250	250
Economic debt^{LF}	5,035	3,725
Operating EBITDA	3,192	3,241
Modifications	(319)	(324)
Operating EBITDA^{LF}	2,873	2,917
Leverage Factor: Economic debt^{LF}/Operating EBITDA^{LF}	1.8	1.3

One of the financial targets is a dynamic leverage factor calculated as the ratio of economic debt to operating EBITDA; this factor should not regularly exceed the defined maximum of 2.5. In determining the leverage factor, the economic debt and the operating EBITDA are modified to enable financial management that corresponds to the Group's structure. The modifications in regard to the economic debt largely relate to cash and cash equivalents, which are tied up in the Group, while the modifications in regard to the operating EBITDA address the Group's structure and its co-shareholder shares. The leverage factor determined in this way is thus always more conservative than the figure that would be obtained using only the items recognized in the balance sheet.

Risks and Opportunities

Risk Management System

The purpose of the Bertelsmann risk management system (RMS) is the early identification and evaluation of, as well as response to, internal and external risks. The internal control system (ICS), an integral component of the RMS, monitors the effectiveness of the risk response measures that have been implemented. The aim of the RMS is to identify, at an early stage, material risks to the Group so that risk response measures can be taken and controls implemented. Risks are possible future developments or events that could result in a negative deviation from the outlook or objectives for Bertelsmann. In addition, risks can negatively affect the achievement of the Group's strategic, operational, reporting and compliance-related objectives and its reputation.

The risk management process is based on the internationally accepted frameworks of the Committee of Sponsoring Organizations of the Treadway Commission (COSO Enterprise Risk Management – Integrated Framework and Internal Control – Integrated Framework, respectively) and is organized in the subprocesses of identification, assessment, response, control, communication and monitoring. A major element of risk identification is a risk inventory that lists significant risks year by year, from the profit-center level upward. These risks are aggregated step by step at the division and Group levels. This ensures that risks are registered where their impact would be felt. There is also a Group-wide reassessment of critical risks every six months, and quarterly reporting in case the risk situation has changed. Ad hoc reporting requirements ensure that significant changes in the risk situation during the course of the year are brought to the attention of the Executive Board. The risks are compared to risk management and control measures to determine the net risk position. Both one- and three-year risk assessment horizons are applied to enable the timely implementation of risk response measures. The basis for determining the main Group risks is the three-year period, similar to medium-term corporate planning. Risk assessment is the product of the estimated negative impact on Group free cash flow should the risk occur, and the estimated probability of occurrence. Risk monitoring is conducted by Group management on an ongoing basis. The RMS, along with its component ICS, is constantly undergoing further development and is integrated into ongoing reporting to the Bertelsmann Executive Board and Supervisory Board. Divisional risk management meetings are held to ensure compliance with statutory and internal requirements.

The Group auditor inspects the risk early-warning system for its capacity to identify developments early on that could threaten the existence of Bertelsmann SE & Co. KGaA according to section 91(2) of Germany's Stock Corporation Act (AktG), and then reports the findings to the Supervisory Board of Bertelsmann SE & Co. KGaA. Corporate Audit conducts ongoing reviews of the adequacy and functional capability of the RMS in all divisions apart from RTL Group and M6, Majorel (Arvato) and Afya (Bertelsmann Education Group). The RMS of RTL Group, M6, Majorel and Afya is evaluated by the respective internal auditing department and by the external auditor. Any issues that are identified are promptly remedied through appropriate measures. The Bertelsmann Executive Board defined the scope and focus of the RMS based on the specific circumstances of the company. However, even an appropriately designed and functional RMS cannot guarantee with absolute certainty that risks will be identified and controlled.

Accounting-Related Risk Management System and Internal Control System

The objectives of the accounting-related RMS and ICS are to ensure that external and internal accounting are proper and reliable in accordance with applicable laws, and that information is made available without delay to the various recipients. Reporting should also present a true and fair view of Bertelsmann's net assets, financial position and results of operations. The following statements pertain to the Consolidated Financial Statements (including the Notes to the Consolidated Financial Statements and the Combined Management Report), interim reporting and internal management reporting.

The ICS for the accounting process consists of the following areas. The Group's internal rules for accounting and the preparation of financial statements (e.g., IFRS manual, guidelines and circulars) are made available without delay to all employees involved in the accounting process. The Consolidated Financial Statements are prepared in a reporting system that is uniform throughout the Group. Extensive automatic system controls ensure the consistency of the data in the financial statements. The system is subject to ongoing development through a documented change process. Systematized processes for coordinating intercompany transactions serve to prepare the corresponding consolidation steps. Circumstances that could lead to significant misinformation in the Consolidated Financial Statements are monitored centrally by employees of Bertelsmann SE & Co. KGaA, and then verified by external experts as required. Central contact persons from Bertelsmann SE & Co. KGaA and the divisions are also in continuous contact with local subsidiaries to ensure IFRS-compliant accounting as well as compliance with reporting deadlines and obligations. These preventive measures are supplemented by specific controls in the form of automated and manual analyses by the Corporate Financial Reporting department of Bertelsmann SE & Co. KGaA. The purpose of such analyses is to identify any remaining inconsistencies. The controlling departments at the Group and division levels are also integrated into the internal management reporting. Internal and external reporting are reconciled during the segment reconciliation process. The further aim of a globally binding control framework for the decentralized accounting processes is to achieve a standardized ICS format at the level of the local accounting departments of all fully consolidated Group companies. The findings of the external auditors, Corporate Audit and the internal auditing departments of RTL Group, M6, Majorel and Afya are promptly discussed with the affected companies, and solutions are developed. An annual self-assessment is conducted to establish reporting on the quality of the ICS in the key fully consolidated Group companies. The findings are discussed at the divisional level. Like the RMS, each ICS cannot guarantee with absolute certainty that significant misinformation in the accounting process can be prevented or identified.

Corporate Audit and the internal auditing departments of RTL Group, M6, Majorel and Afya evaluate the accounting-related processes as part of their auditing work. As part of the auditing process, the Group auditor also reports to the Audit and Finance Committee of the Bertelsmann SE & Co. KGaA Supervisory Board about any significant vulnerabilities of the accounting-related ICS that were identified during the audit, and the findings regarding the risk early-warning system.

Major Risks to the Group

Bertelsmann is exposed to a variety of risks. The major risks to Bertelsmann identified in the risk reporting are listed in order of priority in the table below. In line with the level of possible financial loss, the risks are classified as low, moderate, significant, considerable or endangering. The risk inventory carried out did not identify any risks that would be classified as considerable or endangering. The determination of risk-bearing capacity on Group level using a Monte Carlo simulation also shows that no endangering situation can be identified since there is sufficient liquidity to cover risk.

Overview of Major Risks to the Group

		Risk Classification				
Priority	**Type of risk**	Low	Moderate	Significant	Consider-able	Endanger-ing
1	Cyclical development of economy			■		
2	Supplier risks			■		
3	Customer risks			■		
4	Changes in market environment			■		
5	Legal and regulatory risks			■		
6	Pricing and discounting			■		
7	Audience and market share			■		
8	Information security risks		■			
9	Financial market risks		■			
10	Employee-related risks		■			

Risk classification (potential financial loss in three-year period): low: < €50 million, moderate: < €100 million, significant: < €250 million, considerable: < €500 million, endangering: > €500 million.

■ Existing risks

Given the diversity of the businesses in which Bertelsmann is active, and the corresponding diversity of risks to which the various divisions are exposed, the key strategic and operational risks to the Group that have been identified are specified below. Risks from acquisitions were identified as the primary risks, and are therefore described separately. This is followed by an outline of legal and regulatory risks, information security risks and financial market risks. These risks are largely managed at the corporate level.

Strategic and Operational Risks

In 2022, global economic development weakened considerably due to the impact of the war in Ukraine, high inflation rates, the continuation of some of the pandemic-related restrictions, above all in China, and the persisting disruptions in supply chains. The real gross domestic product (GDP) rose by 3.4 percent, compared to 5.9 percent in 2021. The global economy will remain under significant pressure in the future in view of the war in Ukraine. The associated distortions, such as the energy crisis and high inflation, are affecting economic development worldwide. By contrast, positive effects are expected from China in the course of 2023, where the strict zero-COVID policy has been lifted meanwhile. The tightening of monetary policy by major central banks poses a global risk to further economic development. Bertelsmann's business development is also subject to other macroeconomic risks. Even though the possible negative effects of the coronavirus pandemic on Bertelsmann's businesses is now considered to be less significant, especially as regards the advertising-financed businesses of RTL Group, there is ongoing uncertainty regarding a further slowdown of the economy, resulting in, amongst other things, increasing customer risks. In addition, the structural decline in the printing businesses continues. The printing and services businesses in particular are significantly affected by rising personnel and material costs. It is largely possible to transfer this upwards pressure on prices, but only with a time delay in some cases. Additional cost measures will be required in individual divisions as part of the offsetting measures. In the short and medium term, negative economic developments, supplier and customer risks, a changing market environment, legal and regulatory risks, drops in prices and margins as well as reduced audience and market shares at RTL Group all represent significant Group risks. How these risks develop depends to a large extent on changes in customer behavior due to factors such as the continued digitalization, the development and implementation of products and services by competitors, bad debt losses, and default and interference along the production chains in individual sectors. Information security and financial market risks as well as staff-related risks represent moderate risks for Bertelsmann.

In addition to increased competition for audience attention and the acquisition of programming content, a major risk for RTL Group is the accelerated fragmentation of markets in the digital environment with possible negative effects on TV advertising revenues. To counter these risks, RTL Group is continuously revising and developing the channel and program strategies. By establishing leading positions locally in the streaming market, RTL Group counters risks stemming from the growing use of non-linear services. The major tech platforms continue to consider ad-supported programming, which could increase competition in advertising markets. Furthermore, RTL Group seeks to secure advertising revenue through the active expansion of addressable TV and to diversify its earning base by finding sources of income that are not dependent on advertising. In the past year, the macroeconomic environment deteriorated significantly, as described above. RTL Group is responding to such economic downturns with ongoing monitoring of market development and scenario analyses derived therefrom, as well as strict cost control. Changes in the local or European legal framework could result in a need to adjust revenue streams. RTL Group seeks to identify changes in legislation early and to implement any necessary adjustments in a timely manner.

The possibility of changing market conditions constitutes a risk for Penguin Random House. In the area of procurement and supply chains, rising costs for raw materials and energy represent additional risks. These risks are countered through ongoing cost management and by reviewing the materials used. Any risks of bad debt loss are being limited through debtor management, and in some cases through credit insurance. Penguin Random House is also finding itself exposed to general economic risks that could lead to lower sales. The risks are addressed through careful management of supplier relationships and innovative marketing activities, and by maintaining a flexible cost structure that allows for a quick response in the event of an economic downturn.

Risks that affect BMG concern the client portfolio, in particular contract extensions with artists and authors as well as contractual relationships with business partners concerning digital and physical distribution as well as film, TV, advertising and live concerts. There are also risks resulting from corporate growth, especially for business integration and scaling of the technical platform and organization. Market and sell-side risks, especially changes in the market environment with increased competitive pressures and declining sales volumes, are addressed through high revenue diversification resulting from a diversified client and catalog base both in regional and segment terms as well as through price adjustments. Furthermore, measures for minimizing risk include contractual protection clauses to secure advance payments made, the realization of prepayments received and minimum revenue guarantees.

Against the backdrop of growing macroeconomic uncertainty, Arvato sees itself as particularly exposed to risks from customer and supplier relationships. The risk of loss of key customers is being countered through contracts offering comprehensive service packages with simultaneously flexible cost structures. On the supplier side, there are risks associated with the availability of services and the further rise in factor costs.

Countermeasures include an active exchange with existing suppliers and entering into long-term framework agreements. Growing competition for qualified professionals as well as the continued rise in labor costs represent the major personnel-related risks. There are plans to address these risks by using targeted HR instruments. A further slowdown of the economy could result in declining revenues and thus lower margins, which would necessitate cost-cutting measures and capacity downsizing. Broad diversification across regions and sectors as well as the constant optimization of cost and organizational structures help to reduce this risk. Moreover, new legislation could have a negative impact on business models. This risk is mitigated by observing legislative developments and adjusting business processes.

For the Bertelsmann Printing Group, the most significant risk is the volatile price situation on the raw materials and energy markets on the supplier side. In addition, price and margin pressures result from the market environment, which is characterized by overcapacity, primarily in the gravure printing segment. The potential loss of customers also represents an additional risk. The persistent increase in digital substitution continues to accelerate the decline in circulations and the number of pages per issue, in particular in the magazine and catalog print segments. A deterioration in the economic environment may also lead to an acceleration in the decline of the print market. Risk mitigation strategies are based, in particular, on the expansion of innovative print and marketing services, ongoing initiatives to expand existing customer relationships and to sign up new customers as well as constantly optimizing cost structures and processes. Rising factor costs are to be gradually offset by higher prices for printing services.

For the Bertelsmann Education Group, the market entry of new competitors, particularly in the US healthcare market, may lead to the substitution of existing products. Any resulting change in the market environment could lead to growing price and margin pressure and to reduced new customer acquisition, and it could negatively impact the planned growth targets should new product opportunities or the innovative power to improve existing products turn out to be insufficient as a response to market changes. These risks are being countered in particular through strategic partnerships, long-term customer agreements, targeted customer retention measures and an expansion of the product portfolio. Additionally, higher education is highly regulated in the United States and Brazil, especially with regard to financial aid for students. Failure to comply with existing or future laws and regulations could have a material adverse effect on Afya's and Alliant's business operations. Countermeasures include ongoing monitoring of full compliance with regulatory standards and potential changes in laws and regulations that may impact companies as well as regular interactions with regulators and accrediting bodies. Furthermore, the Bertelsmann Education Group is exposed to macroeconomic risks (e.g., currency effects and political uncertainty) in Brazil and the United States.

The key risks for the venture activities at Bertelsmann Investments consist of falling portfolio valuations and lost sales proceeds. These risks are being addressed through a standardized investment process and the continuous monitoring of the investment portfolio, including possible exit opportunities. In the Bertelsmann Next unit, changing conditions in the digital business represent a risk. For the other investments, risks arise in particular from a challenging market environment with potentially adverse effects on subscription and advertising revenues as well as on factor costs.

The increasing pace of change in the markets, accelerated even more by the coronavirus pandemic, and in Bertelsmann’s business segments means employees will need to be more willing and able to adapt in the future. There are also continuing demographic risks that impact the recruitment, development and retention of talent as a result of shifts in the age distribution of the workforce. The pandemic has also resulted in a skills shortage in many operational business areas, and suitable measures, in particular customized training opportunities, comprehensive health programs, competitive remuneration and flexible working models, are required to counteract this shortage. Bertelsmann is also enhancing its talent management by digitalizing recruiting processes and measures, and making it easier for employees to switch jobs within the Group by harmonizing processes and structures.

Acquisition-Related Risks

The Group strategy focuses on acquisitions of businesses and organic growth. The risk of potential mistakes when selecting investments and allocating investment funds is limited by means of strict investment criteria and processes. Acquisitions present both opportunities and risks. For example, integration into the Group requires one-time costs that are usually offset by increased benefits in the long term, thanks to synergy effects. The risks here are that the integration costs may be higher than expected or the predicted level of synergies may not materialize. The integration processes are therefore being monitored by management on an ongoing basis.

Legal and Regulatory Risks

Bertelsmann, with its worldwide operations, is exposed to a variety of legal and regulatory risks concerning, for example, litigation or varying interpretations of tax assessment criteria. Bertelsmann has television and radio operations in several European countries that are subject to regulation. In Germany, for example, the media is subject to oversight by the Commission on Concentration in the Media. Moreover, education activities are subject to regulatory provisions of government authorities and accreditation bodies. Some of the financial services activities are subject to banking supervision regulations. Bertelsmann Group companies occupy leading market positions in many lines of business, and may therefore have limited potential for growth through acquisition due to antitrust legislation. Other risks include litigation relating to company acquisitions and disposals, as well as increased data protection regulations leading to growing challenges, especially for data-based business models. These risks are being continuously monitored by the relevant divisions within the Group.

Several subsidiaries of RTL Group are being sued by the broadcaster RTL 2 Fernsehen GmbH & Co KG and its sales house, El Cartel Media GmbH & Co KG, before the regional court in Düsseldorf, Germany, seeking disclosure of information to substantiate a possible claim for damages. The proceedings follow the imposition of a fine in 2007 by the German Federal Cartel Office for abuse of market dominance with regard to discount scheme agreements (share deals) granted by Ad Alliance GmbH (formerly IP Deutschland GmbH) and SevenOne Media GmbH to media agencies. The German Federal Cartel Office argued that these discounts would foreclose small broadcasters from the advertising market. In 2014, the district court of Düsseldorf decided to order an expert report. The expert concluded in February 2018 that the likelihood of damages cannot be proven with certainty. In July 2018, RTL 2 Fernsehen GmbH & Co KG filed a motion claiming that the expert was not impartial, with the aim of getting the court to obtain a new expert opinion. Ad Alliance GmbH has rejected the motion of lack of impartiality as unfounded. Due to his unexpected death in February 2020, the court expert could not submit his response to the allegation of impartiality. The court has announced that it would take a decision on the issue of impartiality in the upcoming weeks. The court case will continue. Similar proceedings from other small broadcasters, initiated in different courts, were unsuccessful or have been withdrawn.

In June 2016, the main competitors of Fun Radio alleged that a host of the morning show had influenced Fun Radio's results by encouraging his listeners to give favourable treatment to Fun Radio in the Médiamétrie surveys. In response to these allegations, Médiamétrie decided to remove Fun Radio from its surveys. Following a legal procedure initiated by Fun Radio, Médiamétrie was required to reinstate Fun Radio in the audience results surveys as of September 2016. Nevertheless, Médiamétrie decided to lower Fun Radio's audience results in its published surveys, alleging the existence of a 'halo effect'. Following a procedure initiated by Fun Radio, a judicial expert was appointed in December 2017 to examine Médiamétrie's assessment of the alleged 'halo effect'. In September 2019, the judicial expert issued his final report which confirmed the 'halo effect' but assessed that Fun Radio's results were over-corrected. As of September 2017, Médiamétrie has again published the full audience results for Fun Radio. In parallel to the above procedure, the main competitors of Fun Radio also filed, in December 2016, a claim for damages, claiming unfair competition, but this procedure was suspended until the end of the judicial expertise. In the meantime, four of the six claimants withdrew their claim from the proceedings. On 23 January 2023, the Court decided to award damages for unfair competition. Fun Radio appealed the Court's decision on 26 January 2023 and is confident to achieve a favourable decision before the Court of appeal.

In November 2019, the Spanish Competition Authority (CNMC) arrived at a decision in disciplinary proceedings imposing a fine on Atresmedia and Mediaset and barring both operators from specified courses of conduct. The parties were ordered to take steps to align their commercial and contractual relations to the requirements of the decision. The fine imposed on Atresmedia amounts to €38.2 million. In 2020, Atresmedia challenged the decision by filing an application for judicial review with the Administrative Chamber of the Audiencia Nacional, Spain's national court. The application was found admissible. Consequently, Atresmedia will proceed with an appeal in the aforementioned court. The directors and legal advisors of Atresmedia believe that the application for judicial review against the CNMC's decision is likely to succeed.

The investment environment in China continues to be subject to changes. The Chinese government is tackling what it sees as undesirable social developments by implementing regulatory interventions, e.g., currently in the areas of crypto currencies or the outflow of data to foreign countries. This is influencing the focus of Bertelsmann Asia Investments' (BAI) investment activities, the growth expectations of the businesses and possible exit channels with regard to the existing portfolio that are increasingly shifting away from the United States to Hong Kong and China. After the National Congress of the Chinese Communist Party, a stronger ideologization of politics can be observed, with accompanying challenges for the economy. Possible exit timings largely depend on the further effects of the COVID-19-pandemic and may generally be pushed back. In addition, current global geopolitical tensions may also adversely affect BAI's portfolio. In the meantime, at least an agreement has been concluded with regard to the threat of delisting Chinese companies from US stock exchanges in the event of non-compliance with the regulatory requirements relating to the selection of the auditing firm and the compliance with disclosure requirements, although the practical implementation of this agreement has yet to be ascertained. Foreign direct investments in the People's Republic of China are also subject to regulatory restrictions. To satisfy local requirements, some of Bertelsmann's activities are held by trustees as part of VIE (Variable Interest Entity) structures. These are standard market practice for investments in China and are only rarely subject to judicial disputes in China. There is a certain risk that it will not be possible to safeguard VIE structures through the courts, particularly if the People's Republic changes its policies or if courts and authorities change their case law or administrative practice toward investments by foreigners (particularly in respect to VIE structures). Bertelsmann lawyers and external legal counsel are working closely with the Group legal department to follow further developments in order to anticipate legal and economic consequences early on. This affects companies within BMG, Arvato and the investments of BAI.

Aside from the matters outlined above, no further significant legal and regulatory risks to Bertelsmann are apparent at this time.

Information Security Risks

The ability to provide information in a timely, complete and confidential way, and to process it without disruptions, is crucial to Bertelsmann's success, and it continues to grow in importance. Bertelsmann is addressing the operating environment, which is made tougher by cyber threats, at the management level by operating a Group-wide Information Security Management System (ISMS, based on ISO 27001) and the measures thereby initiated. The ISMS's goals are the structured management of cyber risks and to monitor compliance with minimum Group standards that are refined based on the state of the art. In order to have access to cutting-edge cyber security technologies and specialist expertise in regular operations and emergencies, Bertelsmann – in addition to providing and further developing its own resources – also uses a network of external partners, and is an active member of the German Cyber Security Organization (Deutsche Cyber-Sicherheitsorganisation: DCSO). Furthermore, Bertelsmann addresses the increased risk with specific measures that directly increase resilience in cyber security – for example, by supporting the activities of Security Operations Centers and authentication technologies. An indicative assessment of information security risks was conducted in the 2022 financial year on the basis of the method used to assess operative Group risks. The results indicate that information security risks are moderate, analogous to the categorization of major Group risks.

Financial Market Risks

As an international corporation, Bertelsmann is exposed to various forms of financial market risk, especially interest rate and currency risks. These risks are primarily monitored centrally by the Finance Department on the basis of guidelines set up by the Executive Board. Derivative financial instruments are used solely for hedging purposes. Currency derivatives are primarily used to hedge future obligations that are subject to a foreign currency risk. Some firm commitments denominated in foreign currency are partially hedged when they are made, with the hedged amount being adapted over time. A number of subsidiaries are based outside the eurozone. The resulting translation risks to the leverage factor (ratio of economic debt to operating EBITDA) is managed over the long term by aligning the debt in the main foreign currencies with the current leverage factor and the maximum permitted leverage for the entire Group. Foreign currency translation risks arising from net investments in foreign entities are not hedged. The cash flow risk from interest rate changes is centrally monitored and controlled as part of interest rate management. The aim is to achieve a balanced ratio of different fixed-interest rates through the selection of appropriate maturity periods for the originated financial assets and liabilities affecting liquidity, and through the ongoing use of interest rate derivatives. The liquidity risk is regularly monitored on the basis of the budget planning. The syndicated loan and appropriate liquidity provisions form a sufficient risk buffer for unplanned payments. Counterparty risks exist in the Group in respect to invested cash and cash equivalents, as well as in case a counterparty to derivative transactions defaults.

Transactions involving money market securities and other financial instruments are exclusively conducted with a defined group of banks with high credit ratings. Within the guidelines, a risk limit specified by the Executive Board has been issued for financial assets and derivatives for each counterparty. Compliance with this limit is regularly monitored by the Finance Department. The guidelines concerning the investment of cash and cash equivalents are continuously monitored and extended if necessary. Financial investments are made on a short-term basis, so that the investment volume can be reduced if the credit rating changes. Financial market risks remain at a moderate level.

General Statement on the Risk Situation

The risks identified in the 2022 financial year are not endangering. Neither are there any substantial discernible risks that could threaten the existence of the Group.

Some risks emerged in the reporting period compared to the previous year. In addition, the key pandemic-related risks to Bertelsmann are now considered as being lower. The overall risk situation is therefore slightly below the previous year's level. Due to high inflation and large uncertainties regarding a potential slowdown of the economy, risks arising from economic development continue to represent the main challenge. Supplier and customer risks, risks arising from a changing market environment, legal and regulatory risks, pricing and margin risks and the possible loss of audience and market share at RTL Group constitute other key risks. However, as a result of the diversification of Group businesses, there are no concentration risks stemming from dependency on individual business partners or products in either procurement or sales. The Group's financial position is solid, with liquidity needs covered by existing liquidity and available credit facilities.

Opportunity Management System

An efficient opportunity management system enables Bertelsmann to secure its corporate success in the long term, and to exploit potential in an optimal way. Opportunities are possible future developments or events that could result in a positive deviation from the outlook or objectives for Bertelsmann. The opportunity management system is, like the RMS, an integral component of business processes and company decisions. During the strategy and planning process, significant opportunities are determined each year from the profit-center level upward, and then aggregated step by step at the division and Group levels. By systematically recording them on several reporting levels, opportunities that arise can be identified and exploited at an early stage. This also creates an interdivisional overview of Bertelsmann's current opportunities. A review of major changes in opportunities is conducted at the division level every six months. In addition, the largely decentralized opportunity management system is coordinated by central departments in the Group in order to derive synergies through targeted cooperation in the individual divisions. The interdivisional experience transfer is reinforced by regular meetings of the GMC.

Opportunities

While the above-mentioned opportunities associated with positive development may be accompanied by corresponding risks, certain risks are entered into in order to be able to exploit potential opportunities. This link to the key Group risks offers strategic, operational, legal, regulatory and financial opportunities for Bertelsmann.

Strategic opportunities can be derived primarily from the Group's further strategic development (see the section "Strategy"). In particular, there are opportunities in some cases for exploiting synergies as a result of the strategic portfolio expansions. There are individual operating opportunities in the individual divisions, in addition to the possibility of more favorable economic development.

For RTL Group, better-than-expected development of advertising technology and streaming services as well as higher demand for content, and more positive development in audience and advertising market shares are major opportunities. The increasing digitalization and fragmentation of the media landscape are opening up new opportunities. Professionally produced content can be distributed across multiple platforms nationally and internationally. New revenue streams could be generated by exploiting existing TV content across different platforms, and by creating native digital content. The increased presence in the digital sector also provides opportunities for online video advertising sales on all devices and platforms, and growing subscriber-based revenues in the on-demand business. Other opportunities can be found in target-group marketing of the Group's own inventory (addressable advertising) and advertising technology products for third parties. In addition, RTL Group's strategy of creating national media champions could generate significant value through potential synergies.

For the trade book publishing group Penguin Random House, opportunities lie in signing new authors and new book projects. The publishing group is well positioned to invest in new markets and content, and to offer its products to the widest possible readership. In general, the digital evolution transforming book markets offers the potential for new product development, and broader and more efficient marketing channels as well as better accessibility to the backlist. Digital audiobooks are experiencing growth worldwide, while new technologies could make books more appealing and bring book content to wider audiences. The development of new marketing tools and platforms is expanding opportunities for author engagement with their readers.

BMG's focus is on growth through signing new contracts with artists and authors, especially the acquisition of music rights and the monetization thereof. Moreover, the growing international market penetration of subscription-based music streaming services offers opportunities to better monetize the recorded-music and music-publishing markets. This will be achieved by increasing price levels for subscription-based streaming services among end customers, by more advantageous billing models between streaming providers and BMG, and through market expansion, for example in the areas of gaming, fitness or self-help apps.

At Arvato, strategic partnerships and major projects can provide additional opportunities for acquiring new customers. The global e-commerce market is expected to continue its dynamic growth over the next few years. Arvato was able to participate in this growth through further business expansion, particularly with the units Majorel, Supply Chain Solutions and Riverty. Further growth opportunities from ongoing digitalization lie in the development of innovative IP-based and multi-cloud-based IT services.

Bertelsmann Printing Group businesses may decline less steeply through additional volumes from existing and new customers. Furthermore, increased consolidation in the market could result in an additional strengthening of Bertelsmann Printing Group's own competitive position.

In particular, a further shift from traditional classroom-based delivery methods toward online and skill-based training, and the persisting high demand for medical university education, offer further growth opportunities for the education business. The growing skills shortage in the fields of healthcare and education also offers opportunities for organic growth for Bertelsmann Education Group. For example, Relias in the United States has the potential to grow more rapidly than expected through additional offerings for healthcare professionals in the area of recruiting as well as compliance and workforce management solutions for hospitals. At Afya, there is further growth potential from continued market consolidation in medical education as well as increasing demand for digital healthcare solutions.

For the venture activities of Bertelsmann Investments, there is the opportunity to realize higher-than-expected contributions to earnings thanks to increasing portfolio valuations or through the sale of holdings. In the Bertelsmann Next unit and for the other investments, there are opportunities arising from improved macro-economic conditions that could, for example, lead to a stronger growth dynamic.

The current innovation efforts detailed in the section "Innovations" offer further potential opportunities for the individual divisions.

Other opportunities could arise from changes to the legal and regulatory environment.

The financial opportunities are largely based on a favorable development of interest and exchange rates from Bertelsmann's point of view.

Outlook

Anticipated Overall Economic Development

Bertelsmann anticipates that economic conditions will develop as follows in 2023. The global economy remains under significant pressure in view of the war in Ukraine. The associated distortions, such as the energy crisis and high inflationary pressure, are dampening economic sentiment worldwide. By contrast, positive effects are expected from China in the course of the year, where the strict zero-COVID policy has been lifted meanwhile. The simultaneous quantitative tightening measures by major central banks pose a global risk to further economic development. Growth in 2023 is therefore likely to be subdued early in the year and should then pick up again slightly as the factors weighing on the economy recede. According to the forecast published by the Institute for the World Economy (IfW) in Kiel, global production is estimated to increase by 2.2 percent in 2023, compared to a rise of 3.1 percent in 2022.

Economic growth is expected to be low in the eurozone, despite the adverse factors. The IfW estimates real economic growth of 0.6 percent in 2023. Germany's GDP is expected to grow by 0.3 percent in real terms, according to the IfW. The growth rate in France is also expected to be 0.3 percent in real terms. For the United Kingdom, however, GDP is expected to decline by 0.6 percent in real terms in 2023. The IfW, in its report of December 2022, also forecast economic output in the United States to decrease by 0.4 percent in real terms in 2023. However, other institutions have predicted economic growth and therefore a more positive development.

Anticipated Development in Relevant Markets

The worldwide media industry is primarily influenced by global economic developments and the resulting growth dynamic. The continued trend toward digitization of content and distribution channels, changes in media usage and the increasing influence of emerging economies will continue to present risks and opportunities in the years to come. With its strategic focus, Bertelsmann expects to benefit to an increasing extent from the resulting opportunities. Through its businesses, Bertelsmann operates in a variety of different markets and regions whose developments are subject to a range of factors and that do not respond in a linear fashion to overall economic tendencies. The following takes into account only those markets and regions that are large enough to be relevant for forecasting purposes and whose expected development can be appropriately aggregated and evaluated, or that are strategically important from a Group perspective.

In 2023, the TV advertising markets in Germany are expected to decline slightly, while moderate decrease is expected in France, a significant decline in the Netherlands and a stable development in Hungary. The streaming markets in Germany and the Netherlands are expected to continue growing strongly. The book markets are expected to remain stable overall. In the relevant music market, the publishing market segment is expected to grow significantly, whereas strong growth is projected for the recordings market segment. The services markets are predicted to show moderate (customer experience solutions, IT solutions) to significant (logistics and financial services) growth in 2023. The European printing markets are expected to record a moderate (offset) to strong (gravure) decline, while the book printing market in North America is expected to show a slight decline. Overall, sustained moderate to strong growth is anticipated for the relevant US education markets and the Brazilian market for medical university education.

Expected Business Development

The following assessments are subject to a particularly high degree of uncertainty. The economic consequences of the Ukraine war and the further development of the high inflation environment are not foreseeable and therefore cannot be properly forecast. Assessing the effects on the markets relevant for Bertelsmann and the anticipated overall economic development therefore represent a challenge. In addition, further geopolitical crises, national deficits, currency turbulence or the introduction of higher tariffs as a result of rising protectionist tendencies could interfere with economic performance. The resulting developments could also adversely affect the overall economic situation, which is a key factor influencing Bertelsmann's business performance. The following expectations are based on the assumption of a continued recovery in the overall economic situation, and an assumption that most of the forecasted market developments and economic predictions of the research institutions will be realized.

For the 2023 financial year, Bertelsmann anticipates moderately declining European TV advertising markets, stable book markets, and growing service, music and education markets. The growth stimuli created through strategic portfolio expansions will continue to have a positive impact on Bertelsmann's growth profile.

In addition to the assumed market developments, the predicted economic developments in the geographic core markets of Western Europe and the United States are the basis of the expected business development. With revenue and earnings share within the eurozone currently expected at around two-thirds, the range of growth is above all based on the forecasted economic development in this economic zone. In view of the economic expectations and assuming that the situation regarding the war in Ukraine will not aggravate, Bertelsmann expects revenues to show a moderate to significant increase in the 2023 financial year, also in view of the ongoing growth initiatives. Operating EBITDA is forecast to show a stable development in the 2023 financial year. These expectations are based on operational planning for the 2023 financial year and on the exchange rates as of November 2022. In view of changes to the strictly defined performance indicators, the BVA will no longer be forecast from the 2023 financial year onwards.

Depending on how the economy develops, Bertelsmann does not currently anticipate interest rate changes to have any material impact on the average financing costs of medium- to long-term financing. The liquidity situation in the forecast period is expected to be sufficient.

These forecasts are based on Bertelsmann’s business strategy, as outlined in the section “Corporate Profile.” In general, the forecasts reflect careful consideration of risks and opportunities. All statements concerning potential future economic and business developments represent opinions advanced on the basis of the information that is currently available. Should underlying assumptions fail to apply and/or further risks arise, actual results may differ from those expected. Accordingly, no assurances can be provided concerning the accuracy of such statements.

Notes to the Financial Statements of Bertelsmann SE & Co. KGaA (in accordance with HGB, German Commercial Code)

In addition to the Group reporting, the business development of Bertelsmann SE & Co. KGaA is outlined below. Bertelsmann SE & Co. KGaA is the parent company and group holding company of the Bertelsmann Group. As a group holding company, it exercises key corporate functions such as the definition and further development of group strategy, capital allocation, financing and management. There are also service functions for individual divisions within the Corporate Center. Furthermore, it is the controlling company of the tax group for most of the domestic subsidiaries. The position of Bertelsmann SE & Co. KGaA is essentially determined by the business success of the Bertelsmann Group.

The Annual Financial Statements of Bertelsmann SE & Co. KGaA, in contrast to the Consolidated Financial Statements, have not been prepared in accordance with the International Financial Reporting Standards (IFRS), but in accordance with the regulations of the German Commercial Code (HGB) and the supplementary regulations of the German Stock Corporation Act (AktG).

Results of Operations of Bertelsmann SE & Co. KGaA

Income Statement of Bertelsmann SE & Co. KGaA in accordance with HGB

in € millions	2022	2021
Revenues	106	100
Other operating income	103	227
Cost of materials	(21)	(20)
Personnel costs	(154)	(147)
Amortization, depreciation and write-downs	(21)	(21)
Other operating expenses	(327)	(274)
Income from other participations	173	557
Interest income	145	(66)
Write-downs of long-term financial assets	(6)	0
Taxes on income	24	2
Earnings after taxes	22	358
Other taxes	(2)	(2)
Net income	20	356
Income brought forward	724	718
Transfer to other retained earnings	-	(130)
Net retained profits	744	944

The results of operations of Bertelsmann SE & Co. KGaA are significantly affected by the amount of income from other participations, due to Bertelsmann SE & Co. KGaA's role as the parent company of the Bertelsmann Group. The decrease in net income to €20 million (previous year: €356 million) is primarily attributable to the drop in other operating income and in income from participations. In contrast to this, the improvement in interest income had a positive impact on the development in net income.

The €124 million decrease in other operating income is due to the decrease in reversals of write-downs of shares in affiliated companies and the reversals of loss allowances on receivables. The reversals of write-downs and reversals of loss allowances of €60 million each in the previous year relate to shares in

RM Hamburg Holding GmbH, Hamburg, and the receivables from Prinovis GmbH & Co. KG, Hamburg. The increase of €53 million in other operating expenses is largely attributable to an increase in losses from derivatives for managing exchange rate fluctuation risks.

Income from other participations is primarily affected by the amount of income from a profit and loss transfer agreement with Bertelsmann Capital Holding GmbH, Gütersloh. As a result of the collection of dividends in the previous year, the amount of income coming from the profit and loss transfer agreement with this company declined by €409 million. The increase in returns on investments had the opposite effect on income from other participations due to a payout by Bertelsmann UK Limited, London (€174 million). The income from other participations was burdened in the reporting year and the previous year by a restructuring subsidy paid to a subsidiary.

The improvement in interest income is largely down to the collection of dividends from securities held by Bertelsmann Pension Trust e.V.

The taxes on income for the 2022 financial year relate to refunds for previous years.

Net Assets and Financial Position of Bertelsmann SE & Co. KGaA

Balance Sheet of Bertelsmann SE & Co. KGaA in accordance with HGB (Summary)

in € millions	31.12.2022	31.12.2021
Assets		
Fixed assets		
Intangible assets	9	10
Tangible assets	364	356
Long-term financial assets	19,049	18,613
	19,422	18,979
Current assets		
Receivables and other assets	5,167	5,632
Securities	879	1,029
Cash-in-hand and bank balances	621	221
	6,667	6,882
Prepaid expenses and deferred charges	22	18
	26,111	25,879
Equity and liabilities		
Equity	10,259	10,459
Provisions	769	610
Liabilities	15,079	14,806
Deferred income	4	4
	26,111	25,879

The total assets of Bertelsmann SE & Co. KGaA rose €232 million from the previous year to €26,111 million. A high ratio of equity (39 percent) and long-term financial assets (73 percent) to total assets continues to characterize net assets and financial position.

The increase in long-term financial assets, at €306 million, concerns investments in Bertelsmann Capital Holding GmbH, Gütersloh. The decline in receivables and other assets is largely apportioned to financing granted to Bertelsmann, Inc., Wilmington. The €400 million increase in cash funds is related to the repayment of receivables from affiliated companies.

Equity decreased by the dividend of €220 million paid out for the 2021 financial year less the net income of €20 million for the reporting year. Bonds and obligations have decreased by €439 million due to the repurchase of bonds and the repayment of bonds and obligations. The €749 million increase in liabilities to affiliated companies is attributable to the increase in the amount of cash funds that were deposited by subsidiaries with Bertelsmann SE & Co. KGaA.

Risks and Opportunities for Bertelsmann SE & Co. KGaA

As Bertelsmann SE & Co. KGaA is largely linked to the Bertelsmann Group companies, among other things through financing and guarantee commitments, as well as through direct and indirect investments in the subsidiaries, the situation of Bertelsmann SE & Co. KGaA in terms of risks and opportunities is primarily dependent on the risks and opportunities of the Bertelsmann Group. In this respect, the statements made by corporate management concerning the overall assessment of the risks and opportunities also constitute a summary of the risks and opportunities of Bertelsmann SE & Co. KGaA (see the section "Risks and Opportunities").

Outlook for Bertelsmann SE & Co. KGaA

As the parent company of the Bertelsmann Group, Bertelsmann SE & Co. KGaA receives from its subsidiaries dividend distributions and income or expenses from profit and loss transfer agreements, as well as income from services provided to its subsidiaries. Consequently, the performance of Bertelsmann SE & Co. KGaA is primarily determined by the business performance of the Bertelsmann Group (see the section "Outlook"). Bertelsmann SE & Co. KGaA expects its results for the 2023 financial year to allow a dividend payment at the same level as the dividend for the reporting year.

Dependent Company Report
(Statement in accordance with Section 312 of the German Stock Corporation Act (AktG))

The Executive Board of Bertelsmann Management SE, as general partner of Bertelsmann SE & Co. KGaA, has submitted a voluntary report to the Supervisory Board of Bertelsmann SE & Co. KGaA in accordance with sections 278 (3) and 312 (1) of the German Stock Corporation Act, in which it outlines its relationships with affiliated companies for the 2022 financial year. The Executive Board hereby declares that Bertelsmann SE & Co. KGaA received adequate consideration in return for each and every legal transaction under the circumstances known at the time the transactions were undertaken.

Combined Non-Financial Statement

The following information relates to Bertelsmann SE & Co. KGaA and the Bertelsmann Group ("Bertelsmann") with its incorporated, fully consolidated subsidiaries ("subsidiaries") in accordance with sections 315b and 315c of the HGB, in conjunction with sections 289b to 289e of the HGB. Bertelsmann operates in the core business fields of media, services and education in around 50 countries worldwide (see section "Corporate Profile"). Taking responsibility – for employees, society and the environment – is firmly anchored in Bertelsmann's corporate culture. In its corporate responsibility management, Bertelsmann pursues the goal of reconciling commercial interests with social and environmental concerns, within the Group and beyond.

In addition to the Non-Financial Statement, voluntary reporting based on the standards of the Global Reporting Initiative (GRI) is published in the middle of the financial year.

Company Principles and Guidelines

The prerequisites for a corporate culture in which employees, management and shareholders work together successfully, respectfully and in a spirit of trust are common goals and shared values. These are set forth in the corporate constitution as well as in the Bertelsmann Essentials "Creativity & Entrepreneurship." Furthermore, the Bertelsmann Code of Conduct – as a binding guideline for all employees – defines minimum standards for ethical and lawful conduct within the company and toward business partners and the public. The Bertelsmann Supplier Code of Conduct sets out the mandatory minimum standards for its business partners in their relationship with Bertelsmann. Bertelsmann's actions are also determined by external guidelines.

Bertelsmann is committed to the principles of the Universal Declaration of Human Rights and the United Nations Guiding Principles on Business and Human Rights. As a participant in the United Nations Global Compact, Bertelsmann also supports the UN's Agenda 2030 for sustainable development. Moreover, the company is committed to the International Labor Organization core labor standards, largely follows OECD Guidelines for Multinational Enterprises, and uses as guidance the recommendations of the German Corporate Governance Code for good and responsible corporate governance.

Corporate Responsibility Management

Organization

The advisory body for the management and strategic development of corporate responsibility (CR) at Bertelsmann is the CR Council. The CR Council consists of executives from the corporate divisions and the Chief Human Resources Officer of Bertelsmann, who chairs the advisory body. The CR Council focuses on the further development of group-wide Environmental, Social, Governance (ESG) priorities in line with the corporate strategy, anchoring corporate responsibility and ESG reporting more strongly in the corporate divisions and the cross-divisional coordination of ESG activities. At the Group level, the CR department coordinates and supports the work of the CR Council in close cooperation with other Group functions. Within the Bertelsmann corporate structure, the local management teams are responsible for implementing corporate responsibility through specific measures. The corporate divisions and companies have their own structures and processes in place for this, in accordance with local requirements.

Topics

To identify thematic ESG priorities, Bertelsmann carries out regular relevance analyses. For this purpose, external and internal stakeholders are surveyed on pre-selected ESG topics. The external stakeholders estimate the impact of Bertelsmann's business activity on ESG topics, while the internal stakeholders assess their business relevance. This process serves to identify ESG priorities that are necessary for understanding the business development, the business performance, the position of the Group and the impact of its activity on employees, society and the environment. The ESG priorities are analyzed within the company boundaries, unless otherwise stated. Based on the relevance analysis carried out, the following eight ESG priorities were adopted by the Bertelsmann Executive Board: creative/journalistic independence & freedom of expression; content responsibility; fair working conditions; diversity, equity & inclusion; health & well-being; learning; responsibility in the supply chain; and climate change. The Bertelsmann ESG Program (2021–2023) is currently being implemented; progress is regularly monitored. Its content with relevance for the 2022 financial year is explained elsewhere in this non-financial statement. ESG topics, including their performance indicators, are increasingly important for Bertelsmann's businesses. Against this backdrop, ESG was included in 2022 as a new enabler for the corporate strategy – in addition to "People", "Communication" and "Tech & Data". ESG performance indicators have not yet been incorporated into the Group's value-oriented management system (see the section "Value-Oriented Management System"). However, Bertelsmann plans to incorporate ESG performance indicators into its value-oriented management system in the medium term.

Risks

A number of risks are associated with the ESG priorities relevant for Bertelsmann. These risks can arise from the company's own business activities or from its business relationships, and can affect the company or its environment and stakeholders.

For the non-financial matters defined in the German Commercial Code – employee and social matters, respect for human rights, anti-corruption and bribery matters, and environmental matters – no significant risks that were very likely to have serious negative effects, either individually or collectively, were identifiable as part of the 2022 reporting. For more information on the relevant risks, please see the section "Risks and Opportunities."

Employee Matters

Motivated employees are the most important resource for creativity and entrepreneurship and thus for Bertelsmann's success. This corporate identity – anchored in the corporate constitution and the Bertelsmann Essentials – is the basis for the Executive Board guidelines on HR work. Supplementary provisions are specified in the Bertelsmann Code of Conduct.

The Chief Human Resources Officer (CHRO) of Bertelsmann is responsible for employee matters. The main group-wide focus of his work includes setting the strategic HR agenda, aligning top management and talent development with the Group's strategic growth priorities, the re- and up-skilling activities of Bertelsmann University, standardizing and providing IT support for HR processes, and continually developing corporate responsibility and the corporate culture.

The CHRO heads the HR Committee, which is the corporate committee responsible for international HR work at Bertelsmann. Its members are the heads of HR at the corporate divisions, who report to the CHRO, as well as head managers of the corporate HR department.

Fair Working Conditions

Strategy implementation and operational responsibility are for the most part delegated to the corporate divisions and companies, in accordance with the subsidiarity principle. With that in mind, Bertelsmann sees it as its responsibility to ensure fair working conditions and a healthy, safe working environment for employees. The Supplier Code of Conduct contains standards for Bertelsmann's business partners stipulating that they adhere to the statutory regulations on fair working conditions and provide a framework that allows their employees to speak up freely and without fear of retaliation.

At Bertelsmann, remuneration issues are an integral part of fair working conditions. The compensation system is designed to ensure that remuneration is driven by market, function and performance considerations, taking into account business-specific characteristics. Numerous domestic and foreign subsidiaries have operational/divisional success and profit-sharing models adapted to local requirements. In 2022, a total of €89 million was distributed as part of such success and profit-sharing schemes globally for 2021.

Continual dialogue between employees and company management at Bertelsmann represents another element for fair working conditions. Employees are involved in the development and improvement of working conditions through HR interview tools (including performance and development dialogue, agreements on objectives, team talk), as well as the international employee surveys that are conducted regularly. Although Bertelsmann, as a media company, is free to determine its political direction as defined in the German "Works Constitutions Act" (Tendenzschutz) and therefore is not subject to statutory co-determination in the Supervisory Board, the company nevertheless makes four positions on the Supervisory Board of Bertelsmann SE & Co. KGaA available to employees on a voluntary basis. In 2022, three seats are held by members of works councils of German Group companies, and one seat is held by the Chair of the International Management Representative Committee of Bertelsmann. In addition, managers, general workforce, employees with disabilities and trainees all have various dialogue formats and platforms for exchanging ideas, advancing topics and voicing their concerns. The Bertelsmann Group Dialogue Conference is an event where the CEO, CHRO of Bertelsmann and members of the Corporate Works Council from the corporate divisions in Germany can exchange ideas.

Other elements of the topic "Fair Working Conditions" – such as respecting human rights, including anti-discrimination, diversity, equity & inclusion, health & well-being, and learning – are discussed elsewhere in this non-financial statement.

The company defined strategic objectives relating to fair working conditions, and developed measures from those, as part of the Bertelsmann ESG Program (2021–2023). These include the further development of a Group-wide management approach to fair working conditions and respecting human rights, the further development of processes for identifying risks concerning human rights issues and the continuous advancement of knowledge on these topics.

In 2022, the most important measures included the Code of Conduct training program and an international survey by the Bertelsmann Representative Committee of 1,000 employees about their satisfaction and the future of work.

Diversity, Equity & Inclusion (DEI)

Diversity and differences in the workforce are prerequisites for creativity, innovation and Bertelsmann's long-term business success. This conviction is conveyed in the Bertelsmann Essentials and in the Bertelsmann DEI policy. In that policy, the Bertelsmann Executive Board emphasizes its aim of further increasing diversity of staff at all levels and in every respect, and of creating general conditions that foster the appreciation and inclusion of employees and ensure equal opportunities.

The DEI strategy and the DEI relevant aspects of the Bertelsmann ESG Program (2021–2023) are implemented by the CR department with support from a Group-wide working group and from other bodies in the corporate divisions. The focus in 2022 was on promoting equal opportunities and an inclusive working environment along the following dimensions of diversity: gender, disability, sexual orientation and gender identity. Some corporate divisions also set their own additional priorities.

On December 31, 2022, the genders were almost evenly distributed across the entire staff, with 54 percent women and 46 percent men, remaining unchanged from the previous year). The Group Management Committee was comprised of 20 members (previous year: 18), of which seven were women (previous year: five). Bertelsmann had initially set itself the target of raising the ratio of women in top management and senior management across all corporate divisions to one-third by the end of 2021. This target was reached in 2022. Compared with the previous year, the proportion of female executives was increased from 30 percent to 35 percent in top management and 36 percent in senior management (see table). Furthermore, the targeted proportion of women was set at one-third for the top management and senior management talent pool, respectively, and 50 percent for the career development pool for the 2021/2022 cohort. For future cohorts, the targeted proportion of women was increased to 40 percent for the top management talent pool and to 50 percent for the senior management talent pool. The targeted proportion for the career development pool remains unchanged at 50 percent. The Supervisory Board and the Executive Board are notified annually of progress in regard to these targets.

Targeted Proportion of Women in Top Management and Senior Management

Target for 2021	in percent	2022	2021
One-third of positions across all divisions occupied by women	Top management [1),2)]	35	30
	Senior management [1),3)]	36	30

1) Top management and senior management comprises those positions that are of particular importance because of their success-critical function and their strategic relevance for the Group's continued transformation and the achievement of its strategic targets. Top management positions comprise GMC positions but not Executive Board positions.
2) Basis: permanent and fixed-term employees as of December 31; with gender indication 2022 (100 percent), with gender indication 2021 (100 percent), limited comparability.
3) Basis: permanent and fixed-term employees as of December 31; with gender indication 2022 (92 percent), with gender indication 2021 (91 percent), limited comparability.

The company also defined strategic objectives relating to DEI as part of the Bertelsmann ESG Program (2021–2023). These include the closer involvement of the Executive Board and top management into DEI engagement, the strategic further development of Diversity Management into Diversity, Equity & Inclusion Management, the professionalization of the governance structures for DEI in the corporate divisions, and awareness raising and competence development.

Against this backdrop, measures were initiated in 2022 to drive the integration of DEI in prioritized phases of the Employee Life Cycle. In addition, further resources and expertise for DEI were established in the corporate divisions, and corresponding working groups were set up. In addition, measures to raise awareness and develop skills were implemented, including as part of the international Bertelsmann DEI month.

The Bertelsmann Action Plan for Inclusion (2019–2024) aims to improve participation for employees with disabilities in the German Bertelsmann companies. The third annual evaluation can be viewed on the Bertelsmann website: bertelsmann.com/disability-and-inclusion.

The LGBTIQ+ employee network "be.queer" has advanced international collaboration with the LGBTIQ+ networks in the corporate divisions. For example, Pride Month was marked with numerous activities. The Bertelsmann website provides an overview of the DEI measures at Bertelsmann and in the corporate divisions at bertelsmann.com/diversity.

Health & Well-being

Bertelsmann aims to create a health-promoting working environment and conditions for avoiding occupational health risks. In 2022, the topic "Health & Well-being" was confirmed by the Bertelsmann Executive Board as a Group-wide ESG priority and is now part of the CHRO's strategic HR agenda. The CR department is responsible for developing and implementing the Health & Well-being strategy. In cooperation with an international, cross-divisional working group, the department develops the strategic framework for health-related topics.

Due to the ongoing coronavirus pandemic, the focus in the first half of 2022 continued to be the immediate health protection of all employees around the world. This primarily included COVID-19 vaccines as well as additional prevention and protection measures. Since the summer of 2022, the previous obligations regarding prevention and protection measures against the coronavirus for employees have been changed to recommendations. Measures such as working from home and the provision of masks, disinfectants and coronavirus test kits were continued.

In addition to the strategic and organizational further development of the topic and the coronavirus crisis management, two other action areas were defined as part of the Bertelsmann ESG Program (2021–2023): the empowerment of executives to create a healthy, safe working environment and corporate culture; and the support of employees to adopt healthy working habits and lifestyle and to strengthen individual resilience.

In 2022, a cross-divisional survey was carried out as regards the degree of coverage of external counseling services for employees (Employee Assistance Program) outside of Germany in order to be able to provide employees worldwide with access to job-related social counseling in the future. Mental health was also the focus of a cross-divisional initiative to raise awareness among employees. In addition, training courses to promote a health-oriented leadership style and an international fitness challenge were introduced as part of a pilot project.

Learning

Bertelsmann aims to empower employees on all levels to adapt to the challenges of a quickly changing environment and to continuously learn from and with one another. Among other things, this is reflected in the fact that great importance is attached to an open attitude that embraces experimentation as an element of creativity in the Bertelsmann Essentials. The topic of "Workforce Transformation" through targeted learning opportunities is part of the CHRO's strategic HR agenda.

The Chief Learning Officer is responsible for the Group's learning strategy, which is implemented by Bertelsmann University and in Germany by the Bertelsmann vocational college. The HR Committee regularly discusses and agrees on aspects of this learning strategy, and supports its implementation in the corporate divisions. Furthermore, the central focus areas for learning are complemented by individual training initiatives in the corporate divisions. Employees around the world are thereby offered central and division-specific learning opportunities, and free access to more than 15,000 online courses by LinkedIn Learning.

The company defined strategic objectives relating to the topic of learning as part of the Bertelsmann ESG Program (2021–2023). These include developing a re- and upskilling approach, empowering and networking executives to facilitate the future-oriented design of the Bertelsmann transformation, expanding the offerings on business-critical competencies for employees (e.g., Tech & Data) and promoting a learning culture.

Various measures were implemented in 2022 in this context. To better identify and close qualification gaps, regular reporting on the success-critical Tech & Data roles (target/actual analysis) was expanded to include uniform performance indicators. In addition to the digital program series "BeReady," for example, the strategy programs "Managing Strategy for Action" and "Reimagining Strategy" were held at Harvard Business School to empower and network Bertelsmann's top executives. The three-year Udacity technology scholarship program, which provides 50,000 scholarships for which both Bertelsmann employees and external candidates are eligible to apply, was ended after the third round. A new three-year follow-up program for an additional 50,000 scholarships was started. Moreover, an "Employee Scholarship" program for Bertelsmann employees was initiated to build Tech & Data expertise. To promote a learning culture, the digital peer-to-peer learning format "Your Campus" was continued, and the new learning format "Your Growth Booster" was launched to strengthen learning skills.

Social Matters

Creative / Journalistic Independence & Freedom of Expression

Free and critical thinking as well as exchange of varying opinions are prerequisites for creativity. Bertelsmann stands for editorial and journalistic independence in its content businesses, as well as for freedom of the press and artistic license. The company publishes a wide variety of opinions and positions. These basic principles of the content businesses are therefore also set forth in the Bertelsmann Code of Conduct. Bertelsmann aims to ensure this creative/journalistic independence in two directions. Inside the company, it means that the company does not attempt to influence the decisions of artists, authors, editors and program managers, or to restrict their freedom. To the outside, this means that both content managers and company managers comply with existing laws regarding the separation of editorial content and commercial advertising and do not capitulate to political or economic influence in their coverage. In accordance with the Bertelsmann "Editor-in-Chief Principle," editorial decisions are the sole responsibility of the content managers.

Representatives from Bertelsmann's corporate content divisions – RTL Group, Penguin Random House and BMG – collaborate in the context of a cross-divisional working group to discuss issues relating to press freedom and editorial and journalistic independence, and to share information, current challenges and best practices.

The company defined strategic objectives relating to creative/journalistic independence as part of the Bertelsmann ESG Program (2021–2023). These include guaranteeing the safety and health of journalists, continuously developing high-quality news reporting output and creating an environment that supports creative/journalistic independence and that reflects the diversity of perspectives and the differences of people and their opinions, ideas and stories.

In 2022, key measures included extensive coverage of the war in Ukraine. When the war broke out, RTL Deutschland interrupted the regular TV program of its main channel RTL Television and – together with its news channel n-tv – broadcast more than 200 hours of special programs. Reporters and news teams reported live on-location to provide audiences with reliable and continuous information about the war. Another measure involved conducting the nationwide "Trusted News Brands" survey, which showed a high level of interest among media users in news, especially on the topics of world news, regional news and politics. In this survey, n-tv achieved high scores in the area of trust, and the RTL brand showed clear potential for improvement. In March 2022, "Stern," together with the Dorling Kindersley publishing company and in close cooperation with other units of the Bertelsmann Content Alliance, published the Hungarian storybook "Meseország mindenkié" [Fairyland is for Everyone], which addresses various LGBTIQ+ themes, in Germany, Austria and Switzerland. The publication of the German version of the original Hungarian book is another strong signal sent by the Bertelsmann Content Alliance to advocate social plurality and freedom of expression.

Content Responsibility

Content responsibility at Bertelsmann means reflecting on the repercussions of content creation and distribution, to protect the rights and interests of media users, customers and third parties as far as possible. Overriding principles and guidelines of media ethics are set by national and international laws governing the press, broadcasting and multimedia. These are complemented by voluntary commitments to external guidelines such as the ethics codes of national press councils and within the company by the Bertelsmann Code of Conduct. In accordance with these principles and guidelines, Bertelsmann's editorial staff are committed to, among other things, "respecting privacy and the accurate and responsible treatment of information, opinion and images." As a result, the company expects careful research, high-quality reporting and transparency in case of errors – because thorough journalistic work is more important than ever in the face of online disinformation ("fake news"). Cross-divisional verification teams provide their expertise in discerning between authentic and manipulated photos and videos, or those taken out of context.

Furthermore, the issue of content responsibility is anchored in various ways in the corporate divisions, companies and editorial departments. In accordance with the "Editor-in-Chief Principle," the responsibility for media content lies solely with the managers in the editorial teams and creative departments.

The company shoulders a special responsibility when creating and distributing content for children and teenagers, who experience their living environment as digital natives. In the area of youth media protection, content is monitored in accordance with different restrictions for each medium and region to see if it could adversely affect the development of children or teenagers. If there are indications of such, various restrictions come into force, such as broadcasting time restrictions or content and/or product labels. Through voluntary labeling systems, Bertelsmann corporate divisions and companies sometimes go beyond the existing EU and national regulations, particularly in the area of audiovisual media. In addition, Bertelsmann companies are active in child and youth media protection organizations.

The company defined strategic objectives relating to the topic of content responsibility as part of the Bertelsmann ESG Program (2021–2023). These include, for example, expanding coverage of socio-political topics, ensuring complete youth media protection in the streaming business and digital provision, and developing journalistic guidelines for publishing content. In addition, cross-industry partnerships with artists involving social topics were expanded.

In 2022, RTL Deutschland carried out the secure integration of content for children as well as a technical adjustment of the youth protection system for RTL+ by implementing an automated provision of age ratings in the system. In addition, comprehensive themed weeks were conducted, organized by various units of the Bertelsmann Content Alliance. These included the Diversity Week initiated by RTL Deutschland in June, focusing on the dimensions of gender identity and sexual orientation, and the Sustainability Week launched in October around energy and mobility as part of the format "Packen wir's an" [Let's get to grips with it]. In addition, as a result of allegations of sexual misconduct and abuse of power on the show "The Voice of Holland," RTL Nederland, together with the Talpa Network, founded an initiative to create a safe and inspiring work culture for the entire Dutch media industry.

Respect for Human Rights

Bertelsmann is committed to respecting and protecting human rights within the company and in its supply chains. This stance is anchored in the Code of Conduct and is expressed through the voluntary commitment to external guidelines, e.g., the Guiding Principles on Business and Human Rights as well as the Free & Equal standards of the United Nations or the OECD Guidelines for Multinational Enterprises. The goal is to minimize the risk of human rights violations and discrimination to the greatest possible extent.

To ensure compliance, the Bertelsmann Executive Board established an Integrity & Compliance program and appointed a Corporate Compliance Committee (CCC). The CCC submits an annual Compliance Report to the Bertelsmann Executive Board and the Audit and Finance Committee. The CCC chair is the head of the corporate legal department. The Integrity & Compliance (I&C) department is responsible for implementing the topic, and is subordinated to the CCC in the organization. I&C supports the CCC in fulfilling its tasks and makes suggestions for necessary improvements to the I&C program. It is I&C's task to make all employees worldwide aware of the key legal provisions and internal company guidelines, including those concerning respect for human rights. I&C coordinates the collaboration between RTL Group, Majorel, Afya and Alliant, each of which has separate compliance organizations.

Bertelsmann is committed to fulfilling its human-rights due diligence obligations within its supply chains. Business partners are required to respect human rights, as expressly stipulated by the Supplier Code of Conduct. This includes, for example, a ban on coercive and child labor, the reaffirmation of the right to freedom of association and the right to engage in collective bargaining, and a ban on discrimination and intimidation.

When it comes to business partners, the Supplier Code of Conduct also stipulates that Bertelsmann does not tolerate discrimination because of any characteristic specified under applicable anti-discrimination law or company policy. Actual and/or suspected infringements of these principles can be reported by Bertelsmann employees and third parties by using channels of the existing compliance management system. Information on the options and the procedure applicable to reporting incidents can be viewed on Bertelsmann website: integrity.bertelsmann.de. An investigation is initiated for each compliance case reported, based on a defined procedure in line with the Executive Board's guideline for dealing with compliance violations, with the aim of fully clarifying each case. If Bertelsmann learns of actual and/or suspected human rights violations at business partners, the company contacts those responsible and takes the necessary remedial action.

The new Code of Conduct training introduced in 2022 is compulsory for all employees in order to enhance the general understanding of topics such as human rights issues among employees. In this context, measures to sensitize employees to the issue of anti-discrimination were also taken, and employees were advised of their rights. Contact persons for the German "General Equal Treatment Act" (AGG) are available at sites in Germany and employees were informed of their associated rights. In 2022, both Bertelsmann and individual subsidiaries issued own statements in accordance with the "UK Modern Slavery Act" condemning all forms of modern slavery, coercive and child labor, and exploitation and discrimination, and that present measures to prevent these human rights violations. The company also advanced the revision of the Supplier Code of Conduct to fulfil human-rights due diligence obligations in supply chains as well as the development of a human rights strategy in the Group. Moreover, the head of the corporate legal department was appointed the Bertelsmann Human Rights Officer. The findings of the Bertelsmann Compliance Risk Analysis of 2022 show that the risks of human rights violations and discrimination are minimized to the greatest extent possible in view of the measures that have been taken.

Anti-Corruption and Bribery Matters

Bertelsmann actively combats corruption. As a participant in the United Nations Global Compact, the company is committed to taking a stance against all types of corruption, among other things. A major priority of the Bertelsmann Executive Board is to effectively counteract corruption within the organization. The goal is to minimize the risk of corruption to the greatest possible extent.

The I&C department, reporting to the Corporate Compliance Committee, continuously develops the Group's corruption prevention measures internationally.

Both the Bertelsmann Code of Conduct and the Anti-Corruption and Integrity Executive Board Guideline expressly prohibit all forms of corruption and bribery. This prohibition also applies to all third parties that work for, with or on behalf of Bertelsmann, as stipulated in the Supplier Code of Conduct. Along with instructions for dealing with officials, and guidelines for the granting or accepting of gifts in the context of business relations, the Anti-Corruption and Integrity Executive Board Guideline prescribes appropriate due diligence processes in dealing with third parties. A due diligence review is carried out for each individual risk profile through a corresponding risk classification. The general business partner risk and the supply chain risk are assessed annually as part of the Bertelsmann Compliance Risk Analysis. The Anti-Corruption and Integrity Executive Board Guideline also describes the channels for reporting suspected violations and seeking additional advice, as well as other prevention and control measures. The Executive Board guideline for dealing with alleged compliance violations anchors an obligation to report even suspected violations of the prohibition of corruption to the Bertelsmann Corporate Center.

The most important measures in 2022 included the rollout of the new Code of Conduct training, which is compulsory for all employees. Majorel, Afya and Alliant have their own training programs. Furthermore, training on the topic of "Anti-Corruption & Integrity" was provided to relevant employees across the Group and the corruption risk outlined in the annual compliance report to the Executive Board. The findings of the Bertelsmann Compliance Risk Analysis of 2022 show that the risk of corruption is minimized to the greatest extent possible in view of the measures that have been taken.

Environmental Matters

Bertelsmann aspires to become climate-neutral by 2030. The company's environmental management is based on the climate strategy "Bertelsmann Climate Neutral 2030" and the Bertelsmann ESG Program (2021–2023). In addition, guidelines such as for energy and paper procurement, constitute the framework for environmental and climate protection.

The "Bertelsmann Climate Neutral 2030" climate strategy prioritizes measures to avoid and reduce emissions – ahead of offsetting remaining emissions. The Group aims to significantly reduce greenhouse gas emissions generated at its own sites due to business travels by its employees and in the manufacture of its products by 2030, and to offset all remaining emissions. The Group's target of cutting recorded greenhouse gas emissions by 50 percent compared to 2018 was validated by the Science Based Targets initiative (SBTi) and is in line with the 1.5 degree target of the Paris Climate Agreement in accordance with SBTi.

On the basis of the climate strategy, own targets for corporate divisions of Bertelsmann were derived, and relevant measures were identified. The achievement of these division-specific targets is discussed as part of annual strategy meetings between the Executive Board and divisional heads. The "be green" working group with representatives from the corporate divisions provides a platform for cross-divisional coordination and the exchange on environmental topics.

In 2022, the focus of the collaboration was on measures to implement the strategic objectives of the Bertelsmann ESG Program (2021–2023), such as procurement and generation of electricity from renewable sources, the further development of environmental planning and reporting across the Group, the publication of a guideline for climate-friendly business travel, the increase in transparency on supply chain emissions in relation to print and digital products, and the development and external verification of product carbon footprints of print products.

As part of the annual environmental data survey conducted at the Group sites globally, data are collected regarding energy and materials consumption, the procurement of materials and purchased services as well as mobility and IT equipment of employees. These data are used to quantify greenhouse gas emissions using the Group-wide green.screen IT platform and to present these emissions in specific environmental footprint reports at site, divisional and company level. These environmental key figures help those responsible on various levels of the Group to evaluate opportunities and risks and to report to business partners. They are also used as an information basis for ESG ratings.

On December 31, 2022, the number of sites using green electricity was 378, a significant rise of 197 on the previous year's figure of 181. The ratio of green energy in the electricity procured by sites with electricity consumption of more than 100 megawatt hours was 76 percent. The ongoing conversion to renewable energies using certificates of origin and the expansion of photovoltaic systems at the company's own sites made a significant contribution to lower greenhouse gas (GHG) emissions (Scope 1 and 2 combined, measured in carbon dioxide equivalents CO_2e). In 2022, Bertelsmann's CO_2 emissions totaled 12.9 tons of CO_2e per €1 million turnover (Scope 1 and 2, previous year: 18.2 tons CO_2e per €1 million turnover).

Environmental key figures

	2022	2021
Number of sites with green electricity supply	378	181
GHG emissions in tons of CO_2e Scope 1 and 2 (combined)	261,800	340,200
GHG emissions in tons of CO_2e Scope 1 and 2 (combined) per € 1 million turnover	12.9	18.2

In 2022, further data was collected from suppliers and business partners for the quantification of indirect Scope 3 emissions. Next to data gathering from paper manufacturers and print service providers, the focus was on the analysis of film productions and video streaming.

Further Group-wide environmental key figures are published in the second quarter of 2023 on the Bertelsmann website at bertelsmann.com/environmental.

EU Taxonomy

With EU regulation 2020/852 (hereinafter "EU Taxonomy"), the EU Commission establishes the criteria for determining what qualifies as an "environmentally sustainable activity" and the criteria for classifying an economic activity as environmentally sustainable. For the 2022 financial year, as was already the case in 2021, the Group's EU Taxonomy reporting relates to the environmental targets 1 "Climate Change Mitigation" and 2 "Climate Change Adaptation." This includes information on the proportion of Taxonomy-eligible economic activities, and for the first time in the 2022 financial year Taxonomy-aligned economic activities, in revenues, investments (CapEx) and operating expenses (OpEx).

Economic activities are deemed Taxonomy-eligible when they are listed in the EU Taxonomy. They are deemed Taxonomy-aligned when they (a) make a substantial contribution to implementing one or more environmental targets, (b) do no significant harm (DNSH) to any of the other environmental objectives as well as (c) are being conducted in compliance with the minimum safeguards for labor and human rights.

Bertelsmann is a media, services and education company that operates with a variety of business models in around 50 countries worldwide (see the section "Corporate Profile"). Bertelsmann has identified its Taxonomy-eligible economic activities on this basis. The analysis is carried out on an ongoing basis on the Group level together with the corporate divisions in order to ensure the completeness of the Taxonomy-eligible economic activities. In the 2022 financial year, Bertelsmann carried out an analysis of the required Taxonomy criteria for determining Taxonomy alignment for the first time.

Bertelsmann has reviewed the application of the EU Commission's delegated regulation 2022/1214 (hereinafter "Complementary Climate Delegated Act") with regard to individual economic activities in certain energy sectors. Bertelsmann operates CHP plants for generating electricity predominantly for internal purposes. The revenues, investment expenditure and operating expenses connected with these CHP plants are immaterial for Bertelsmann. Moreover, in Bertelsmann's view, the economic activities described in Attachment XII of the Complementary Climate Delegated Act are not congruent with Bertelsmann's economic activities in connection with the CHP plants. The reporting is therefore not applicable in that respect.

Taxonomy eligibility

With regard to the "Climate Change Mitigation" environmental target, Bertelsmann reports via the Arvato division's revenues from the economic activities "8.1. Data processing, hosting and related activities" and "8.2. Data-based solution for reducing greenhouse gas emissions." Regarding the "Climate Change Adaptation" environmental target, the following economic activities in the EU Taxonomy are defined as being relevant for Bertelsmann with respect to revenues: "11. Education" and "13.3. Motion picture, video and television program production, sound recording and music publishing activities." These economic activities represent an "enabling activity" as defined in the EU Taxonomy, and they relate to the corporate divisions RTL Group, BMG and Bertelsmann Education Group, and are reported for the first time for the 2022 financial year. As Bertelsmann understands it, the EU Taxonomy criteria do not currently provide clear guidelines on when the "enabling activities" and thereby the economic activities of the divisions RTL Group, BMG and Bertelsmann Education Group can make a direct contribution to climate change adaptation. Bertelsmann has therefore not performed an evaluation of the direct contribution to climate change adaptation in the 2022 financial year. Within the framework of the information on investments (CapEx), Bertelsmann reports other economic activities that can be seen in the section "EU Taxonomy Indicators."

Taxonomy alignment

Bertelsmann does not report Taxonomy-aligned revenues, CapEx and OpEx in relation to the environmental objectives 1 "Climate Change Mitigation" and 2 "Climate Change Adaptation" for the financial year 2022. The technical screening criteria for a significant contribution in order to implement both environmental objectives or the DNSH criteria set out in Appendix A to Annex I or Annex II of the EU Taxonomy are not complied with as a climate risk and vulnerability assessment of the economic activities relevant for Bertelsmann was not carried out. In view of the need for cumulative compliance with the requirements of the technical screening criteria for a significant contribution, of the DNSH criteria, and compliance with the minimum safeguards, for Taxonomy alignment, no further checks were made to determine whether other Taxonomy criteria were met.

EU Taxonomy Indicators

Reporting is based on the indicators for Taxonomy-eligible revenues, investments (CapEx) and operating expenditure (OpEx) defined in Article 8 of the EU Taxonomy.

If revenues, CapEx or OpEx can be assigned to both the "Climate Change Mitigation" and the "Climate Change Adaptation" targets, they are allocated in full to the "Climate Change Mitigation" target to avoid double counting. The calculation of the key performance indicators for Taxonomy-eligible economic activities was carried out taking into consideration the FAQ documents published by the EU Commission and the publication "Particularities in reporting according to Article 8 of the Taxonomy Regulation" of the IDW (Institute of Public Auditors in Germany), which address questions of interpretation relating to the EU Taxonomy.

Revenues: The basis for the revenues is the revenues reported in the consolidated financial statements in accordance with IFRS 15. These revenues can be allocated to Bertelsmann's economic activities pursuant to Annex I and II of the EU Taxonomy:

	Revenues		Substantial Contri-bution to Climate Change Mitigation	Substantial Contri-bution to Climate Change Adaptation	Compli-ance with Do No Significant Harm Criteria	Compli-ance with Minimum Safeguards	Taxonomy-Aligned Proportion of Revenues	Category Enabling Activity (E)	Category Transitional Activity (T)
Economic activities	in € millions	in %	in %	in %	Yes/No	Yes/No	in %	E	T
A. Taxonomy-eligible activities	**8,837**	**44**					**0**		
8.1 Data processing, hosting and related activities	146	1	100	0	No	No	0		T
8.2 Data-driven solutions for GHG reductions	7	0	100	0	No	No	0	E	
11. Education	622	3	0	100	No	No	0	E	
13.3 Motion picture, video and television program production, sound recording and music publishing activities	8,062	40	0	100	No	No	0	E	
B. Taxonomy-non-eligible activities	**11,408**	**56**							
Total (A + B)	**20,245**	**100**							

CapEx: Investments comprise additions to intangible assets (IAS 38), property, plant and equipment (IAS 16), and leases (IFRS 16). Apart from investments in music, film and broadcasting rights at RTL Group and BMG, as well as capital expenditure in intangible assets of the Bertelsmann Education Group, specifically for online education, Bertelsmann invests in modernizing and improving energy efficiency at its sites. In this context, investments were made, e.g., in photovoltaic systems. In the 2022 financial year, Taxonomy-eligible investment expenditure totaled €760 million (previous year: €58 million). The increase compared to the previous year was primarily because investment expenditure of €398 million in music and film rights was taken into account for the first time, and additions from leases for land, land rights and buildings amounting to €209 million were taken into account for the first time. For the 2022 financial year, Bertelsmann does not report any Taxonomy-aligned investment expenses. Please refer to the following sections of the Notes to the Consolidated Financial Statements for total investments:

- Note 9 "Intangible Assets": "Additions from business combinations" as well as "Other additions" in "Other intangible assets,"
- Note 10 "Property, Plant and Equipment and Right-of-Use Assets": "Additions from business combinations" as well as "Other additions" in "Property, plant and equipment" as well as "Additions" from changes in right-of-use assets.

The investments can be allocated to Bertelsmann's economic activities pursuant to Annex I and II of the EU Taxonomy:

Economic activities	Investments (CapEx) in € millions	Investments (CapEx) in %	Substantial Contribution to Climate Change Mitigation in %	Substantial Contribution to Climate Change Adaptation in %	Compliance with Do No Significant Harm Criteria Yes/No	Compliance with Minimum Safeguards Yes/No	Taxonomy-Aligned Proportion of Investments in %	Category Enabling Activity (E) E	Category Transitional Activity (T) T
A. Taxonomy-eligible activities	**760**	**31**					**0**		
6.5 Transport by passenger cars and light commercial vehicles	1	0	100	0	No	No	0		T
7.1 Construction of new buildings	66	3	100	0	No	No	0		
7.2 Renovation of existing buildings	21	1	100	0	No	No	0		T
7.3 Installation, maintenance and repair of energy efficiency equipment	2	0	100	0	No	No	0	E	
7.6 Installation, maintenance and repair of renewable energy technologies	5	0	100	0	No	No	0	E	
7.7 Acquisition and ownership, and lease, of buildings	249	10	100	0	No	No	0		
8.1 Data processing, hosting and related activities	11	1	100	0	No	No	0		T
8.2 Data-driven solutions for GHG reductions	7	0	100	0	No	No	0	E	
13.3 Motion picture, video and television program production, sound recording and music publishing activities	398	16	0	100	No	No	0	E	
B. Taxonomy-non-eligible activities	**1,685**	**69**							
Total (A + B)	**2,445**	**100**							

OpEx: Operating expenditures within the meaning of the EU Taxonomy comprise operating repair and maintenance expenditures (including maintenance expenses for taxonomy-eligible software) and expenditures arising from short-term leases. Other expenditures in connection with the daily operation of property, plant and equipment are not included in operating expenditures. The expenditures from operating repair and maintenance expenses and short-term leases amounted to €266 million in the 2022 financial year (OpEx denominator in accordance with the EU Taxonomy). Operating expenditures for the 2022 financial year defined within the meaning of the EU Taxonomy only make up an insignificant proportion (1 percent) in relation to the total operating expenses (cost of materials, royalty and license fees, personnel costs as well as other operating expenses) reported in the Consolidated Income Statement. In application of the exemption option granted by the EU Commission (Second Commission Notice dated December 19, 2022), Bertelsmann therefore reports Taxonomy-eligible operating expenditures of €0 million or 0 percent. Companies can forgo the calculation of the OpEx numerator if the operating expenses within the meaning of the EU Taxonomy are not significant for the company's business model.

Consolidated Financial Statements

Consolidated Income Statement

in € millions	Notes	2022	2021
Revenues	1	20,245	18,696
Other operating income	2	341	849
Cost of materials	13	(6,553)	(5,943)
Royalty and license fees		(1,496)	(1,458)
Personnel costs	3	(6,485)	(6,011)
Amortization/depreciation, impairment and reversals on intangible assets, property, plant and equipment and right-of-use assets	4	(1,099)	(909)
Other operating expenses	5	(3,535)	(2,789)
Results from investments accounted for using the equity method	11	6	101
Impairment and reversals on investments accounted for using the equity method	11	(7)	2
Results from disposals of investments		136	786
EBIT (earnings before interest and taxes)		1,553	3,324
Interest income	6	30	11
Interest expenses	6	(140)	(139)
Other financial income	7	73	13
Other financial expenses	7	(221)	(237)
Financial result		(258)	(352)
Earnings before taxes from continuing operations		1,295	2,972
Income tax expense	8	(246)	(662)
Earnings after taxes from continuing operations		1,049	2,310
Earnings after taxes from discontinued operations		3	–
Group profit or loss		1,052	2,310
attributable to:			
Bertelsmann shareholders			
Earnings from continuing operations		668	1,800
Earnings from discontinued operations		3	–
Earnings attributable to Bertelsmann shareholders		671	1,800
Non-controlling interests			
Earnings from continuing operations		381	510
Earnings from discontinued operations		–	–
Earnings attributable to non-controlling interests		381	510

Consolidated Statement of Comprehensive Income

in € millions	Notes	2022	2021
Group profit or loss		1,052	2,310
Items that will not be reclassified subsequently to profit or loss			
Remeasurement component of defined benefit plans		503	253
Changes in fair value of equity instruments		(1)	8
Share of other comprehensive income of investments accounted for using the equity method		23	–
Items that will be reclassified subsequently to profit or loss when specific conditions are met			
Exchange differences			
– changes recognized in other comprehensive income		13	358
– reclassification adjustments to profit or loss		5	20
Cash flow hedges			
– changes in fair value recognized in other comprehensive income		(11)	(52)
– reclassification adjustments to profit or loss		32	62
Share of other comprehensive income of investments accounted for using the equity method		33	(17)
Other comprehensive income net of tax	17	597	632
Group total comprehensive income		1,649	2,942
attributable to:			
Bertelsmann shareholders		1,275	2,406
Non-controlling interests		374	536

Consolidated Balance Sheet

in € millions	Notes	12/31/2022	12/31/2021
Assets			
Non-current assets			
Goodwill	9	8,872	8,146
Other intangible assets	9	3,947	2,793
Property, plant and equipment and right-of-use assets	10	3,185	2,774
Investments accounted for using the equity method	11	621	1,340
Minority stakes and other financial assets	12	1,716	1,584
Trade and other receivables	14	101	71
Other non-financial assets	15	1,124	1,047
Deferred tax assets	8	814	989
		20,380	18,744
Current assets			
Inventories	13	2,264	1,902
Trade and other receivables	14	5,044	4,594
Other financial assets	12	256	386
Other non-financial assets	15	1,321	1,068
Current income tax receivables		184	176
Cash and cash equivalents	16	3,228	4,645
		12,297	12,771
Assets held for sale		141	254
		12,438	13,025
		32,818	31,769
Equity and liabilities			
Equity	17		
Subscribed capital		1,000	1,000
Capital reserve		2,345	2,345
Retained earnings		9,193	8,266
Bertelsmann shareholders' equity		12,538	11,611
Non-controlling interests		2,498	1,995
		15,036	13,606
Non-current liabilities			
Provisions for pensions and similar obligations	18	710	1,474
Other provisions	19	156	198
Deferred tax liabilities	8	171	127
Profit participation capital	20	413	413
Financial debt	21	5,199	4,857
Lease liabilities	22	1,227	1,082
Trade and other payables	23	674	505
Other non-financial liabilities	23	385	397
		8,935	9,053
Current liabilities			
Other provisions	19	261	288
Financial debt	21	278	747
Lease liabilities	22	311	274
Trade and other payables	23	5,391	5,282
Other non-financial liabilities	23	2,495	2,294
Current income tax payables		111	110
		8,847	8,995
Liabilities related to assets held for sale		–	115
		8,847	9,110
		32,818	31,769

The prior-year comparatives have been adjusted. Further details are presented in the section "Prior-Year Information."

Consolidated Cash Flow Statement

in € millions	2022	2021
Group earnings before interest and taxes	1,558	3,324
Taxes paid	(339)	(807)
Depreciation and write-ups of non-current assets	1,135	914
Results from disposals of investments	(141)	(786)
Gains/losses from disposals of non-current assets	(24)	(10)
Change in provisions for pensions and similar obligations	(97)	(276)
Change in other provisions	(140)	(2)
Change in net working capital	(988)	(68)
Fair value measurement of investments	232	(483)
Interest received	66	28
Other effects	120	(14)
Cash flow from operating activities	1,382	1,820
Investments in:		
– intangible assets	(586)	(482)
– property, plant and equipment	(450)	(327)
– financial assets	(372)	(890)
– purchase prices for consolidated investments (net of acquired cash)	(264)	(255)
Disposals of subsidiaries and other business units	197	851
Disposals of other fixed assets	357	836
Cash flow from investing activities	(1,118)	(267)
Issues of bonds and promissory notes	835	–
Redemption of bonds and promissory notes	(1,188)	(1,026)
Redemption of other financial debt	(218)	(171)
Proceeds from other financial debt	193	183
Redemption of lease liabilities	(311)	(279)
Interest paid	(279)	(249)
Dividends to Bertelsmann shareholders	(220)	(180)
Dividends to non-controlling interests and payments to partners in partnerships (IAS 32.18(b))	(293)	(230)
Change in equity	(187)	304
Other effects	(66)	(47)
Cash flow from financing activities	(1,734)	(1,695)
Change in cash and cash equivalents	(1,470)	(142)
Exchange rate effects and other changes in cash and cash equivalents	29	168
Cash and cash equivalents as of 1/1	4,669	4,643
Cash and cash equivalents as of 12/31	3,228	4,669
Less cash and cash equivalents included within assets held for sale	–	(24)
Cash and cash equivalents as of 12/31 (according to the consolidated balance sheet)	3,228	4,645

The prior-year comparatives have been adjusted. Further details are presented in the section “Prior-Year Information.”

Consolidated Statement of Changes in Equity

in € millions	Subscribed capital	Capital reserve[1]	Retained earnings: Other retained earnings	Retained earnings: Accumulated other comprehensive income[2]: Exchange differences	Fair value reserve	Cash flow hedges	Share of other comprehensive income of investments accounted for using the equity method	Bertelsmann shareholders' equity	Non-controlling interests	Total
Balance as of 1/1/2021	1,000	2,345	6,086	(331)	9	(11)	(2)	9,096	1,629	10,725
Group profit or loss	–	–	1,800	–	–	–	–	1,800	510	2,310
Other comprehensive income	–	–	243	365	7	8	(17)	606	26	632
Group total comprehensive income	–	–	2,043	365	7	8	(17)	2,406	536	2,942
Dividend distributions	–	–	(180)	–	–	–	–	(180)	(218)	(398)
Transactions with subsidiaries that do not result in a loss of control[3]	–	–	283	2	–	–	–	285	(5)	280
Equity transactions with shareholders	–	–	103	2	–	–	–	105	(223)	(118)
Other changes[4]	–	–	(2)	–	–	6	–	4	53	57
Balance as of 12/31/2021	1,000	2,345	8,230	36	16	3	(19)	11,611	1,995	13,606
Balance as of 1/1/2022	1,000	2,345	8,230	36	16	3	(19)	11,611	1,995	13,606
Group profit or loss	–	–	671	–	–	–	–	671	381	1,052
Other comprehensive income	–	–	471	65	–	18	50	604	(7)	597
Group total comprehensive income	–	–	1,142	65	–	18	50	1,275	374	1,649
Dividend distributions	–	–	(220)	–	–	–	–	(220)	(284)	(504)
Transactions with subsidiaries that do not result in a loss of control[3]	–	–	(129)	–	–	–	–	(129)	(123)	(252)
Equity transactions with shareholders	–	–	(349)	–	–	–	–	(349)	(407)	(756)
Other changes[4]	–	–	20	–	(8)	(11)	–	1	536	537
Balance as of 12/31/2022	1,000	2,345	9,043	101	8	10	31	12,538	2,498	15,036

1) The capital reserve mainly includes share premiums received from the issue of ordinary shares in excess of their par values.
2) As of December 31, 2022, €0 million relates to assets classified as held for sale in accordance with IFRS 5 (December 31, 2021: €-8 million).
3) In the financial year 2022, transactions with subsidiaries that do not result in a loss of control mainly result from the change in non-controlling interests with put options. In the previous year, the amount mainly resulted from the decrease of shareholdings in Majorel.
4) Other changes in non-controlling interests in the financial year 2022 mainly result from the acquisition of the education company Afya. The prior-year comparatives of the other changes in non-controlling interests have been adjusted. Further details are presented in the section "Prior-Year Information."

Notes

Segment Information (Continuing Operations)

in € millions	RTL Group 2022	RTL Group 2021	Penguin Random House 2022	Penguin Random House 2021	BMG 2022	BMG 2021	Arvato 2022	Arvato 2021
Revenues from external customers	7,199	6,995	4,222	4,029	863	661	5,495	4,960
Intersegment revenues	25	21	1	1	3	2	69	75
Divisional revenues	7,224	7,016	4,223	4,030	866	663	5,564	5,035
Operating EBITDA	1,323	1,416	666	755	195	144	877	825
EBITDA margin[1)]	18.3%	20.2%	15.8%	18.7%	22.5%	21.7%	15.8%	16.4%
Impairment (-)/reversals (+) on intangible assets, property, plant and equipment and right-of-use assets	(1)	(1)	–	(5)	–	–	(39)	(19)
Results from investments accounted for using the equity method	14	29	4	7	–	–	8	9
Impairment (-)/reversals (+) on investments accounted for using the equity method	(5)	2	–	–	–	–	(2)	–
Invested capital	7,504	7,009	2,844	2,605	2,211	1,969	2,421	1,910

The prior-year comparatives for RTL Group, Bertelsmann Investments and Consolidation have been adjusted.
Further details on segment reporting are presented in note 27 "Segment Reporting."
1) Operating EBITDA as a percentage of revenues.
2) The business development of the venture capital business of Bertelsmann Investments is determined primarily on the basis of EBIT.
EBIT of Bertelsmann Investments amounted to €-70 million (previous year: €430 million).

Reconciliation to Operating EBITDA (Continuing Operations)

in € millions	2022	2021
EBIT from continuing operations	1,553	3,324
Less special items		
Impairment on goodwill and other intangible assets with indefinite useful life as well as gains from business combinations	(7)	–
Adjustment to carrying amounts on assets held for sale	–	(6)
Impairment (-)/reversals (+) on other financial assets at amortized cost	(32)	(1)
Impairment (-)/reversals (+) on investments accounted for using the equity method	(7)	2
Results from disposals of investments	136	786
Fair value measurement of investments	(232)	483
Restructuring and other special items	(420)	(301)
Less amortization/depreciation, impairment and reversals on intangible assets, property, plant and equipment and right-of-use assets	(1,099)	(909)
Less adjustments on amortization/depreciation, impairment and reversals on intangible assets, property, plant and equipment and right-of-use assets included in special items	22	29
Operating EBITDA from continuing operations	3,192	3,241

	Bertelsmann Printing Group		Bertelsmann Education Group		Bertelsmann Investments[2]		Total divisions		Corporate		Consolidation		Continuing operations	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
	1,303	1,179	622	283	523	578	20,227	18,685	18	11	–	–	20,245	18,696
	145	140	–	–	12	11	255	250	34	35	(289)	(285)	–	–
	1,448	1,319	622	283	535	589	20,482	18,935	52	46	(289)	(285)	20,245	18,696
	26	60	192	86	22	68	3,301	3,354	(110)	(113)	1	–	3,192	3,241
	1.8%	4.5%	30.8%	30.6%	4.1%	11.6%	16.1%	17.7%	n/a	n/a	n/a	n/a	15.8%	17.3%
	–	(16)	–	–	(1)	(3)	(41)	(44)	–	–	1	–	(40)	(44)
	–	–	(30)	41	11	15	7	101	–	–	(1)	–	6	101
	–	–	–	–	–	–	(7)	2	–	–	–	–	(7)	2
	25	19	2,550	1,246	1,493	1,827	19,048	16,585	221	152	(9)	11	19,260	16,748

Information by Geographical Area (Continuing Operations)

in € millions	Germany		France		United Kingdom		Other European countries		United States		Other countries		Continuing operations	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Revenues from external customers	6,020	5,720	1,979	2,063	1,437	1,307	4,073	3,842	4,875	4,359	1,861	1,405	20,245	18,696
Non-current assets[1]	3,592	3,436	1,347	1,318	1,479	1,294	3,615	3,529	4,130	3,787	1,841	349	16,004	13,713

1) Non-current assets comprise intangible assets (including goodwill), property, plant and equipment, and right-of-use assets.
Details on segment reporting are presented in note 27 "Segment Reporting."

Information on Revenue Sources (Continuing Operations)

in € millions	Own products and merchandise		Services		Advertising		Rights and licenses		Continuing operations	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Revenues from external customers	4,456	4,399	8,237	7,132	3,779	4,041	3,773	3,124	20,245	18,696

General Principles

The Bertelsmann SE & Co. KGaA Consolidated Financial Statements as of December 31, 2022, were prepared in accordance with International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) and the related interpretations (IFRIC) of the IFRS Interpretations Committee (IFRS IC) that are applicable in the European Union (EU-IFRS). The supplementary requirements set out in section 315e of the German Commercial Code (HGB) were also met. The Consolidated Financial Statements are prepared in euros. Unless otherwise stated, all amounts are given in millions of euros (€ million). For the sake of clarity, certain items in the consolidated income statement, the consolidated statement of comprehensive income, the consolidated balance sheet and the consolidated cash flow statement are combined. These items are disclosed and explained in greater detail in the notes.

Bertelsmann SE & Co. KGaA is a partnership limited by shares with its registered office in Gütersloh, Germany. It is entered in the commercial register of the Gütersloh Local Court (Amtsgericht) under HRB 9194. The address of the company's registered headquarters is: Carl-Bertelsmann-Strasse 270, 33311 Gütersloh.

Bertelsmann operates in the core business fields of media, services and education in around 50 countries worldwide. The geographic core markets are Western Europe – in particular, Germany, France and the United Kingdom – and the United States. In addition, Bertelsmann is strengthening its involvement in growth markets such as Brazil, India and China. As of December 31, 2022, the Bertelsmann divisions are RTL Group (entertainment), Penguin Random House (books), BMG (music), Arvato (services), Bertelsmann Printing Group (printing), Bertelsmann Education Group (education) and Bertelsmann Investments (international network of funds). As of January 1, 2022, Gruner + Jahr is no longer reported as an independent division. The German magazine businesses and brands have been part of the RTL Group division since the beginning of the year. The remaining Gruner + Jahr activities (particularly Territory, the AppLike Group, DDV Mediengruppe and the investment in the Spiegel Group) were allocated to the Bertelsmann Investments division. Further explanations are presented in note 27 "Segment Reporting." Further information on the main activities of Bertelsmann SE & Co. KGaA and its subsidiaries is presented in detail in the Combined Management Report.

Impact of New Financial Reporting Standards

The initial application of new financial reporting standards and interpretations had no material impact on the Bertelsmann Group.

Impact of Issued Financial Reporting Standards That Are Not Yet Effective

The Bertelsmann Group has not opted for early adoption of any additional standards, interpretations or amendments that have been issued by the IASB or the IFRS IC but are not yet mandatory. The expected impact from the issued financial reporting requirements that are not yet effective is not material to the Bertelsmann Group.

The reform of interest rate benchmarks (so-called IBOR reform) is not expected to have any material impact on the financial position and financial performance. Bertelsmann is particularly affected with regard to the hedging of interest rate and currency risks insofar as derivative financial instruments reference certain interest reference rates (for example EURIBOR, USD-LIBOR). Bertelsmann will continuously monitor further developments in the context of the IBOR reform and initiate any necessary measures at an early stage.

Impact of External Events on the Consolidated Financial Statements

Despite external events such as geopolitical tensions, the Bertelsmann Group's core businesses performed robustly in the financial year 2022, which was reflected in an overall increase in revenues. The economic challenges and associated uncertainties have been and will continue to be regularly monitored by management from the outset in order to intervene at an early stage if necessary. The balance sheet effects were therefore continuously analyzed for the particularly relevant issues, which are impairment of goodwill and individual assets, leasing, royalties to authors, program rights, inventories, trade receivables, deferred tax assets, contingent losses and revenues. As a result of the current business development, in view of the economic uncertainties, an impairment loss was recognized on the goodwill of a cash-generating unit within the Bertelsmann Printing Group division. In addition, in light of the geopolitical and economic situation in Russia, impairment losses were recognized on assets located in Russia in the Arvato division, although these are of minor significance to the Bertelsmann Group. Furthermore, no significant negative effects on the financial position or financial performance of the Bertelsmann Group are currently expected for the accounting areas classified as vulnerable.

The assessments are based on judgments, estimates and assumptions that contain additional uncertainties in the current situation characterized by geopolitical and economic challenges. Management is of the opinion that these uncertainties have been taken into account to an adequate degree.

Consolidation

Principles of Consolidation

The Bertelsmann Consolidated Financial Statements include the financial statements of the parent company and its subsidiaries, joint ventures and associates. In addition, a special fund is included in the consolidated financial statements as a structured entity.

Subsidiaries are companies controlled by Bertelsmann SE & Co. KGaA in accordance with IFRS 10. Consolidation begins on the date on which the ability to exercise control exists, and ends when Bertelsmann loses the ability to exercise control. Profit or loss and each component of total comprehensive income are attributed to the shareholders of the parent company and the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. In accordance with IFRS 3, business combinations are accounted for using the acquisition method. Non-controlling interests are measured at the proportionate fair value of the assets and liabilities. If the consideration transferred for the business combination or the fair values attributable to the identifiable assets and liabilities of the company acquired can only be identified preliminarily on the date of initial accounting, the business combination is accounted for using these preliminary values. Initial accounting is completed in accordance with IFRS 3.45, taking into account the maximum one-year measurement period. Comparative information for reporting periods prior to the completion of initial accounting is presented as if it had already been completed on the acquisition date. Changes in the parent's ownership interest in a subsidiary that do not lead to a loss of control are accounted for as equity transactions. After the loss of control of a subsidiary, it is deconsolidated in accordance with the requirements of IFRS 10.25 in conjunction with IFRS 10.B98 f. Any investment retained in the former subsidiary, as well as any amounts owed by or to the former subsidiary, are accounted for in accordance with the applicable IFRSs from the date when control is lost.

Joint ventures in accordance with IFRS 11 and associates are included in the Consolidated Financial Statements using the equity method in accordance with IAS 28. Associates are companies over which Bertelsmann exercises a significant influence. This is generally the case for voting rights between 20 percent and 50 percent. Smaller shareholdings are accounted for using the equity method if there is a significant influence in accordance with IAS 28.6. When changing the accounting treatment of investments to the equity method, IFRS 3 is applied correspondingly so that the fair value of the previously held interest is used in determining the cost of the investment accounted for using the equity method on the transition date. The difference between the fair value and the carrying amount of the previously held interest is recognized in profit or loss. The portfolio of investments held by the venture capital business of the Bertelsmann Investments division includes, among others, investments in associates recognized at fair value through profit or loss in accordance with IAS 28.18 in conjunction with IFRS 9. When applying the equity method to an associate or a joint venture that is an investment entity, Bertelsmann, which is a non-investment entity, generally retains as investor the fair value measurement applied by the associate or joint venture to its interests in subsidiaries.

Bertelsmann SE & Co. KGaA invests in a special fund in order to diversify the capital investment strategy. This fund is a structured entity in accordance with IFRS 10. The fund's activity is governed by the agreed investment requirements. The results generated by the fund are in general attributable to Bertelsmann SE & Co. KGaA as the sole investor.

The Bertelsmann Group recognizes immaterial investments in accordance with IFRS 9.

Scope of Consolidation

As of December 31, 2022, Bertelsmann is the majority shareholder of RTL Group, with an interest of 76.3 percent. Penguin Random House, BMG, Arvato, the Bertelsmann Printing Group, the Bertelsmann Education Group and Bertelsmann Investments are each wholly owned by Bertelsmann. As of January 1, 2022, Gruner + Jahr is no longer reported as an independent division. Further details are presented in note 27 "Segment Reporting."

Composition of Scope of Consolidation

	Subsidiaries		Joint ventures[2]		Associates[2]		Total	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021	12/31/2022	12/31/2021	12/31/2022	12/31/2021
RTL Group	336	264	11	9	24	22	371	295
Penguin Random House	116	118	–	–	1	1	117	119
Gruner + Jahr	n/a	62	n/a	–	n/a	3	n/a	65
BMG	63	67	–	–	–	–	63	67
Arvato	212	189	4	4	2	2	218	195
Bertelsmann Printing Group	34	35	1	1	–	–	35	36
Bertelsmann Education Group	57	20	–	–	4	4	61	24
Bertelsmann Investments	60	18	–	–	1	1	61	19
Corporate[1]	40	39	–	–	–	–	40	39
Total	918	812	16	14	32	33	966	859

1) Including Bertelsmann SE & Co. KGaA and the special fund.
2) The joint ventures and associates included in the table are investments accounted for using the equity method.

Changes in Scope of Consolidation

	Germany	France	United Kingdom	Other European countries	United States	Other countries	Total
Consolidated as of 12/31/2021	250	96	124	199	67	123	859
Additions	6	6	42	23	26	70	173
Disposals	14	5	–	26	3	18	66
Consolidated as of 12/31/2022	242	97	166	196	90	175	966

A total of 162 (previous year: 174) companies were excluded from the scope of consolidation. These consist of the associates in the venture capital business of the Bertelsmann Investments division and entities without significant business operations and of negligible importance for the financial position and financial performance of the Bertelsmann Group. The complete list of the Bertelsmann Group's shareholdings will be published in the "Bundesanzeiger" ("Federal Gazette") as an annex to these Consolidated Financial Statements in accordance with section 313 (2) of the German Commercial Code (HGB) and will be available at the General Meeting.

Acquisitions and Disposals

In the financial year 2022, the cash flow from acquisition activities totaled €-264 million (previous year: €-255 million), of which €-215 million (previous year: €-188 million) related to new acquisitions during the reporting period less cash and cash equivalents acquired and €-49 million related to payments in connection with acquisitions made in previous years.

The consideration transferred in accordance with IFRS 3 amounted to a total of €600 million (previous year: €253 million), taking into account contingent consideration of €47 million (previous year: €2 million). Furthermore, put options were recognized in the amount of €149 million (previous year: €40 million) in connection with the acquisitions made by the RTL Group division and a forward in the amount of €1 million (previous year: €0 million) was recognized in connection with an acquisition made by the Penguin Random House division.

In February 2022, Majorel signed an agreement to acquire 12 of Booking.com's 14 internal customer experience (CX) service centers in Europe, Asia Pacific and North America. In accordance with IFRS 3, the acquisition date was June 1, 2022. The expanded strategic partnership with Booking.com enables Majorel to expand its geographic footprint into new countries and also to further consolidate its existing presence in the other markets. The consideration transferred amounted to €65 million and was fully paid in cash. The negative difference between the consideration transferred and the fair value attributable to the identifiable assets and liabilities, resulting from the preliminary purchase price allocation, amounting to €3 million, was recognized in profit or loss. In the financial year 2022, transaction-related costs amounted to €1 million and have been recognized in profit or loss as other operating expenses. Since initial consolidation, the CX service centers have contributed €63 million to revenue and €4 million to Group profit or loss.

In March 2022, Fremantle, which belongs to RTL Group, acquired 70 percent of the shares in Lux Vide, Italy's leading independent television production company. The acquisition of Lux Vide forms part of Fremantle's growth strategy to invest in premium production companies, content creators and talents from around the world developing and securing original formats and exclusive intellectual property. The consideration transferred amounted to €43 million and was fully paid in cash. The purchase price allocation resulted in goodwill of €8 million, mainly reflecting the expertise of the management and synergy potential with Fremantle. Goodwill is not tax deductible and was allocated to the cash-generating unit Fremantle. Further, in connection with the acquisition, put options on the remaining 30 percent of the shares were recognized for an amount of €32 million through equity for the present value of the redemption amount. In the financial year 2022, transaction-related costs amounted to €1 million and have been recognized in profit or loss as other operating expenses. Since initial consolidation, Lux Vide has contributed €56 million to Group revenue and €6 million to Group profit or loss. If consolidated as of January 1, 2022, Lux Vide would have contributed €67 million to Group revenue and €7 million to Group profit or loss.

In May 2022, Fremantle also acquired 51 percent of the shares in Element Pictures, the production company behind the Academy Award, Golden Globe and BAFTA-winning films "The Favourite" and "Room", the global drama "Normal People", and the mini-series "Conversations With Friends." The acquisition of Element Pictures also forms part of Fremantle's growth strategy to invest in premium production companies, content and talents around the world to source the best creative ideas, and to develop and create strong and exclusive intellectual property. The consideration transferred amounted to €56 million and comprises a purchase price payment already made in the amount of €46 million and a contingent consideration in the amount of €10 million. The purchase price allocation resulted in goodwill of €51 million, mainly reflecting synergies with Fremantle and international distribution growth opportunities. Goodwill is not tax deductible and was allocated to the Fremantle cash-generating unit. Further, in connection with the acquisition, put options on the remaining 49 percent of the shares were recognized for an amount of €54 million through equity for the present value of the redemption amount. In the financial year 2022, transaction-related costs amounted to €1 million and have been recognized in profit or loss as other operating expenses. Since initial consolidation, Element Pictures has contributed €51 million to Group revenue and €5 million to Group profit or loss. If consolidated as of January 1, 2022, Element Pictures would have contributed €66 million to Group revenue and €-2 million to Group profit or loss.

In May 2022, Bertelsmann, acting through Bertelsmann Education Group, increased its interest in Nasdaq-listed education company Afya, the leading provider of medical education and training and digital solutions for medical practitioners in Brazil. The acquisition strengthens Bertelsmann Education Group's focus on healthcare education and gives Bertelsmann access to the high-growth and high-margin Brazilian healthcare market through Afya, the market leader in this area of a consolidating Brazilian higher education market. Following the acquisition of six million Class B shares for an amount of €147 million from the founding family (the Esteves family), Bertelsmann increased its voting rights in Afya initially from 46 percent to 58 percent. After obtaining control, Bertelsmann was able to purchase additional Class A shares (approximately 7.2 million) on the stock exchange and from employees of the company, thus further increasing its shareholding. As of the reporting date, the interest amounts to 40 percent of the shares under company law and 59 percent of the voting rights. As a result of obtaining control, the investment, which was previously accounted for using the equity method, has been consolidated from the date of acquisition. The consideration transferred amounted to €147 million. Obtaining control led to the derecognition of the investment previously accounted for using the equity method, the fair value of which amounted to €501 million immediately before the acquisition date. The overall effect from the remeasurement of the investment already held and the reclassification of all currency translation differences previously recognized in the Group's other comprehensive income is immaterial. The preliminary purchase price allocation resulted in goodwill of €418 million, mainly reflecting the future growth potential from the further expansion of the company's market position in Brazil. Goodwill is not tax-deductible and represents a separate cash-generating unit within the Bertelsmann Education Group division. In the financial year 2022, transaction-related costs were immaterial and have been recognized in profit or loss as other operating expenses. Since initial consolidation, Afya has contributed €288 million to revenue and €21 million to Group profit or loss. If consolidated as of January 1, 2022, Afya would have contributed €428 million to revenue and €47 million to Group profit or loss.

In November 2022, Fremantle acquired 55 percent of the shares in 72 Films, an independent TV production company focusing on documentaries and factual entertainment. The acquisition further underlines Fremantle's strategic plan to invest in and help develop premium production companies with exceptional creative talents. The consideration transferred amounted to €51 million, of which €44 million was paid in cash. The earn-out consideration amounted to €7 million. The preliminary purchase price allocation, which is at a very early stage, resulted in provisional goodwill of €50 million, mainly reflecting the expertise of the management and synergy potential with Fremantle. Goodwill is not tax deductible and was allocated to the cash-generating unit Fremantle. Further, in connection with the acquisition, put options on the remaining 45 percent of the shares were recognized for an amount of €39 million through equity for the present value of the redemption amount. In the financial year 2022, transaction-related costs amounted to €1 million and have been recognized in profit or loss as other operating expenses. Since initial consolidation, 72 Films has contributed €3 million to Group revenue and an immaterial amount to Group profit or loss. If consolidated as of January 1, 2022, 72 Films would have contributed €25 million to Group revenue and €2 million to Group profit or loss.

In addition, the Bertelsmann Group made several acquisitions in the financial year 2022, none of which was material on a stand-alone basis. In total, the impact of these acquisitions on the Group's financial position and financial performance was also minor. Payments net of acquired cash and cash equivalents amounted to €-98 million; the consideration transferred in accordance with IFRS 3 for these acquisitions amounted to €238 million taking into account contingent consideration of €30 million. The other acquisitions resulted in goodwill totaling €173 million, which reflects synergy potential and is not tax-deductible. Transaction-related costs amounted to €3 million in the financial year 2022 and have been recognized in profit or loss as other operating expenses.

The preliminary purchase price allocations consider all the facts and circumstances prevailing as of the respective dates of acquisition that were known prior to preparation of the Consolidated Financial Statements. In particular, the valuations have not yet been finalized. Therefore, the fair values of identifiable assets – especially intangible assets – and liabilities acquired have only been determined provisionally. The accounting for the acquisitions will be finalized within the 12-month measurement period in accordance with IFRS 3, based on facts and circumstances that existed at the date of gain of control, and the purchase price allocations will be adjusted accordingly.

In accordance with IFRS 3, the fair values of the identifiable assets, liabilities and contingent liabilities acquired are measured primarily using the market price-oriented method. According to this method, assets and liabilities are measured at the prices observed in active markets. If measurement using the market price-oriented method is not feasible, as a rule the capital value-oriented method is to be applied. According to that method, the fair value of an asset or a liability corresponds to the present value of the future cash inflows or outflows (cash flows).

The following table shows the fair values of the assets and liabilities of the acquisitions on their dates of initial consolidation based on the purchase price allocations, some of which are currently preliminary:

Effects of Acquisitions

in € millions	CX service centers	Lux Vide	Element Pictures	Afya	72 Films	Other	Total
Non-current assets							
Other intangible assets	4	10	13	940	–	68	1,035
Property, plant and equipment and right-of-use assets	12	17	2	217	1	13	262
Trade and other receivables	–	–	–	35	–	–	35
Other non-current assets	2	–	1	32	2	1	38
Current assets							
Inventories	–	42	72	3	12	39	168
Trade and other receivables	32	37	4	78	4	37	192
Other current assets	4	28	–	14	1	12	59
Cash and cash equivalents	80	3	20	118	7	48	276
Liabilities							
Provisions for pensions and similar obligations	(1)	–	–	–	–	(4)	(5)
Financial debt	–	(32)	(7)	(262)	–	(8)	(309)
Lease liabilities	(13)	(5)	(1)	(142)	–	(9)	(170)
Other financial and non-financial liabilities	(52)	(50)	(93)	(310)	(25)	(117)	(647)
Net assets acquired	68	50	11	723	2	80	934
Goodwill (+)/gains from business combinations (-)	(3)	8	51	418	50	173	697
Non-controlling interests	–	(15)	(6)	(493)	(1)	(11)	(526)
Fair value of pre-existing interests	–	–	–	(501)	–	(4)	(505)
Consideration transferred according to IFRS 3	65	43	56	147	51	238	600
Less advance payments of the previous year	–	–	–	–	–	(58)	(58)
Less deferred payments	–	–	–	–	–	(7)	(7)
Less contingent consideration	–	–	(10)	–	(7)	(30)	(47)
Consideration paid in cash	65	43	46	147	44	143	488
Cash and cash equivalents acquired	(80)	(3)	(20)	(118)	(7)	(48)	(276)
Repaid financial debt	–	–	–	–	–	3	3
Cash outflow from acquisitions in accordance with IFRS 3	(15)	40	26	29	37	98	215
Payments on prior year's acquisitions							49
Total cash flow from acquisition activities							264

On the acquisition date, the fair value of the acquired receivables was €228 million. Of that amount, €163 million is attributable to trade receivables and €65 million to other receivables. Trade receivables were impaired in the amount of €13 million, so that the gross amount is €176 million. The other receivables are impaired only to an insignificant extent, so that the fair value corresponds to the gross amount.

Since initial consolidation, all new acquisitions made in the financial year 2022 in accordance with IFRS 3 have contributed €559 million to revenue and €31 million to Group profit or loss. If consolidated as of January 1, 2022, these would have contributed €926 million to revenue and €57 million to Group profit or loss.

In March 2022, RTL Group sold its interests held in RTL Belgium. The disposal resulted in net cash inflows of €154 million. Net of transaction-related costs, the transaction resulted in an overall gain of €58 million recognized in the item "Results from disposals of investments."

In June 2022, RTL Group sold its interests held in RTL Croatia for €41 million net of cash disposed of. Net of transaction-related costs, the transaction resulted in an overall gain of €16 million recognized in the item "Results from disposals of investments." In addition, RTL Group has agreed to a long-term trademark licensing agreement with the buyer.

After considering cash and cash equivalents disposed of, the Bertelsmann Group recorded cash flows in the amount of €197 million (previous year: €851 million) from all disposals. The disposals resulted in a gain from deconsolidation of €54 million (previous year: €821 million), which is recognized in the item "Results from disposals of investments." The following table shows their impact on the Bertelsmann Group's assets and liabilities at the time of deconsolidation:

Effects of Disposals

in € millions	RTL Belgium	RTL Croatia	Other	Total
Non-current assets				
Goodwill	76	–	2	78
Other intangible assets	3	4	1	8
Property, plant and equipment and right-of-use assets	40	9	3	52
Other non-current assets	5	2	1	8
Current assets				
Inventories	28	16	5	49
Other current assets	54	15	16	85
Cash and cash equivalents	51	2	7	60
Liabilities				
Provisions for pensions and similar obligations	15	–	–	15
Lease liabilities	26	5	1	32
Other financial and non-financial liabilities	67	18	15	100

Discontinued Operations

Earnings after taxes from discontinued operations of €3 million comprise follow-on effects related to the disposal of companies of the former Direct Group division.

Assets Held for Sale and Liabilities Related to Assets Held for Sale

The carrying amounts of the assets classified as held for sale and related liabilities are presented in the following table:

Assets Held for Sale and Related Liabilities

in € millions	Total as of 12/31/2022	Total as of 12/31/2021
Assets		
Non-current assets		
Goodwill	–	77
Other intangible assets	–	7
Property, plant and equipment and right-of-use assets	18	46
Investments accounted for using the equity method	123	–
Deferred tax assets	–	4
Current assets		
Inventories	–	27
Trade and other receivables	–	64
Other current assets	–	7
Cash and cash equivalents	–	24
Impairment on assets held for sale	–	(2)
Assets held for sale	141	254
Equity and liabilities		
Non-current liabilities		
Provisions for pensions and similar obligations	–	15
Lease liabilities	–	23
Current liabilities		
Lease liabilities	–	5
Trade and other payables	–	51
Other current liabilities	–	21
Liabilities related to assets held for sale	–	115

As of December 31, 2022, the carrying amounts of the assets classified as held for sale and related liabilities are mainly attributable to the Arvato division. They relate to the shares in informa Solutions GmbH, which is accounted for using the equity method and is reported as an asset classified as held for sale in accordance with IFRS 5. The transaction with a consideration of €123 million was completed in January 2023. Prior to the classification of the investment as an asset held for sale, an impairment loss of €2 million was recognized on the investment.

Further assets classified as held for sale relate to properties within the Bertelsmann Printing Group division as of December 31, 2022.

As of December 31, 2021, the carrying amounts of the assets classified as held for sale and related liabilities were mainly attributable to the RTL Group division.

Other Disclosures on Portfolio Initiatives

In the reporting period and subsequent months, the following decisions were made regarding planned transactions. The announced mergers of Groupe M6 and Groupe TF1 in France, and of RTL Nederland and Talpa Network in the Netherlands, will no longer be pursued after the competent antitrust authorities in the relevant countries have objected to or prohibited, respectively, the said transactions. Majorel and Sitel also ended talks regarding a possible merger after failing to reach a final agreement. Furthermore, Bertelsmann announced that the Group no longer intends to pursue the previously planned merger of Penguin Random House and Simon & Schuster after the US District Court in Washington, D.C., enjoined the transaction. The contractually agreed "regulatory termination fee" in the amount of US$200 million was paid to Paramount Global in the reporting period.

Foreign Currency Translation

Transactions denominated in a currency other than a subsidiary's functional currency are recognized in the functional currency at the exchange rate applicable on the day of their initial accounting. At the end of the reporting period, monetary assets and liabilities denominated in foreign currency are revalued into the functional currency using the closing rate applicable at that time. As a rule, gains and losses from these foreign currency translations are recognized in profit or loss. Non-monetary balance sheet items in foreign currency are carried at the historical exchange rate.

The financial statements of subsidiaries, joint ventures and associates that were prepared in foreign currencies are translated into euros using the functional currency concept set out in IAS 21 before they are included in the Consolidated Financial Statements. Assets and liabilities are translated into the reporting currency at the closing rate at the end of the reporting period, while income statement items are translated at the average rate for the financial year. Foreign currency translation differences are recognized in other comprehensive income. Such differences arise from translating items in the balance sheet at a closing rate that differs from the previous closing rate, and from using the average rate for the period and the closing rate at the end of the reporting period to translate the Group profit or loss. At the time of deconsolidation of Group companies, the respective accumulated exchange differences recognized in other comprehensive income and accumulated in a separate component of equity are reclassified from equity to profit or loss. The following euro exchange rates were used for currency translation purposes for the most significant foreign currencies for the Bertelsmann Group:

Euro Exchange Rates for Significant Foreign Currencies

		Average rates		Closing rates	
Foreign currency unit per €1		2022	2021	12/31/2022	12/31/2021
Australian dollar	AUD	1.5162	1.5745	1.5693	1.5615
Canadian dollar	CAD	1.3709	1.4828	1.4440	1.4393
Chinese renminbi	CNY	7.0920	7.6272	7.3582	7.1947
British pound	GBP	0.8520	0.8596	0.8869	0.8403
US dollar	USD	1.0530	1.1827	1.0666	1.1326
Brazilian real	BRL	5.4411	6.3807	5.6386	6.3101

In the financial year 2022, Argentina and Turkey are classified as hyperinflationary in the sense of IAS 29. The financial statements of the significant investment by Majorel in Turkey, which was initially consolidated as of January 1, 2022, were prepared in accordance with IAS 29. The effects amounted to €28 million, resulting mainly from the recognition of step-ups and goodwill. The translation effect amounts to €-13 million and is shown as a currency effect in other comprehensive income. The application of IAS 29 resulted in a loss from the net position of monetary items in the amount of €2 million recognized under other financial expenses for the reporting year. The consumer price index of the Turkish Statistical Institute was used to adjust the purchasing power effects. The effects from the possible application of IAS 29 to the other consolidated subsidiaries in Argentina and Turkey are immaterial overall for the Bertelsmann Consolidated Financial Statements 2022.

Accounting and Measurement Policies

Recognition of Income and Expense

Revenues from contracts with customers are recognized in accordance with IFRS 15. Under this standard, a contract-based five-step model is used to first identify and distinguish the relevant contracts with customers. In a next step, the separate performance obligations explicitly or implicitly stipulated in the contract are identified, and the contract is examined for fixed and variable consideration in order to use this as a basis for determining the respective transaction price. In doing so, constraining estimates of variable consideration are adequately taken into account. If more than one separate performance obligation is identified in a contract, the transaction price is then allocated to the identified performance obligations using the method of relative stand-alone selling prices, which are generally determined as prices on the markets relevant for the respective customers. Revenue recognition occurs upon satisfaction of the performance obligation either at a point in time or over time, depending on the underlying business model. If necessary, the extensive principal-agent considerations presented in IFRS 15 are also adequately taken into account in analyzing the contracts.

The prioritization of the five steps depends on the design of the underlying business model. Based on the underlying revenue sources in the Bertelsmann Group, the following key aspects are taken into consideration for revenue recognition:

- Own products and merchandise: As a rule, the revenues resulting from these contracts are recognized at a point in time when control is transferred. Depending on the underlying respective terms of sale, this is generally upon delivery to the customer. Expected returns from sales of products, mainly from physical books and magazines, are shown as liabilities in the balance sheet position "Trade and other payables." Return assets are presented in the balance sheet position "Other non-financial assets." In individual business models at RTL Group, giveaways to customers meet the criteria of a separate performance obligation. Any giveaways to an agent are capitalized as costs to obtain a contract and are amortized over the expected term of the subscription.
- Services: Services are generally rendered over a period of time, and the revenue is recognized based on an appropriate output method or input method for measuring progress. If permissible, revenues are recognized in the amount of the invoice if this amount corresponds to the value of the performance provided. Revenue from financial services is presented separately as revenue if it results primarily from interest rate effects.

- Advertising: Advertising services are generally rendered over a period of time, and the revenue is recognized based on an appropriate output method for measuring progress. If several performance obligations are identified in an advertising contract, the transaction price is allocated on the basis of the relative stand-alone selling prices.
- Rights and licenses: The timing of revenue recognition for business models generating revenue from licenses depends on whether the license represents a right to access the intellectual property through the entire licensing period or a right to use when the license is granted. In particular, the underlying contracts are analyzed to determine whether the customer is exposed to significant changes to the intellectual property or whether the intellectual property remains in the condition defined upon entering into the contract throughout the term of the contract with regard to its content and scope. While revenues from licenses granted for a right to use are realized at the date of the transfer of control, revenues from licenses for rights to access are realized over a period of time throughout the term of the contract. The majority of licenses granted in the TV business represent a right to use the intellectual property at the date the license is granted. As a result, revenue is recognized at the point in time the license is granted to the licensee. In contrast, rights to access are used extensively in the music business, and these revenues recognized are throughout the term of the contract.

IFRS 15 stipulates some practical expedients of which the following are applied in the Bertelsmann Group:
- Costs of obtaining contracts are not capitalized if the underlying asset is amortized in no more than 12 months.
- The value of consideration is not adjusted for the effects of a material financing component if the financing component pertains to a period of no more than 12 months.
- For contracts with an original duration of not more than 12 months and for contracts for which revenue can be recognized according to the amount invoiced for simplification purposes, no disclosure of the aggregated transaction price is provided.

Payments received before satisfaction of the corresponding performance obligation are recognized as a contract liability. If contractual provisions make the invoicing of services completed to date causally dependent on the need to provide further goods or services, a contract asset is recognized. Receivables from contracts with customers are generally due in less than 12 months.

Interest income and expenses relating to financial assets measured at amortized cost are recognized on an accrual basis using the effective interest method in accordance with IFRS 9. Dividends are only recognized in profit or loss when the right to receive payment of the dividend is established. Other income is recognized when the economic benefits are probable and the amount can be measured reliably. Expenses are deferred on the basis of underlying facts or the period of time to which they relate.

Goodwill

In accordance with IFRS 3, goodwill resulting from a business combination is initially recognized at cost, with subsequent recognition at cost less accumulated impairment losses. Goodwill is subject to impairment testing at least annually in accordance with IAS 36. In the Bertelsmann Group, goodwill is tested for impairment as outlined in the section "Impairment."

Other Intangible Assets

Non-current, internally generated intangible assets are capitalized at cost in accordance with IAS 38 if the corresponding requirements have been met. Intangible assets acquired separately are carried at cost less accumulated amortization and accumulated impairment losses, also in accordance with IAS 38. Intangible assets acquired as part of a business combination are initially recognized at fair value on the acquisition date in accordance with IFRS 3. Intangible assets with finite useful life are amortized on a straight-line basis over their estimated useful life. Impairment and reversals are determined by applying the requirements for impairment testing in accordance with IAS 36. As a rule, capitalized software has a useful life of between three and five years. Acquired customer relationships are amortized over a period of two to 15 years, while the amortization period for trademarks and music and publishing rights is three to 25 years. Licenses are amortized on a straight-line basis over the term of the license agreement, assumed useful life or depending on performance (based on the ratios of income from use generated in the reporting period to the estimated total income from use over the entire useful life). Intangible assets with indefinite useful life are not amortized. Instead, they are subject to at least annual impairment testing in accordance with IAS 36 and, if applicable, written down to their recoverable amount.

Property, Plant and Equipment

Items of property, plant and equipment are accounted for in accordance with IAS 16 and carried at cost less accumulated depreciation and accumulated impairment losses. Depreciation is determined on a straight-line basis over the estimated useful life of the asset. In the financial year 2022, depreciation was generally based on the following useful lives:
- buildings: 10 to 50 years
- technical equipment and machinery: four to 15 years
- other equipment, fixtures, furniture and office equipment: three to 15 years

Land is not subject to depreciation.

Impairment

Goodwill and intangible assets with indefinite useful life are tested for impairment in accordance with IAS 36 annually as of December 31 and if a triggering event occurs. Intangible assets with a finite useful life as well as property, plant and equipment and right-of-use assets are tested for impairment at the end of each reporting period in accordance with IAS 36 only if there are any indications of impairment. An impairment loss in accordance with IAS 36 has occurred when the carrying amount of an asset or cash-generating unit exceeds its recoverable amount. The recoverable amount is the higher of fair value less costs of disposal and value in use. Fair value less costs of disposal and value in use are generally determined using the discounted cash flow method, which is based on future cash flow forecasts, which are part of company forecasts. Corresponding to the consideration of the right-of-use assets recognized in the balance sheet for determining the carrying amount, the lease payments are not deducted when determining the recoverable amount. For assets held for sale, only the fair value less costs to sell is used as a basis for comparison.

For determining the value in use, estimated future cash inflows or outflows from future restructurings or from improvement or enhancement of the cash-generating units' performance are excluded unless, as of the end of the reporting period, the cash-generating unit is committed to the restructuring and related provisions have been made. If an active market exists, the market price or, if applicable, the price in the most recent comparable transaction, is used for fair value measurement. If there is no active market, the fair value less costs of disposal is generally calculated using the discounted cash flow method. If it is not possible to allocate cash flows to assets, the relevant impairment losses are determined on the basis of cash flows attributable to the cash-generating unit to which the assets belong. Projected cash flows are based on internal estimates for three detailed planning periods. Generally, two further detailed planning periods are applied in addition. For periods beyond this detailed horizon, a perpetual annuity is recognized, taking into account individual business-specific growth rates. Discounting is generally based on the weighted average cost of capital (WACC) after tax. Specific WACCs are derived for cash-generating units with different risk profiles. The Bertelsmann Group performs sensitivity analyses on the cash-generating units, especially on those where the headroom between the recoverable amount and the carrying amount is low.

If the reasons for an impairment loss recognized in prior periods no longer exist, the impairment loss is reversed up to a maximum of the carrying amount of the respective asset if the impairment loss had not been recognized. The latter does not apply to goodwill. The impairment loss and reversals of impairment losses are both recognized immediately in profit or loss.

Leases

Generally, for all leases with the Bertelsmann Group as a lessee the related contractual rights and obligations are recognized on the balance sheet as a right-of-use asset and a lease liability. On the date of initial accounting, lease liabilities are recognized at the present value of the outstanding lease payments. The lease payments include fixed payments less any lease incentives due from the lessor, variable lease payments linked to an index or a rate, amounts expected to be payable under residual value guarantees, the exercise price of a purchase option if the exercise is reasonably certain and penalty payments for terminating the lease, if the lease term reflects the exercise of the termination option. Variable lease payments linked to sales are recognized in profit or loss in the period when the conditions for the payments have been met. The present value is determined using maturity-, currency- and risk-specific incremental borrowing rates. Subsequent measurement of a lease liability includes the increase of the carrying amount to reflect interest on the lease liability and reducing the carrying amount to reflect the lease payments made. Right-of-use assets are measured at cost less any accumulated depreciation and accumulated impairment losses. Cost comprises the amount of lease liabilities recognized, the initial direct costs and the lease payments made at or before the commencement date of the lease, less any lease incentives received. The right-of-use asset is depreciated on a straight-line basis over the shorter of the useful life or lease term. Short-term leases with a lease term of up to one year, and leases for low-value assets for which the Bertelsmann Group does not recognize right-of-use assets or lease liabilities, constitute an exception. For such leases, the payments are recognized on a straight-line basis as expenses in the income statement under "Other operating expenses." If, in the context of sale-and-leaseback transactions, control of an underlying asset is transferred as defined in IFRS 15, the Bertelsmann Group as the seller and lessee recognizes the asset in the amount of the proportional right of use retained. The gain or loss from the sales transaction as the proportional amount of the rights transferred to the lessor is recognized through profit or loss in the item "Other operating income" or "Other operating expenses."

Financial Assets

In accordance with the IFRS 9 classification and measurement approach for financial assets, there are three classification categories for financial assets in the Bertelsmann Group:

- at amortized cost,
- at fair value with changes in fair value through other comprehensive income (FVOCI) and
- at fair value with changes in fair value through profit or loss (FVTPL).

The allocation to the respective classification categories is based on the following criteria:

- the entity's business model for managing the financial assets and
- contractual cash flow characteristics of the financial asset.

Financial assets (with the exception of trade receivables without a significant financing component) are recognized initially at fair value, taking into account transaction costs that are directly attributable to the acquisition of the financial asset. Financial assets are recognized on the settlement date of the transaction. Transaction costs of financial assets recognized at fair value through profit or loss are immediately expensed in profit or loss. Trade receivables without a significant financing component are initially recognized at their transaction price.

Subsequent measurement of financial instruments depends on the classification categories:

- At amortized cost: Financial assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest on the principal amount outstanding are measured at amortized cost. This category mainly comprises trade receivables and other financial receivables. Any gain or loss arising on derecognition and impairment losses are recognized directly in profit or loss.
- FVOCI: Financial assets that are held for collection of contractual cash flows and for selling, where the assets' cash flows represent solely payments of principal and interest on the principal amount outstanding, are measured at fair value with changes in fair value through other comprehensive income. The Bertelsmann Group held no debt instruments measured at fair value through other comprehensive income. Bertelsmann exercises the option for measurement of equity instruments at fair value through other comprehensive income mainly for individual immaterial investments. With deferred taxes taken into consideration, the gains and losses resulting from fluctuations in the fair value of these equity instruments are recognized through other comprehensive income. Gains and losses from the fair value are not reclassified to profit or loss after derecognition of the equity instruments. Dividends from such equity instruments continue to be recognized in profit or loss.
- FVTPL: Financial assets that do not meet the criteria for amortized cost or FVOCI are measured at fair value through profit or loss. Gains and losses resulting from fluctuations in fair value are recognized in profit or loss.

Impairment and measurement of expected credit losses:
Bertelsmann applies the expected credit loss (ECL) model in accordance with IFRS 9 for debt instruments at amortized cost and for contract assets. Accordingly, the amount of expected credit losses recognized as a loss allowance depends on the extent to which the default risk has increased since initial recognition. According to the so-called general approach, a distinction is made between the following two measurement bases:

- 12-month ECL: At initial recognition and if the default risk has not increased significantly from the initial recognition of the debt instrument, a loss allowance is recognized for expected credit losses within the next 12 months.
- Lifetime ECL: If the default risk has increased significantly, a loss allowance for expected credit losses is recognized for the entire life of the debt instrument.

Appropriate quantitative and qualitative information and analyses based on the Group's historical experience and reasonable assessments, including forward-looking information such as customer-specific information and forecasts of future economic conditions, are taken into consideration when determining the credit risk. When a financial asset is more than 30 days past due, its credit risk is assumed to have increased significantly. A default of a financial asset is assumed at the latest when the counterparty fails to make contractual payments within 90 days of when they fall due, unless reasonable and supportable information is available that justifies a different time of overdue payment. The Group assesses whether a financial asset is credit-impaired at the end of each reporting period. This is the case when one or more events that have a detrimental impact on the expected future cash flows of that financial asset have occurred. A financial asset is written off when it is no longer reasonably expected to be fully or partially recoverable.

For trade receivables and contract assets, Bertelsmann uses a simplified approach to measure expected credit losses. According to this, the loss allowance is measured using lifetime expected credit losses. For this purpose, impairment matrices based on historic bad debt losses, maturity bands and expected credit losses are prepared. The impairment matrices are created for division-specific or business unit-specific groups of receivables, each with similar default patterns. In addition, separate risk assessments are performed. Contract assets have substantially the same risk characteristics as trade receivables for the same types of contracts, so that the expected loss rates for trade receivables are also a reasonable approximation of the loss rates for contract assets.

Measurement at Fair Value

In the case of financial assets and financial liabilities measured at fair value, the valuation technique applied depends on the respective inputs present in each case. If listed prices can be identified for identical assets on active markets, they are used for measurement (level 1). If this is not possible, the fair values of comparable market transactions are applied, and financial methods that are based on observable market data are used (level 2). If the fair values are not based on observable market data, they are identified using established financial methods or on the basis of observable prices obtained as part of the most recently implemented qualified financing rounds, taking into account the life and developmental cycle of the respective entity (level 3).

Inventories

Inventories – including raw materials and supplies, finished goods, work in progress and merchandise – are accounted for in accordance with IAS 2 and recognized at the lower of historical cost or net realizable value at the end of the reporting period. Similar inventories are measured at average cost or using the FIFO (first-in, first-out) method. In addition, inventories include all short-term film, television and similar rights that are intended for broadcast or sale within the Group's normal operating cycle. In particular, this includes films and TV shows currently in production, co-productions and acquired broadcasting rights. The carrying amount of such items at the end of the reporting period is the lower of historical cost or net realizable value. The consumption of film and television rights starts from the date of initial broadcast and depends on the number of planned broadcasts. The broadcast-based consumption of film and television rights is as follows:

- Free television thematic channels: Program rights are consumed on a straight-line basis over a maximum of six runs.
- Free television other channels:
  - Blockbusters, mini-series, other films, series, TV movies and (co-)productions are consumed, run by run, over a maximum of four transmissions mainly following a degressive approach for amortization depending on the agreed total number of transmissions.
  - Soaps, in-house productions, quiz and game shows, sports and other events, documentaries and music shows are fully consumed upon the first transmission.
  - Children's programs and cartoons are consumed over the license period on a linear basis as there is a very slow saturation and a very high number of repetitions for the target group kids (three to 13 years of age).
- Pay television channels: Program rights are consumed on a straight-line basis over the license period.

The consumption of inventories and current film and television rights, changes in inventories of work in progress and finished goods as well as own costs capitalized, are recognized in the income statement in the position "Cost of materials."

Income Taxes

In accordance with IAS 12, income taxes include both current taxes on income and deferred taxes. Current income taxes are calculated on the taxable income of the financial year and on all adjustments to taxable income of previous financial years, taking into account the tax rates applicable in each case. For the calculation of current and deferred taxes, the applicable tax laws and tax jurisdictions of the respective country in which the consolidated Group companies are registered are considered.

In accordance with IAS 12, deferred tax assets and liabilities are recognized for temporary differences between the tax base and the carrying amounts shown on the IFRS consolidated balance sheet, and for as yet unused tax loss carryforwards and tax credits. Deferred tax assets are reviewed at each balance sheet date and recognized to the extent it is probable that taxable income will be available against which the deductible temporary differences, tax loss carryforwards and tax credits can be utilized. Deferred tax assets that are unlikely to be realized within a clearly predictable period are reduced by valuation allowances. Deferred tax liabilities are generally recognized for all taxable temporary differences.

Deferred taxes are not recognized for:

- temporary differences arising on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither earnings before taxes nor taxable income
- temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, where the parent entity is able to control the timing of the reversal of the temporary differences and it is probable that they will not be reversed in the foreseeable future
- taxable temporary differences on initial recognition of goodwill

The tax rates applied for computation are those expected as of the date of reversal of temporary differences and use of tax loss carryforwards or tax credits, respectively. As a rule, current and deferred taxes are recognized in profit or loss unless they relate to items recognized in other comprehensive income. In this case, current and deferred taxes are recognized in other comprehensive income.

Current and deferred income tax items are offset if there is a legally enforceable right to set off current tax assets against current tax liabilities and the tax assets and tax liabilities relate to income taxes levied by the same taxation authority.

In October 2021, more than 130 countries agreed to implement a minimum tax regime for multinational groups, known as Pillar Two, to reform the international corporate taxation. Pillar Two aims to ensure that multinational groups in scope are liable to a minimum effective corporate tax rate of 15 percent per country. In December 2021, the OECD released the Pillar Two model rules – accompanied by commentary and guidelines – which are due to be transposed into national legislation but adapted to take into account local conditions. In Europe, the individual countries enact the related law based on the latest EU directive before December 31, 2023. Management closely monitors the progress of the legislative process in each country in which the Group operates. As of December 31, 2022, the Group did not have sufficient information to determine the potential quantitative impact.

Accumulated Other Comprehensive Income

Accumulated other comprehensive income includes net exchange differences and gains and losses from the fair value measurement of equity instruments with changes through other comprehensive income (IFRS 9 classification category FVOCI) and of derivatives used to hedge future cash flows (cash flow hedges) in accordance with IFRS 9.

In addition, in accordance with IAS 28.10, changes in other comprehensive income for entities accounted for using the equity method are recognized. Remeasurement effects of defined benefit pension plans (actuarial gains and losses on the defined benefit obligation, differences between actual investment returns and the returns implied by the net interest cost on the plan assets, and effects of the asset ceiling) are recognized in the other retained earnings in the year in which these gains and losses are incurred as part of the reconciliation of total comprehensive income for the period in the statement of changes in equity. Deferred taxes on the aforementioned items are also recognized directly in equity.

Provisions

Provisions for pensions and similar obligations are calculated using the projected unit credit method in accordance with IAS 19. The net interest expense included in pension expense is recognized in the financial result. Remeasurement effects of defined benefit pension plans (actuarial gains and losses on the defined benefit obligation, differences between actual investment returns and the returns implied by the net interest cost on the plan assets, and effects of the asset ceiling) are recognized immediately in equity under other comprehensive income and are not reclassified to profit or loss in a subsequent period (recycled). With the exception of the other personnel-related provisions calculated in accordance with IAS 19, all other provisions are recognized in accordance with IAS 37. Provisions are measured in the amount of the most likely outcome. Non-current provisions are discounted. The discount rates take into account current market expectations and, if necessary in individual cases, specific risks for the liability. As a rule, income from the reversal of provisions is generally included in the income statement line item to which the provision was previously charged.

Financial Liabilities

Trade payables and other primary financial liabilities, including profit participation certificates, are initially measured at their fair value less transaction costs. Subsequent measurement is based on amortized cost using the effective interest method, unless the financial liability is classified as initially recognized at fair value through profit or loss. Future payments related to put options issued by the Bertelsmann Group on the equity interests of subsidiaries are accounted for as a financial liability. The liability is initially recognized at the present value of the redemption amount, with a corresponding charge directly to equity. In the case of a business combination with the transfer of the risks and rewards of the non-controlling interests underlying the put option to the Bertelsmann Group, the goodwill increases by a corresponding amount upon initial recognition. Subsequent measurement of liabilities from put options is recognized in profit or loss.

Derivative Financial Instruments

As set out in IFRS 9, all derivative financial instruments are recognized at fair value on the balance sheet. Derivative financial instruments are recognized as of the trade date of the transaction. When a contract involving a derivative is entered into, it is initially determined whether it serves to hedge a balance sheet item (fair value hedge) or to hedge future cash flows (cash flow hedge). Some derivatives do not meet the requirements set out in IFRS 9 for recognition as hedges, despite this being their economic purpose (stand-alone hedge).

Changes in the fair values of derivatives are recognized as follows:

- Fair value hedge: Changes in the fair value of these derivatives used to hedge assets or liabilities are recognized in profit or loss; the corresponding gain or loss on the change in fair value of the underlying balance sheet item is also directly included in the income statement.
- Cash flow hedge: The effective portion of the changes in the fair value of derivatives used to hedge future cash flows is recognized in other comprehensive income. Upon receiving an underlying non-financial asset or a non-financial liability, the amount is reclassified from accumulated other comprehensive income to the respective item. In other cases, the reclassification of the previously recognized gains and losses from equity to the income statement is performed when the hedged underlying transaction affects profit or loss. The ineffective portion of the changes in the fair value of the hedging instrument is recognized in profit or loss.
- Stand-alone hedge: Changes in the fair value of derivatives that do not meet the criteria for recognition as hedges are recognized in profit or loss.

No hedge of net investment in foreign operations was made in the financial year 2022.

Share-Based Payments

Share-based payments for employees of the Bertelsmann Group include equity-settled share-based payment transactions and cash-settled share-based payment transactions. Equity-settled share-based payment transactions are granted to certain directors and senior employees in the form of share options. The options are granted at the market price on the grant date and are exercisable at that price. For share options, the fair value of the options granted is recognized as personnel costs with a corresponding increase in equity. The fair value is measured at the grant date and allocated over the vesting period during which the employees become unconditionally entitled to the options. The fair value of the options granted is measured using a binomial option pricing model, taking into account the terms and conditions at which the options were granted. The amount recognized as an expense is adjusted to reflect the actual number of share options vesting. Share options forfeited solely due to share prices not achieving the vesting threshold are excluded. The financial liability arising under cash-settled share-based payment transactions is measured initially at fair value at grant date using an option pricing model. Until the liability is settled, its fair value shall be remeasured at the end of each reporting period and at the date of settlement, with any value changes recognized in profit or loss as personnel costs of the period.

Non-Current Assets Held for Sale and Related Liabilities

Non-current assets or disposal groups are classified as held for sale if the associated carrying amount will be recovered principally through a sale transaction and not from continued use. These non-current assets and the associated liabilities are presented in separate balance sheet positions in accordance with IFRS 5. They are measured at the lower of the carrying amount or fair value less costs to sell. Depreciation/amortization is not recognized if a non-current asset is classified as held for sale or forms part of a disposal group that is classified as held for sale. Components of entities that fulfill the requirements of IFRS 5.32 are classified as discontinued operations and thus are carried separately in the income statement and cash flow statement. All the changes in amounts made during the reporting period that are directly connected with the sale of a discontinued operation in any preceding period are also stated in this separate category. If a component of an entity is no longer classified as held for sale, the results of this entity component that were previously carried under discontinued operations are reclassified to continuing operations for all the reporting periods shown.

Significant Judgments, Estimates and Assumptions

The preparation of the Consolidated Financial Statements requires the use of accounting judgments, estimates and assumptions that may impact the carrying amounts of assets, liabilities, income and expenses recognized. Estimates and the underlying assumptions are reviewed on an ongoing basis. As a rule, adjustments to estimates are taken into account in the period in which the change is made and in future periods. Amounts actually realized may differ from estimated amounts. The following section presents accounting judgments, estimates and assumptions that are material in the Bertelsmann Consolidated Financial Statements for understanding the uncertainties associated with financial reporting:

Judgments

- Control of entities in which the Bertelsmann Group holds less than half of the voting rights: Management considers that the Bertelsmann Group has control of Groupe M6, which belongs to RTL Group, even though it holds less than 50 percent of the voting rights. RTL Group is the controlling shareholder of Groupe M6, while the balance of other holdings remains highly dispersed, and the other shareholders have not organized their interest in such a way that they intend to vote differently from the Bertelsmann Group. Furthermore, management believes that the Bertelsmann Group also controls the customer experience company Majorel, which belongs to the Arvato division, even though it holds less than 50 percent of the share voting rights. The control is founded on the Group's contractually secured majority in the Supervisory Board of Majorel, allowing the Bertelsmann Group to direct Majorel's relevant activities even after the initial public offering (IPO).
- Significant influence although the Bertelsmann Group holds less than 20 percent of the equity shares in another entity: Although the Bertelsmann Group holds less than 20 percent of the equity shares of Atresmedia, management considers that the Group exercises a significant influence on Atresmedia in view of the representation of RTL Group on the Board of Directors and other governing bodies of Atresmedia.

- Leases: Some real estate lease contracts include extension or termination options. Payments from these optional periods are included in the lease liability, provided it is reasonably certain that the lease will be extended beyond the non-cancellable lease period or that a termination option will not be exercised. In assessing whether an option to extend or terminate will be exercised, management considers all facts and circumstances that are associated with an economic incentive to exercise the option or not to exercise it. These include, in particular, the amount of lease payments compared to market prices in the optional period, completed or expected leasehold improvements, and the importance of the underlying asset to the Bertelsmann Group's operations.

Estimates and Assumptions

- Recognition of income and expense: In the event of return rights, mostly for print products, estimates must be made with regard to the anticipated return volume, as revenues are recognized taking the anticipated returns into account. Return ratios determined using statistical methods are used to identify the anticipated returns. The transaction prices to be determined using the contract-based five-step model defined in IFRS 15 often include both fixed and variable consideration. The variable components are determined on the basis of estimates, which are made and updated in accordance with constraint conditions. For various business models, qualitative estimates must be made as part of principal-agent considerations as to who is to be regarded as a customer of a Bertelsmann company and whether a Bertelsmann company is to be regarded as principal or agent in a transaction. Disclosures on anticipated returns are presented in note 23 "Liabilities."
- Investments in equity instruments: The measurement of various investments in equity instruments recognized at fair value (December 31, 2022: €1,219 million; December 31, 2021: €1,145 million) that are not based on prices quoted on active markets is based on observable prices obtained as part of the most recently implemented qualified financing rounds, taking into account the life and developmental cycle of the respective entity, or on valuations obtained on the basis of established financial methods using risk-adjusted discount rates. Further adjustments are made for financial instruments with contractual lockups. Further explanations are presented in note 25 "Additional Disclosures on Financial Instruments."
- Assumptions are also made for fair value measurement of other financial assets and financial liabilities. In this regard, Bertelsmann uses various financial methods that take into account the market conditions and risks in effect at the end of the respective reporting periods. The inputs to these models are taken from observable market data where possible, but where these are not available, fair value measurement is based on assumptions by management. These assumptions relate to inputs such as cash flows, discount rate, liquidity risk and default risks. If a right to early termination or repayment exists for financial debt, the determination of the remaining term takes into account whether there is actually an intention to exercise such right. Further explanations are presented in note 25 "Additional Disclosures on Financial Instruments."
- In the case of purchase price allocations, assumptions are also made regarding the measurement of assets and liabilities assumed as part of business combinations. This applies in particular with regard to the acquired intangible assets, as measurements are based on fair value. As a rule, this is the present value of the future cash flows after taking into account the present value of the tax amortization benefit. In addition, the definition of uniform useful lives within the Group is based on management's assumptions. General information on useful lives is presented in the sections "Other Intangible Assets" and "Property, Plant and Equipment."
- In connection with non-current assets held for sale and related liabilities as well as the impairment tests for intangible assets, property, plant and equipment, and right-of-use assets, the determination of the fair value less costs to sell requires management judgments as it relates to estimates of proceeds of the disposal, residual obligations and direct disposal costs. The classification as assets held for sale and discontinued operations also requires management judgment.

- Trade and other receivables: Calculation of loss allowance for accounts receivable is based on historical credit loss rates for groups of financial assets with similar credit risk characteristics and on forward-looking information, including customer-specific information and forecasts of future economic conditions. Further explanations are presented in note 25 "Additional Disclosures on Financial Instruments."
- Advance payments: Sales estimates and assumptions on future sales success are made in connection with advances paid to authors to secure exploitation rights for their publications. Disclosures on advance payments are presented in note 13 "Inventories."
- Impairment: The management's estimates of cash flow, on which impairment tests are based, are based on factors including assumptions of economic trends and the associated risks, the regulatory environment, the competitive environment, market share, investments, EBITDA margins and growth rates. A combination of long-term trends, industry forecasts and in-house knowledge, with special emphasis on recent experience, is used in forming the assumptions about the development of the various relevant markets in which the Bertelsmann Group operates. The relevant markets are an area highly exposed to the general economic conditions. The development of the relevant markets is just one of the key operational drivers used by the Bertelsmann Group to assess individual business models. The most important assumptions include estimated growth rates, the weighted average cost of capital and tax rates. All these different elements are variable, interrelated and difficult to isolate as the main drivers of the various business models and respective valuations. Changes to these estimates as a result of more recent information could have a material impact on the amount of the possible impairment. The growth rates applied are based on long-term real growth rates for the relevant economies, growth expectations for the relevant sectors and long-term inflation forecasts for the countries in which the cash-generating units operate. The values allocated to the key assumptions are in line with external sources of information. The figures obtained using the respective discount rates reflect the recoverable amount of the cash-generating units. Material changes in the market or competitive environment may impair the value of cash-generating units. Details on impairment testing for intangible assets (including goodwill) in the Bertelsmann Group are presented in note 9 "Intangible Assets." In addition, in the case of sports and film rights, estimates are made with regard to anticipated revenues.
- Pension obligations: Pension obligations are measured using the projected unit credit method. Using this approach, biometric calculations, the prevailing long-term capital market interest rates and, in particular, assumptions about future salary and pension increases are taken into account. As a result of the increase in the discount rate and the increase in the future pension trend for measuring provisions for pensions, actuarial gains amounting to €1,345 million before related tax effects were recognized in the item "Remeasurement component of defined benefit plans." Details on the assumptions made in pension accounting are presented in note 18 "Provisions for Pensions and Similar Obligations."
- Provisions for onerous contracts and warranties are also based to a significant extent on management estimates with regard to their amount and probability of occurrence. Assessments of whether there is a present obligation, whether an outflow of resources is probable and whether it is possible to reliably determine the amount of the obligation are generally based on the expertise of in-house or third-party specialists. More recent information could change the estimates and thus impact the Group's financial position and financial performance. The legal and regulatory environment in which Bertelsmann operates does not bear significant litigation risks. With regard to risk provisioning, a provision for potential losses from litigation is recognized when the risks of a loss are considered probable and when a reliable estimate of the anticipated financial impact is possible. For significant contingent liabilities for which the possibility of a future loss is more than remote but less than probable, the Bertelsmann Group estimates the possible loss where the Group believes that an estimate can be made. Contingent liabilities from litigation that were of subordinate significance from a Group perspective existed at the end of the reporting period. Management regularly reviews the recognition, measurement and use of provisions along with the disclosure requirements for contingent liabilities.

- Lease liabilities are recognized at the present value of the outstanding lease payments using maturity-, currency- and risk-specific incremental borrowing rates. The starting point for determining the incremental borrowing rates is risk-free, country- and maturity-specific interest rates for government bonds. These interest rates are adjusted by a specific risk premium for Bertelsmann SE & Co. KGaA as well as a lease-specific risk premium and a security discount. The lease-specific risk premium takes into account in particular that the lease contracts are not concluded by Bertelsmann SE & Co. KGaA itself, but by its subsidiaries, as well as the different payment profile of a lease contract in contrast to a bullet government bond. Further explanations on lease liabilities are presented in note 22 "Lease Liabilities."
- The activities of the Group companies are subject to the respective applicable tax laws and pronouncements. Assumptions and estimates also form the basis for judgments regarding the ability to realize uncertain tax positions and future tax benefits that may arise from the interpretation of tax regulations. Recognition of an asset or liability from an uncertain tax position is performed in accordance with IAS 12 if payment or refund in respect of the legal uncertainty is probable. Measurement of the uncertain tax assets and tax liabilities is at its most likely amount in accordance with IFRIC 23. Deferred tax assets are only carried to the extent that it is probable that they can be utilized against future taxable profits. When assessing the probability of the ability to use deferred tax assets in the future, various factors are taken into account, including past earnings, company forecasts, tax planning strategies and loss carryforward periods. Information relating to the ability to realize tax benefits is presented in note 8 "Income Taxes."
- Estimates and assumptions also relate to the share-based payments. The conditions of the cash-settled share-based payment transactions and the stock option plans are presented in greater detail in the section "Share-Based Payments" in note 17 "Equity."

Prior-Year Information

In December 2021, Groupe M6, part of RTL Group, acquired a two-percent interest in Stéphane Plaza Immobilier, a company in which it already held a 49 percent interest. This acquisition was reported in the 2021 Consolidated Financial Statements under other acquisitions, which were not material on a stand-alone basis. As a result of obtaining control, the investment, which was previously accounted for using the equity method, is fully consolidated from the date of acquisition. Initial accounting of the acquisition had not yet been completed in the last financial year. During the measurement period in 2022, the provisional amounts recognized at the acquisition date were retrospectively adjusted to reflect new information obtained about facts and circumstances that existed as of the acquisition date. In accordance with IFRS 3.49, goodwill from the acquisition of Stéphane Plaza Immobilier decreased from €56 million to €23 million. The decrease results mainly from the valuation of intangible assets acquired for a total of €88 million (€51 for brands and €37 million for customer relationships) and respective adjustments in the deferred tax liability of €23 million as well as non-controlling interests for €32 million. Due to the finalization of the purchase price allocation in 2022, the consolidated balance sheet figures from the previous year have been adjusted accordingly.

The structure of the Consolidated Cash Flow Statement was adjusted for better comparability. The item "Interest received" was reclassified from "Cash flow from financing activities" to "Cash flow from operating activities." The prior-year comparatives were also adjusted to the current presentation.

Notes to the Income Statement and the Balance Sheet

1 Revenues

In the financial year 2022, Group revenues of €19,896 million were generated from contracts with customers in accordance with IFRS 15 (previous year: €18,381 million). The other revenues amounting to €349 million (previous year: €315 million) not in the scope of IFRS 15 resulted almost entirely from financial services in the Arvato division. The following table only shows the revenues from contracts with customers in accordance with IFRS 15 by division and broken down by revenue source, geographical area and timing of revenue recognition. The categorization of revenue sources and geographical areas shown corresponds to that used in segment reporting.

As of January 1, 2022, Gruner + Jahr is no longer reported as an independent division. The German magazine businesses and brands have been part of the RTL Group division since the beginning of the year. The remaining Gruner + Jahr activities (particularly Territory, the AppLike Group, DDV Mediengruppe and the investment in the Spiegel Group) were allocated to the Bertelsmann Investments division. For this reason, revenues in accordance with IFRS 15 are also presented for the Bertelsmann Investments division for the first time. The prior-year comparatives have been adjusted accordingly. Further details are presented in note 27 "Segment Reporting."

Revenue from Contracts with Customers

	2022							
in € millions	RTL Group	Penguin Random House	BMG	Arvato	Bertelsmann Printing Group	Bertelsmann Education Group	Bertelsmann Investments	Total Divisions[1)]
Revenue Sources								
Own products and merchandise	231	3,986	64	62	22	3	87	4,455
Services	347	168	3	5,084	1,264	619	386	7,871
Advertising	3,714	–	–	–	17	–	48	3,779
Rights and licenses	2,907	68	796	–	–	–	2	3,773
	7,199	4,222	863	5,146	1,303	622	523	19,878
Geographical Areas								
Germany	2,589	298	69	1,671	807	4	348	5,786
France	1,367	14	59	467	64	–	8	1,979
United Kingdom	317	450	105	464	97	1	3	1,437
Other European countries	1,696	371	104	1,567	152	–	51	3,941
United States	999	2,406	465	487	168	322	27	4,874
Other countries	231	683	61	490	15	295	86	1,861
	7,199	4,222	863	5,146	1,303	622	523	19,878
Timing								
Point in time	2,542	4,053	216	66	36	5	109	7,027
Over time	4,657	169	647	5,080	1,267	617	414	12,851
	7,199	4,222	863	5,146	1,303	622	523	19,878

in € millions	2021 RTL Group	Penguin Random House	BMG	Arvato	Bertelsmann Printing Group	Bertelsmann Education Group	Bertelsmann Investments	Total Divisions[1]
Revenue Sources								
Own products and merchandise	259	3,841	63	59	25	–	151	4,398
Services	334	130	2	4,586	1,133	283	339	6,807
Advertising	3,935	–	–	–	21	–	85	4,041
Rights and licenses	2,467	58	596	–	–	–	3	3,124
	6,995	4,029	661	4,645	1,179	283	578	18,370
Geographical Areas								
Germany	2,558	280	40	1,606	728	3	320	5,535
France	1,393	12	63	437	58	–	100	2,063
United Kingdom	253	476	78	394	96	1	9	1,307
Other European countries	1,672	368	79	1,394	135	–	53	3,701
United States	898	2,275	349	393	149	272	23	4,359
Other countries	221	618	52	421	13	7	73	1,405
	6,995	4,029	661	4,645	1,179	283	578	18,370
Timing								
Point in time	2,255	3,896	175	60	39	–	211	6,636
Over time	4,740	133	486	4,585	1,140	283	367	11,734
	6,995	4,029	661	4,645	1,179	283	578	18,370

1) Excluding Corporate activities.

During the reporting period, the revenues from contracts with customers comprise performance obligations fulfilled at a certain point in time of €7,027 million (previous year: €6,636 million) and performance obligations fulfilled over a certain period of time of €12,851 million (previous year: €11,734 million). If revenue is recognized at a point in time, the respective timing of revenue recognition is determined by the contractually agreed terms of sale. For performance obligations satisfied over time, a sufficient measure of progress is determined generally based on output methods to recognize revenue accordingly. Input methods are used to determine revenue recognition in business models for which they more accurately measure progress. Revenues amounting to €5 million (previous year: €1 million) result from performance obligations already satisfied in previous periods. Bertelsmann makes use of practical expedients set out in IFRS 15 and does not disclose any unsatisfied performance obligations for contracts with an original duration of no more than 12 months, or for contracts for which revenue can be recognized according to the amount invoiced for simplification purposes. As of December 31, 2022, Bertelsmann expects future revenues from existing long-term service level agreements of €1,513 million (previous year: €974 million), which will be attributable to unsatisfied (or partially unsatisfied) performance obligations as of the end of the reporting period and is expected to be recognized in the amount of €523 million (previous year: €400 million) in the next financial year and in the amount of €990 million (previous year: €574 million) in the following years.

2 Other Operating Income

in € millions	2022	2021
Income from reimbursements	52	94
Income from sideline operations	44	43
Gains from disposals of non-current assets	28	19
Foreign exchange gains	16	–
Fair value measurement of investments	–	483
Sundry operating income	201	210
	341	849

In the prior year, the item "Fair value measurement of investments" mainly related to effects from the valuation of financial instruments held in the portfolio of the Bertelsmann Investments division and from the valuation of RTL Group's minority stakes. The item "Sundry operating income" consists of a number of individually immaterial matters in the subsidiaries.

3 Personnel Costs

in € millions	2022	2021
Wages and salaries	5,202	4,832
Statutory social security contributions	805	736
Expenses for pensions and similar obligations	160	158
Profit sharing	63	89
Other employee benefits	255	196
	6,485	6,011

The contributions paid by the employer to state pension plans amounted to €420 million in the financial year 2022 (previous year: €367 million).

4 Amortization/Depreciation, Impairment and Reversals on Intangible Assets, Property, Plant and Equipment and Right-of-Use Assets

in € millions	2022	2021
Amortization/depreciation, impairment and reversals on		
– intangible assets	490	365
– property, plant and equipment and right-of-use assets	609	544
	1,099	909

Further details on amortization/depreciation, impairment and reversals shown are presented in note 9 "Intangible Assets" and note 10 "Property, Plant and Equipment and Right-of-Use Assets."

5 Other Operating Expenses

in € millions	2022	2021
Administrative expenses	1,338	1,107
Selling and transmission expenses	622	592
Advertising costs	382	351
Loss allowances on receivables, loans and non-financial assets	306	259
Consulting and audit fees	274	219
Fair value measurement of investments	232	–
Operating taxes	91	97
Losses on disposals of non-current assets	4	9
Adjustment to carrying amounts on assets held for sale	–	6
Foreign exchange losses	–	3
Sundry operating expenses	286	146
	3,535	2,789

The item "Administrative expenses" includes repair and maintenance costs of €225 million (previous year: €214 million) and costs for IT services of €339 million (previous year: €285 million). In the financial year 2022, expenses from short-term leases in the amount of €41 million (previous year: €30 million) and expenses from leases for low-value assets in the amount of €17 million are also included in this item (previous year: €13 million). The item "Loss allowances on receivables, loans and non-financial assets" comprises mainly loss allowances on advance payments for royalties and licenses of the Penguin Random House division amounting to €242 million (previous year: €205 million). The item "Fair value measurement of investments" mainly comprises effects from the valuation of financial instruments held in the portfolio of the Bertelsmann Investments division and from the valuation of RTL Group's minority stakes. Bertelsmann Investments assigns its minority stakes in start-ups and fund-of-fund investments to the fair value through profit or loss category in accordance with IFRS 9. Further details are presented in note 12 "Minority Stakes and Other Financial Assets." The item "Sundry operating expenses" includes, among others, the "Regulatory Termination Fee" of US$200 million paid to Paramount Global.

6 Interest Income and Interest Expenses

in € millions	2022	2021
Interest income		
Interest income on cash and cash equivalents	18	3
Other interest income	12	8
	30	11
Interest expenses		
Interest expenses on financial debt	(129)	(125)
Interest expenses on interest rate derivatives	(1)	(2)
Other interest expenses	(10)	(12)
	(140)	(139)

Interest expenses on financial debt include interest expenses calculated using the effective interest method, adjusted for the effects of derivative financial instruments entered into as hedging instruments in accordance with IFRS 9 against changes in interest rates under hedge accounting.

7 Other Financial Income and Expenses

in € millions	2022	2021
Other financial income		
Financial income from put/call options	25	–
Sundry financial income	48	13
	73	13
Other financial expenses		
Net interest on defined benefit plans	(17)	(20)
Interest expenses on lease liabilities	(47)	(36)
Dividend entitlement on profit participation certificates	(43)	(45)
Financial expenses from put/call options	–	(40)
Minority interests in partnerships	(3)	(9)
Non-operating foreign exchange losses	(48)	(8)
Other non-operating expenses from derivatives	(4)	(30)
Sundry financial expenses	(59)	(49)
	(221)	(237)

To better reflect the economic content, income and expenses from non-operating foreign currency hedging transactions are offset against the results from the measurement of the economically hedged items in foreign currency, and are recognized as non-operating foreign exchange gains or losses. In the financial year 2022, the net results from these non-operating foreign currency transactions of €131 million (previous year: €175 million) were offset against the net results from hedged foreign currency transactions amounting to €-179 million (previous year: €-183 million).

8 Income Taxes

Income taxes, broken down into current and deferred income taxes, are as follows:

Income Taxes

in € millions	2022	2021
Earnings before income taxes (total)	1,300	2,972
Current income taxes from continuing operations	(332)	(583)
Deferred income taxes from continuing operations	86	(79)
Income taxes from continuing operations	(246)	(662)
Current income taxes from discontinued operations	–	–
Deferred income taxes from discontinued operations	(2)	–
Income taxes from discontinued operations	(2)	–
Total income taxes	(248)	(662)
Net income after income taxes (total)	1,052	2,310

Tax loss carryforwards of €150 million (previous year: €200 million) were utilized in the financial year 2022, reducing current tax expenses by €32 million (previous year: €45 million). Of the tax loss carryforwards utilized, €1 million (previous year: €7 million) was due to German corporate income tax, €1 million (previous year: €6 million) was due to German trade tax and €148 million (previous year: €187 million) was due to foreign income taxes. These amounts include €25 million (previous year: €61 million) for tax loss carryforwards for which no deferred tax assets were recognized in the past. These relate to German corporate tax of an immaterial amount (previous year: €1 million), to German trade tax of an immaterial amount (previous year: €1 million) and to foreign income taxes in the amount of €25 million (previous year: €59 million). As a result of this utilization, current tax expense decreased by €5 million (previous year: €14 million).

The recognition of previously unrecognized tax loss carryforwards, deductible temporary differences and tax credits resulted in a reduction in deferred tax expense of €149 million (previous year: €13 million). As a result of the write-down or reversal of historically written down deferred tax assets, a net deferred tax expense of €17 million (previous year: €9 million) arises.

Deferred tax assets and liabilities resulted from the following items and factors:

Deferred Taxes

	12/31/2022			12/31/2021		
in € millions	Assets	Equity and liabilities	Recognized in profit or loss in the financial year	Assets	Equity and liabilities	Recognized in profit or loss in the financial year
Goodwill	46	155	11	30	143	(52)
Other intangible assets	108	402	24	118	363	(2)
Property, plant and equipment and right-of-use assets	72	396	11	63	389	(6)
Investments accounted for using the equity method	1	2	–	1	–	(1)
Minority stakes and other financial assets	11	75	(36)	34	60	(67)
Inventories	205	4	(20)	225	4	(27)
Trade and other receivables	152	33	(10)	159	53	(119)
Other non-financial assets	55	112	(14)	81	122	(16)
Cash and cash equivalents	–	8	(4)	–	4	(1)
Provisions for pensions and similar obligations	865	620	(24)	1,003	479	(29)
Other provisions	132	68	(35)	147	53	26
Financial debt	1	25	(9)	1	15	121
Lease liabilities	402	9	(16)	404	5	(2)
Trade and other payables	187	57	44	146	46	17
Other non-financial liabilities	21	11	(13)	32	10	6
Loss carryforwards/tax credits	362		177	164		73
Total	2,620	1,977	86	2,608	1,746	(79)
Offset	(1,806)	(1,806)		(1,619)	(1,619)	
Carrying amount	814	171		989	127	

The item "Property, plant and equipment and right-of-use assets" includes deferred tax assets of €23 million (previous year: €12 million) and deferred tax liabilities of €336 million (previous year: €336 million) in connection with right-of-use assets in accordance with IFRS 16.

No deferred tax liabilities were recognized for temporary differences in connection with investments in subsidiaries in the amount of €656 million (previous year: €640 million) as Bertelsmann can control their reversal, and it is probable that these temporary differences will not be reversed in the foreseeable future. Current and deferred tax assets and liabilities are offset against each other if they relate to the same tax authority and meet the criteria for offsetting. The term of the deferred taxes on temporary differences is mostly long-term.

Deferred tax assets in other comprehensive income amount to €266 million (previous year: €529 million).

Valuation allowances for deferred tax assets are recognized on temporary differences, tax loss carryforwards and tax credits when it is unlikely that they can be utilized in the foreseeable future. The need to recognize valuation allowances is assessed primarily based on existing deferred tax liabilities from temporary differences and projected taxable income within a planning period.

Temporary differences, tax loss carryforwards and tax credits for which no deferred taxes have been recognized can be carried forward as follows:

Expiration

in € millions	12/31/2022	12/31/2021
Temporary differences (unlimited carryforward period)	106	54
Tax loss carryforwards		
Unlimited carryforward period	5,176	5,665
To be carried forward for more than 5 years	33	75
To be carried forward for up to 5 years	106	104
Tax credits		
Unlimited carryforward period	1	–
To be carried forward for more than 5 years	1	2
To be carried forward for up to 5 years	2	–

A reconciliation of expected tax result to actual tax result is shown in the following table:

Reconciliation to Actual Tax Expense

in € millions	2022	2021
Earnings before income taxes from continuing operations	1,295	2,972
Income tax rate applicable to Bertelsmann SE & Co. KGaA	31.10%	31.10%
Expected tax expense from continuing operations	(403)	(924)
The tax effects of the following items led to differences between the expected and actual tax expense:		
Adjustment to different national tax rates	104	176
Effect of changes in tax rate and tax law	1	(14)
Non-tax-deductible impairment on goodwill	(2)	–
Tax effects in respect of results from disposals of investments	17	15
Current income taxes for previous years	34	26
Deferred income taxes for previous years	(3)	8
Effects of measurements of deferred tax assets	109	14
Permanent differences	(73)	101
Other adjustments	(30)	(64)
Total of adjustments	157	262
Actual tax expense from continuing operations	(246)	(662)

Effects from measurement of deferred tax assets take into account the effects from the recognition of deferred tax assets based on estimates of future taxable income derived from internal forecasts. Permanent differences mainly include effects from tax-free income and fair value measurement effects.

Effective Income Tax Rate

	2022	2021
Corporate income tax including solidarity surcharge	15.83%	15.83%
Trade tax	15.27%	15.27%
Effective income tax rate	31.10%	31.10%

The effective tax rate is based on the tax rate of the German Group parent entity Bertelsmann SE & Co. KGaA and includes corporate income tax, the solidarity surcharge and trade tax. In addition, the Group operates mainly in the United States with a tax rate from 21.00 percent to 24.60 percent and in France with a tax rate of 25.00 percent to 25.83 percent.

9 Intangible Assets

in € millions	Goodwill	Other intangible assets: Music and film rights	Other intangible assets: Other rights and licenses	Other intangible assets: Internally generated intangible assets	Other intangible assets: Advance payments	Other intangible assets: Total	Total
Cost							
Balance as of 1/1/2021	8,323	2,913	2,282	1,077	13	6,285	14,608
Exchange differences	162	123	83	31	1	238	400
Acquisitions through business combinations	235	7	253	–	1	261	496
Other additions	–	326	140	31	35	532	532
Reductions through disposal of investments	(35)	–	(85)	–	–	(85)	(120)
Other disposals	–	(31)	(71)	(2)	–	(104)	(104)
Reclassifications in accordance with IFRS 5	(77)	–	(19)	(8)	(3)	(30)	(107)
Reclassifications and other changes	–	17	(39)	37	(19)	(4)	(4)
Balance as of 12/31/2021	8,608	3,355	2,544	1,166	28	7,093	15,701
Exchange differences	26	44	(46)	25	–	23	49
Acquisitions through business combinations	697	12	994	28	1	1,035	1,732
Other additions	–	386	166	35	36	623	623
Reductions through disposal of investments	(53)	–	(4)	(3)	–	(7)	(60)
Other disposals	–	(38)	(46)	(20)	–	(104)	(104)
Reclassifications in accordance with IFRS 5	44	–	2	–	–	2	46
Reclassifications and other changes	18	34	(104)	95	(34)	(9)	9
Balance as of 12/31/2022	9,340	3,793	3,506	1,326	31	8,656	17,996
Accumulated amortization							
Balance as of 1/1/2021	455	1,631	1,355	991	–	3,977	4,432
Exchange differences	7	33	47	30	–	110	117
Amortization	–	154	151	42	–	347	347
Impairment losses	–	–	13	5	–	18	18
Reversals of impairment losses	–	–	–	–	–	–	–
Reductions through disposal of investments	–	–	(50)	–	–	(50)	(50)
Other disposals	–	(20)	(67)	(1)	–	(88)	(88)
Reclassifications in accordance with IFRS 5	–	–	(13)	(1)	–	(14)	(14)
Reclassifications and other changes	–	–	–	–	–	–	–
Balance as of 12/31/2021	462	1,798	1,436	1,066	–	4,300	4,762
Exchange differences	4	11	15	28	–	54	58
Amortization	–	186	222	64	–	472	472
Impairment losses	10	1	7	3	–	11	21
Reversals of impairment losses	–	(3)	–	–	–	(3)	(3)
Reductions through disposal of investments	(8)	–	(4)	(3)	–	(7)	(15)
Other disposals	–	(39)	(40)	(19)	–	(98)	(98)
Reclassifications in accordance with IFRS 5	–	–	2	–	–	2	2
Reclassifications and other changes	–	2	(24)	–	–	(22)	(22)
Balance as of 12/31/2022	468	1,956	1,614	1,139	–	4,709	5,177
Carrying amount as of 12/31/2022	8,872	1,837	1,892	187	31	3,947	12,819
Carrying amount as of 12/31/2021	8,146	1,557	1,108	100	28	2,793	10,939

Other rights and licenses include brands and publishing rights, acquired customer relationships along with acquired software, and other licenses. In the financial year, BMG acquired music catalogs in the amount of €380 million (previous year: €281 million), €188 million of which related to various music catalogs in the United States, €113 million to various music catalogs in the United Kingdom, €27 million to various music catalogs in Germany, and €52 million to various music catalogs in other countries. Internally generated intangible assets mostly include own film and TV productions and internally generated software. As in the previous year, no intangible assets were subject to restrictions on disposal as of the end of the reporting period.

Goodwill and other intangible assets are attributable to the following cash-generating units:

Goodwill and Other Intangible Assets with Indefinite Useful Life by Cash-Generating Units

	Goodwill		Other intangible assets with indefinite useful life	
in € millions	12/31/2022	12/31/2021	12/31/2022	12/31/2021
RTL Group	5,406	5,249	164	164
RTL Group, Group level	2,079	2,079	–	–
Fremantle	1,252	1,122	–	–
RTL Deutschland	1,269	1,239	–	–
Groupe M6	613	614	164	164
RTL Nederland	159	159	–	–
Other	34	36	–	–
Penguin Random House	1,082	1,045	–	–
BMG	387	368	–	–
Arvato	602	494	–	–
Riverty (previously Financial Solutions)	363	368	–	–
Other	239	126	–	–
Bertelsmann Printing Group	9	18	–	–
Print US	9	8	–	–
Other	–	10	–	–
Bertelsmann Education Group	1,321	888	–	–
Afya	379	–	–	–
Relias Learning	936	882	–	–
Alliant University	6	6	–	–
Bertelsmann Investments	65	84	–	–
Other	65	84	–	–
	8,872	8,146	164	164

Intangible assets with indefinite useful life primarily concern Groupe M6 trademark rights in France (€120 million; previous year: €120 million) and brands related to Gulli (€38 million; previous year: €38 million), which also belong to Groupe M6. In determining that the M6 brand has an indefinite useful life, management has considered various factors such as the historical and expected longevity of the brand, the impact of possible changes in broadcasting technologies, the impact of possible evolutions of the regulatory environment in the French television industry, the current and expected audience share of the M6 channel, and management's strategy to maintain and strengthen the trademark "M6." As of December 31, 2022, based on the analysis of these factors, there is no foreseeable limit to the period of time over which the M6 brand is expected to generate cash inflows. Given their positioning, the market's awareness of the brands and their history, Gulli-related brands are considered to also have an indefinite useful life.

For the purpose of impairment testing in accordance with IAS 36, goodwill from a business combination is allocated to the cash-generating units that are expected to benefit from the synergies of the business combination. As of December 31, 2022, the market price of RTL Group S.A. shares on the Frankfurt Stock Exchange was €39.44 (previous year: €46.62). At that date, the recoverable amount for the goodwill impairment test of RTL Group recognized at Group level was based on the value in use using a discounted cash flow method (level 3), as management considered the share price of RTL Group did not fully reflect its earnings potential due to the expected growth from RTL Group's cross-media platform offerings. The value in use significantly exceeded the carrying amount.

As of December 31, 2022, the market price of Métropole Télévision shares on the Paris Stock Exchange was €15.35 (previous year: €17.16). The recoverable amount of Groupe M6 at that date was based on the value in use using a discounted cash flow method (level 3), as management considered the share price of Groupe M6 did not fully reflect its earnings potential due to the expected growth in AVOD (advertising-funded Video On Demand) offers and diversification business of Groupe M6. The value in use significantly exceeded the carrying amount. The fair value of the cash-generating unit Majorel was determined on the basis of the market price, which is based on level 1 of the fair value hierarchy. As of December 31, 2022, the market price of Majorel shares on the Amsterdam Stock Exchange was €20.50 (previous year: €27.88). The fair value significantly exceeded the carrying amount. As of December 31, 2022, the market price of Afya shares, which represent a class of shares other than Bertelsmann shares, on the Nasdaq was €15.62 (previous year: €15.71). The recoverable amount of Afya at that date was based on the value in use using a discounted cash flow method (level 3), as management considered the share price of Afya did not fully reflect its earnings potential in a growth market characterized by high market entry barriers due to the shareholder structure and the associated lower trading activity. The value in use exceeded the carrying amount.

For the other cash-generating units, the recoverable amount equals the fair value, which is derived from discounted cash flows less costs of disposal and which is based on level 3 of the fair value hierarchy. Projected cash flows were based on internal estimates for three detailed planning periods and, as a rule, two further detailed planning periods were applied. For periods after this detailed horizon, a perpetual annuity was applied, taking into account individual business-specific growth rates.

The cash flow forecasts underlying the impairment testing of the individual cash-generating units bearing material goodwill are based on the following assumptions relating to the market development for the beginning of the detailed planning period:

- In 2023, the TV advertising markets in Germany are expected to decline slightly, while moderate decrease is expected in France, a significant decline in the Netherlands and a stable development in Hungary. The streaming markets in Germany and the Netherlands are expected to continue growing strongly.
- The book markets are expected to remain stable overall.
- In the relevant music market, the publishing market segment is expected to grow significantly, whereas strong growth is projected for the recordings market segment.
- The services markets are predicted to show moderate (customer experience solutions, IT solutions) to significant (logistics and financial services) growth in 2023.
- The European printing markets are expected to record a moderate (offset) to strong (gravure) decline, while the book printing market in North America is expected to show a slight decline.
- Overall, sustained moderate to strong growth is anticipated for the relevant US education markets and the Brazilian market for medical university education.

In addition, recoverable amounts based on discounted cash flows were measured using the following individual business-specific growth rates and discount rates for periods after the detailed planning period:

Overview of Growth and Discount Rates

	Growth rate in % for the year		Discount rate in % for the year	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
RTL Group				
RTL Group, Group level	0.8	0.5	7.6	6.6
Fremantle	1.8	1.8	8.0	8.2
RTL Deutschland	0.5	0.5	7.4	6.3
Groupe M6	0.0	0.0	8.2	6.8
RTL Nederland	0.5	0.0	7.4	6.1
Other	2.0	2.0	12.4	10.0
Penguin Random House	0.5	0.5	8.6	7.5
BMG	2.0	2.0	8.0	6.4
Arvato				
Riverty (previously Financial Solutions)	1.5	1.5	7.7	7.0
Other	1.0–1.5	1.0–1.5	8.8–10.3	7.3–9.9
Bertelsmann Printing Group				
Print US	0.0	0.0	8.1	7.1
Other	0.0	0.0	8.5	6.1
Bertelsmann Education Group				
Afya	4.5	n/a	14.2	n/a
Relias Learning	2.5	2.5	8.2	8.0
Alliant University	2.0	2.0	7.7	8.4
Bertelsmann Investments				
Other	0.0–1.5	n/a	7.7–13.0	n/a

In the financial year 2022, an impairment loss in the amount of €10 million was recognized on goodwill. In the previous year, no impairment loss on goodwill was recognized. The impairment loss of €10 million is fully attributable to the cash-generating unit Mohn Media Group, which belongs to the Bertelsmann Printing Group division. Thus, the goodwill of the Mohn Media Group has been fully impaired. The difficult market environment for printing services with rising factor costs for energy and personnel as well as reduced circulation volumes led to a recoverable amount of €67 million, which was below the carrying amount. The measurement of the impairment loss was based on the following assumptions: the discount rate was 8.5 percent (previous year: 6.1 percent) and the long-term growth rate was 0.0 percent (previous year: 0.0 percent). Impairment losses on goodwill and other intangible assets with indefinite useful lives are recognized in the income statement under "Amortization/depreciation, impairment and reversals on intangible assets, property, plant and equipment and right-of-use assets."

For the cash-generating unit Print USA, which belongs to the Bertelsmann Printing Group division, in the event of an increase in the discount rate by 0.2 percentage points, a decrease in the long-term growth rate by 0.2 percentage points or a decrease in the EBITDA margin by 0.1 percentage points, the recoverable amount would fall below the carrying amount.

For the cash-generating unit Arvato Systems, which belongs to the Arvato division and is recognized in the item “Other,” in the event of an increase in the discount rate by 0.1 percentage points, a decrease in the long-term growth rate by 0.4 percentage points or a decrease in the EBITDA margin by 0.1 percentage points, the recoverable amount would fall below the carrying amount.

For the cash-generating unit Afya, which belongs to the Bertelsmann Education Group division, in the event of an increase in the discount rate by 0.6 percentage points, the recoverable amount would fall below the carrying amount.

Other material goodwill was not subject to impairment, even given a change by one of the three most important factors: discount rate (increase of 1.0 percentage point), long-term growth rate (decrease of 1.0 percentage point) or EBITDA margin (decrease of 1.0 percentage point).

10 Property, Plant and Equipment and Right-of-Use Assets

Right-of-use assets from leased property, plant and equipment are capitalized in accordance with IFRS 16. The balance sheet position “Property, plant and equipment and right-of-use assets” comprises property, plant and equipment owned by the Bertelsmann Group and right-of-use assets from leased property, plant and equipment.

Property, Plant and Equipment and Right-of-Use Assets

in € millions	12/31/2022	12/31/2021
Owned property, plant and equipment	1,879	1,641
Right-of-use assets from leased property, plant and equipment	1,306	1,133
	3,185	2,774

Property, Plant and Equipment

in € millions	Land, rights equivalent to land and buildings	Technical equipment and machinery	Other equipment, fixtures, furniture and office equipment	Advance payments and construction in progress	Total
Cost					
Balance as of 1/1/2021	1,669	2,424	1,370	114	5,577
Exchange differences	18	35	25	3	81
Acquisitions through business combinations	–	1	4	–	5
Other additions	22	54	151	110	337
Reductions through disposal of investments	(3)	–	(11)	–	(14)
Other disposals	(74)	(355)	(108)	(4)	(541)
Reclassifications in accordance with IFRS 5	(11)	(56)	(25)	(4)	(96)
Reclassifications and other changes	46	30	33	(101)	8
Balance as of 12/31/2021	1,667	2,133	1,439	118	5,357
Exchange differences	–	5	(3)	(2)	–
Acquisitions through business combinations	25	15	62	4	106
Other additions	39	81	179	173	472
Reductions through disposal of investments	–	(1)	(4)	–	(5)
Other disposals	(76)	(110)	(99)	(3)	(288)
Reclassifications in accordance with IFRS 5	(46)	(23)	(1)	–	(70)
Reclassifications and other changes	13	64	48	(142)	(17)
Balance as of 12/31/2022	1,622	2,164	1,621	148	5,555
Accumulated depreciation					
Balance as of 1/1/2021	925	2,100	958	–	3,983
Exchange differences	11	29	17	–	57
Depreciation	52	77	134	–	263
Impairment losses	8	6	7	–	21
Reversals of impairment losses	–	–	–	–	–
Reductions through disposal of investments	(1)	–	(9)	–	(10)
Other disposals	(72)	(352)	(105)	–	(529)
Reclassifications in accordance with IFRS 5	(5)	(50)	(21)	–	(76)
Reclassifications and other changes	8	1	(2)	–	7
Balance as of 12/31/2021	926	1,811	979	–	3,716
Exchange differences	–	3	3	–	6
Depreciation	50	84	158	–	292
Impairment losses	8	6	9	–	23
Reversals of impairment losses	(12)	(1)	–	–	(13)
Reductions through disposal of investments	–	(1)	(4)	–	(5)
Other disposals	(68)	(112)	(92)	–	(272)
Reclassifications in accordance with IFRS 5	(34)	(19)	(1)	–	(54)
Reclassifications and other changes	(2)	(15)	–	–	(17)
Balance as of 12/31/2022	868	1,756	1,052	–	3,676
Carrying amount as of 12/31/2022	754	408	569	148	1,879
Carrying amount as of 12/31/2021	741	322	460	118	1,641

As of the end of the reporting period, property, plant and equipment totaling €6 million (previous year: €6 million) were subject to restrictions on disposal. Impairment testing of cash-generating units in the "Other" item of the Bertelsmann Printing Group division identified imputed shortfalls. Subsequent impairment testing of property, plant and equipment amounting to €54 million (previous year: €49 million) at the individual asset level resulted in an impairment of €2 million (previous year: €14 million), which was mainly attributable to technical equipment and machinery. A reversal of an impairment loss of €12 million resulted from the conclusion of a purchase agreement for a Prinovis business property.

Impairment losses totaling €23 million were recognized for property, plant and equipment (previous year: €21 million).

Right-of-Use Assets

The vast majority of leases concern rental properties in the RTL Group, Penguin Random House and Arvato divisions. In addition, leases also exist for technical equipment and machinery, vehicles and other fixtures, furniture and office equipment. The existing lease contracts have different terms and a number of property leases include extension or termination options in order to maximize operational flexibility in terms of managing the assets used in the Group's operations. Details on the corresponding lease liabilities are presented in note 22 "Lease Liabilities."

The following table shows depreciation and impairment, additions and other changes to the right-of-use assets in the financial year 2022 as well as the carrying amounts of the right-of-use assets from leased property, plant and equipment as of December 31, 2022:

Change in Right-of-Use Assets

in € millions	Land, rights equivalent to land and buildings	Technical equipment and machinery	Other equipment, fixtures, furniture and office equipment	Total
Carrying amount of leased property, plant and equipment as of 1/1/2022	1,101	6	26	1,133
Additions	209	2	14	225
Depreciation and impairment	(288)	(4)	(15)	(307)
Other changes	257	0	(2)	255
Carrying amount of leased property, plant and equipment as of 12/31/2022	1,279	4	23	1,306

in € millions	Land, rights equivalent to land and buildings	Technical equipment and machinery	Other equipment, fixtures, furniture and office equipment	Total
Carrying amount of leased property, plant and equipment as of 1/1/2021	1,083	6	34	1,123
Additions	185	3	13	201
Depreciation and impairment	(239)	(3)	(18)	(260)
Other changes	72	0	(3)	69
Carrying amount of leased property, plant and equipment as of 12/31/2021	1,101	6	26	1,133

The other changes mainly relate to lease contracts from acquisitions and extensions of existing lease contracts.

11 Interests in Other Entities

Subsidiaries with Material Non-Controlling Interests

In the Group's view, material non-controlling interests relate to RTL Group, to the customer experience company Majorel and since the financial year 2022, also to the education company Afya. The proportion of ownership interests held by non-controlling interests in RTL Group, based in Luxembourg, is 23.7 percent (previous year: 23.7 percent). At RTL Group itself, material non-controlling interests relate to the subsidiary Groupe M6, based in Paris, France. RTL Group has a 48.4 percent interest (previous year: 48.2 percent) in Groupe M6 (after considering treasury shares held by Groupe M6). Deviating from the interests, RTL Group holds 48.3 percent of the voting rights. Of the non-controlling interests of RTL Group, €748 million (previous year: €733 million) is attributable to Groupe M6. As of December 31, 2022, the proportion of ownership interests held by non-controlling interests in the customer experience company Majorel belonging to the Arvato division, is 60.5 percent (previous year: 60.5 percent). In addition, material non-controlling interests are attributable to the education company Afya, which has been fully consolidated since May 2022 and was previously accounted for as an associate. As of December 31, 2022, the non-controlling interests in the company, which belongs to the Bertelsmann Education Group division, amounted to 59.7 percent.

The following table shows summarized financial information on RTL Group, Majorel and Afya, including the interests in their subsidiaries, joint ventures and associates. The information disclosed shows the amounts before intercompany eliminations.

Financial Information for Subsidiaries with Material Non-Controlling Interests

	RTL Group		Majorel		Afya
in € millions	12/31/2022	12/31/2021	12/31/2022	12/31/2021	12/31/2022
Non-current assets	7,427	7,033	533	356	1,497
Current assets	4,740	5,626	853	802	290
Non-current liabilities	1,246	1,636	308	202	544
Current liabilities	3,675	3,603	563	600	179
Bertelsmann shareholders' equity	5,499	5,663	200	140	653
Non-controlling interests	1,747	1,757	315	216	411
in € millions	2022	2021	2022	2021	2022
Revenues	7,224	6,637	2,100	1,811	288
Profit or loss	728	1,454	172	81	21
– thereof of non-controlling interests	256	461	104	44	13
Total comprehensive income	862	1,513	160	102	(76)
– thereof of non-controlling interests	293	476	97	55	(24)
Dividends to non-controlling interests	269	215	20	–	2
Cash flow from operating activities	465	939	237	185	96
Cash flow from investing activities	104	100	(96)	(174)	45
Cash flow from financing activities	(539)	(980)	(123)	26	66
Increase/(decrease) in cash and cash equivalents	30	59	18	37	207

Investments Accounted for Using the Equity Method

The investments accounted for using the equity method relate to joint ventures in the amount of €19 million (previous year: €19 million) and to associates in the amount of €602 million (previous year: €1,321 million).

Investments in Joint Ventures

As of December 31, 2022, investments in 16 (previous year: 14) individually immaterial joint ventures were accounted for in the Consolidated Financial Statements. The following table shows summarized financial information on these joint ventures. The information given represents in each case the Bertelsmann Group's interest.

Financial Information on Individually Immaterial Joint Ventures

in € millions	12/31/2022	12/31/2021
Non-current assets	26	38
Current assets	82	34
Non-current liabilities	8	46
Current liabilities	93	42

in € millions	2022	2021
Earnings after taxes from continuing operations	(11)	(15)
Earnings after taxes from discontinued operations	–	–
Other comprehensive income	1	1
Total comprehensive income	(10)	(14)

Investments in Associates

As of December 31, 2022, investments in 32 (previous year: 33) associates were accounted for in the Consolidated Financial Statements. As in the previous year, the investment of RTL Group in Atresmedia, based in San Sebastián de los Reyes, Spain, is individually material for the Group. As of December 31, 2022, the ownership interest of RTL Group in Atresmedia was 18.7 percent (previous year: 18.7 percent). As of December 31, 2022, the stock market value of Atresmedia, which is listed on the Madrid Stock Exchange, amounted to €721 million (previous year: €753 million) with a share price of €3.19 (December 31, 2021: €3.34). As of December 31, 2022, the fair value less costs of disposal amounted to €132 million (previous year: €138 million), which is assigned to level 1 fair value measurement.

As of December 31, 2022, the investment in Atresmedia was tested for impairment in accordance with IAS 36. The recoverable amount of Atresmedia on December 31, 2022 was based on the value in use determined using a discounted cash flow model, as management considered the share price of Atresmedia did not fully reflect its earning potential, which includes the new diversification strategy through expansion of its investment portfolio, strengthening its digital streaming offers and building its leading position in locally relevant content production. The ongoing challenging economic environment in Spain combined with strong competition and changing viewing preferences and continued dependence on linear television still leads to high uncertainty in terms of forecasts. As of December 31, 2022, neither an additional impairment loss nor a reversal of an impairment loss had to be recognized on the at-equity investment in Atresmedia. The value in use was measured on the basis of the following assumptions: a discount rate of 10.0 percent (December 31, 2021: 8.1 percent) and a long-term growth rate of 0.0 percent

(December 31, 2021: 0.0 percent). In the event of an increase in the discount rate by 0.7 percentage points, a decrease in the long-term growth rate of 0.7 percentage points or a decrease in the EBITDA margin of 0.6 percentage points, the recoverable amount would fall below the carrying amount.

The following table shows summarized financial information for Atresmedia. The information presented represents the amounts included in the financial statements of Atresmedia plus adjustments for using the equity method, and not the Bertelsmann Group's share of these amounts.

Financial Information on Individually Material Associates

	Atresmedia	
in € millions	12/31/2022	12/31/2021
Non-current assets	686	549
Current assets	825	853
Non-current liabilities	295	381
Current liabilities	529	478
Equity	687	543

in € millions	2022	2021
Revenues	951	963
Earnings after taxes from continuing operations	112	118
Earnings after taxes from discontinued operations	–	–
Other comprehensive income	127	(2)
Total comprehensive income	239	116
Dividends received from the associate	18	8

The reconciliation of the summarized financial information shown to the carrying amount of the interest in Atresmedia in the Consolidated Financial Statements is shown in the following table:

Reconciliation to Carrying Amount

in € millions	12/31/2022	12/31/2021
Equity	687	543
Proportionate equity	128	101
Goodwill	166	166
Impairment on investments accounted for using the equity method	(110)	(110)
Carrying amount	184	157

The following table shows summarized financial information on associates that management considers individually immaterial. The information given represents in each case the Bertelsmann Group's interest.

Financial Information on Individually Immaterial Associates

in € millions	12/31/2022	12/31/2021
Non-current assets	450	1,267
Current assets	199	297
Non-current liabilities	88	196
Current liabilities	155	219

in € millions	2022	2021
Earnings after taxes from continuing operations	(4)	94
Earnings after taxes from discontinued operations	–	–
Other comprehensive income	30	(17)
Total comprehensive income	26	77

The total carrying amount of the investments in all individually immaterial associates amounts to €418 million (previous year: €1,164 million) as of December 31, 2022. Of that amount, €162 million (previous year: €205 million) is attributable to the three University Venture Funds, which invest in high-growth companies in the education sector. Bertelsmann holds between 47.3 percent and 100.0 percent of the shares in these funds. As operational management and investment decisions in particular are the responsibilities of the respective fund managers, there is significant influence, but control as defined by IFRS 10 does not exist despite an ownership interest of over 50 percent in some cases.

In the financial year 2021, €90 million of the total carrying amount of the investments in individually immaterial associates was attributable to the investment in the online learning platform Udacity, which belongs to the Bertelsmann Education Group. Since the beginning of the financial year 2022, the investment previously accounted for as an associate has been measured at fair value (level 3) due to a change in governance structure and the resulting loss of significant influence. In the previous year, an additional €479 million was attributable to the investment in the Nasdaq-listed education company Afya. In May 2022, Bertelsmann acquired the majority of voting rights in Afya via the Bertelsmann Education Group and further increased its interest during the rest of the financial year. As of December 31, 2022, Bertelsmann holds 40 percent of the shares under company law and 59 percent of the voting rights. As a result of obtaining control, the investment previously accounted for using the equity method has been consolidated from the acquisition date. Further details are presented in the section "Acquisitions and Disposals."

Results from Investments Accounted for Using the Equity Method

in € millions	2022	2021
Income from investments accounted for using the equity method	75	149
– joint ventures	10	14
– associates	65	135
Expenses from investments accounted for using the equity method	(69)	(48)
– joint ventures	(21)	(29)
– associates	(48)	(19)
Results from investments accounted for using the equity method	6	101
– joint ventures	(11)	(15)
– associates	17	116

In the financial year 2022, dividends received from investments accounted for using the equity method amounted to €78 million (previous year: €79 million).

12 Minority Stakes and Other Financial Assets

	Current		Non-current	
in € millions	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Loans	50	60	25	56
Fund-of-fund investments	–	–	203	183
Minority stakes in start-ups	16	16	1,163	1,018
Financial instruments of the consolidated special fund	–	–	125	102
Other financial assets	134	285	180	213
Derivative financial instruments	56	25	20	12
	256	386	1,716	1,584

The item “Minority stakes in start-ups” includes minority stakes purchased by the Bertelsmann Investments division. The fair value of its listed investments is measured on the basis of their market values and of its unlisted investments, if possible, on the basis of observable prices obtained as part of the most recently implemented qualified financing rounds which meet the minimum requirements for volume and participants, taking into account life and development cycles of the entity. Fund-of-fund investments, which are mainly held by the Bertelsmann Investments division, are measured at fair value through profit or loss. The measurement of their fair values is based on the valuations of the external management as presented in regular reporting and taking into account a fungibility discount. The gains and losses resulting from changes in the fair value are recognized as other operating expenses (previous year: other operating income) in the item “Fair value measurement of investments” for both minority stakes in start-ups and fund-of-fund investments. The changes in carrying amounts recognized in profit or loss of the financial instruments held by the Bertelsmann Investments division in the venture capital business amounted to €-16 million during the reporting period (previous year: €400 million).

A substantial share of the portfolio shown in the item “Financial instruments of the consolidated special fund” is invested in instruments with a very high credit rating. The current trading volume of the existing investments of the special fund enables the liquidation of the entire special fund within a few days.

Bertelsmann exercises the option granted by IFRS 9 to measure equity instruments at fair value through other comprehensive income mainly for individually immaterial investments and investments in affiliates and recognizes these investments in “Other financial assets.” RTL Group’s minority stake in Magnite in the amount of €123 million (previous year: €190 million) measured at fair value through profit or loss is also included in this item.

As in the previous year, no other financial assets were subject to restrictions on disposal as of the end of the reporting period.

13 Inventories

in € millions	12/31/2022	12/31/2021
Program rights	1,409	1,115
Raw materials and supplies	153	126
Work in progress	116	119
Finished goods and merchandise	416	355
Advance payments	170	187
	2,264	1,902

In the financial year 2022, write-downs on inventories were recognized in the amount of €-103 million (previous year: €-118 million). In addition, reversals of write-downs on inventories were recognized in the amount of €73 million (previous year: €103 million). As of the end of the reporting period, no inventories were subject to restrictions on disposal (previous year: €1 million).

In the financial year 2022, the broadcast-based consumption of program rights recognized in profit or loss amounted to €2,904 million (previous year: €2,507 million). Expenses for raw materials and supplies amounting to €927 million (previous year: €706 million) were recognized, and the cost for merchandise amounted to €91 million (previous year: €104 million). Changes in inventories of work in progress and finished goods amounted to €37 million (previous year: €16 million). In addition, other own costs capitalized of €104 million (previous year: €66 million) were recognized.

14 Trade and Other Receivables

in € millions	12/31/2022	12/31/2021
Non-current		
Trade receivables	38	35
Contract assets	1	2
Other receivables	62	34
Current		
Trade receivables	3,966	3,577
Contract assets	23	27
Receivables from participations	20	30
Other receivables	1,035	960

Trade receivables are due for payment generally within 12 months. The item "Contract assets" covers the conditional right to consideration for completely satisfied performance obligations in accordance with IFRS 15. As of January 1, 2021, this item amounted to €23 million. The item "Other receivables" includes, among other things, receivables of €493 million (previous year: €487 million) from the Riverty (previously Arvato Financial Solutions) business unit, which were recognized in relation to the receivables management service provided. In addition, the item comprises receivables in the amount of €282 million (previous year: €191 million), relating to accounts receivables sold, which are acquired by Riverty from third parties in the course of conducting its financial services and then resold. As of the end of the reporting period, trade and other receivables totaling €16 million (previous year: €14 million) were subject to restrictions on disposal.

15 Other Non-Financial Assets

in € millions	12/31/2022	12/31/2021
Non-current		
Other non-financial assets	1,124	1,047
Current		
Other non-financial assets	1,321	1,068
– advance payments	619	559
– deferred items	233	195
– other tax receivables	155	131
– sundry non-financial assets	314	183

The non-current other non-financial assets relate to advance payments for royalties and licenses in the amount of €950 million (previous year: €951 million). Loss allowances are generally recognized for advance payments for royalties and licenses if no recoupment is expected. The amount of these allowances is based on management estimates of future sales volumes and price changes using historical data. Costs for obtaining and fulfilling contracts with customers are recognized and are immaterial, both individually and in total. The same applies to the amount of amortization and impairment losses recognized for these costs in the reporting period.

16 Cash and Cash Equivalents

in € millions	12/31/2022	12/31/2021
Bank balances and cash on hand	1,583	1,446
Cash equivalents	1,645	3,199
	3,228	4,645

Cash equivalents include short-term, highly liquid securities with a term to maturity on acquisition of not more than three months. Furthermore, this item includes short-term investments in diversified money market funds with very good ratings, which are measured at fair value through profit or loss and are subject to only insignificant fluctuations in value. As of the end of the reporting period, cash and cash equivalents in the amount of €145 million were subject to restrictions on disposal. Thereof, €121 million mainly relate to payments received as part of Riverty's receivables management service provided. As of December 31, 2021, cash and cash equivalents in the amount of €74 million were subject to restrictions on disposal, also mainly relating to payments received as part of Riverty's receivables management service provided. A further €24 million (previous year: €4 million) with restrictions on disposal relates to numerous immaterial items.

17 Equity

Subscribed capital

Number of shares	12/31/2022	12/31/2021
Ordinary shares	83,760	83,760
Total shares	83,760	83,760

Compared with the previous year, the subscribed capital of Bertelsmann SE & Co. KGaA remained unchanged at €1,000 million and comprises 83,760 registered shares (ordinary shares). As of December 31, 2022, foundations (Bertelsmann Stiftung, Reinhard Mohn Stiftung and BVG-Stiftung) indirectly held 80.9 percent of Bertelsmann SE & Co. KGaA shares, with the other 19.1 percent held indirectly by the Mohn family. Bertelsmann Verwaltungsgesellschaft mbH (BVG) controls the voting rights at the General Meeting of Bertelsmann SE & Co. KGaA and of the general partner Bertelsmann Management SE.

In the financial year 2022, a dividend amounting to €220 million was distributed to the shareholders (previous year: €180 million). The dividend per ordinary share amounted to €2,627 (previous year: €2,149) in the reporting period.

The change in other comprehensive income after taxes is derived as follows:

Changes to Components of Other Comprehensive Income after Taxes

in € millions	2022				
	Before-tax amount	Taxes	Net-of-tax amount	Attributable to Bertelsmann shareholders	Attributable to non-controlling interests
Items that will not be reclassified subsequently to profit or loss					
Remeasurement component of defined benefit plans	764	(261)	503	471	32
Changes in fair value of equity instruments	(3)	2	(1)	–	(1)
Share of other comprehensive income of investments accounted for using the equity method	23	–	23	18	5
Items that will be reclassified subsequently to profit or loss when specific conditions are met					
Exchange differences	18	–	18	65	(47)
Cash flow hedges	23	(2)	21	18	3
Share of other comprehensive income of investments accounted for using the equity method	33	–	33	32	1
Other comprehensive income net of tax	858	(261)	597	604	(7)

in € millions	2021				
	Before-tax amount	Taxes	Net-of-tax amount	Attributable to Bertelsmann shareholders	Attributable to non-controlling interests
Items that will not be reclassified subsequently to profit or loss					
Remeasurement component of defined benefit plans	313	(60)	253	243	10
Changes in fair value of equity instruments	8	–	8	7	1
Share of other comprehensive income of investments accounted for using the equity method	–	–	–	–	–
Items that will be reclassified subsequently to profit or loss when specific conditions are met					
Exchange differences	378	–	378	365	13
Cash flow hedges	16	(6)	10	8	2
Share of other comprehensive income of investments accounted for using the equity method	(17)	–	(17)	(17)	–
Other comprehensive income net of tax	698	(66)	632	606	26

Share-Based Payments

The Bertelsmann Group has granted cash-settled or equity-settled share-based payment awards.

There are various free share plans at Groupe M6, which belongs to RTL Group, open to directors and certain employees. The number of free shares granted to participants is approved by the Supervisory Board of Métropole Télévision SA in accordance with the authorization given by the General Meeting of Shareholders.

Plans awarded in October 2022:
- one plan concerns a group of 160 beneficiaries and involves 291,050 shares, subject to the condition of presence in Groupe M6 on March 31, 2025 and the achievement of consolidated EBITA objectives in 2022;
- another plan concerns a group of 25 beneficiaries and involves 224,700 shares subject to a minimum of two years' service. It is awarded annually on the basis of multi-year performance conditions.

The maximum number of free shares granted is as follows, whereby all plans are settled by the physical delivery of shares:

Maximum Number of Free Shares and Remaining Free Shares (Groupe M6)

Free share plans	Maximum number of free shares granted[1]	Remaining free shares
July 2019	246,500	–
April 2021	407,200	393,600
April 2021	93,000	93,000
October 2022	291,050	291,050
October 2022	224,700	224,700
Total	1,262,450	1,002,350

1) Maximum number of free shares granted if the performance conditions are significantly exceeded. Such number could be reduced to zero if objectives are not met.

During the financial year, the balance of shares granted changed as follows:

	Number of shares
Balance as of 12/31/2021	733,700
Change based on performance	–
Granted	515,750
Delivered	(237,000)
Forfeited	(10,100)
Balance as of 12/31/2022	1,002,350

Free share plans outstanding at the end of the year have the following terms:

Conditions for Free Share Plans (Groupe M6)

Expiry date	Number of shares 2022	Number of shares 2021
Free share plans		
2022	–	237,000
2023	486,600	496,700
2024	224,700	–
2025	291,050	–
	1,002,350	733,700

As of December 31, 2022, the market price of Métropole Télévision shares on the Paris Stock Exchange was €15.35 (previous year: €17.16).

The fair value of performance shares granted is based on the value of the share at date of grant less the current value of future dividends estimated for the period of unavailability. For all performance share plans, the maturity corresponds to the vesting period (i.e. two years, two years and six months, or two years and eight months).

Fair Values of Free Share Plans (Groupe M6)

					Personnel costs in € millions	
Grant date	Share price	Risk-free interest rate	Expected return	Fair value	2022	2021
Free share plans						
7/25/2018 (2 plans)	16.92	(0.10)%	5.66%	14.97	–	0.9
7/30/2019 (2 plans)	15.35	(0.30)%	6.97%	13.23	0.8	2.6
4/20/2021 (2 plans)	18.38	(0.64)%	n/a	14.34	4.1	2.3
10/10/2022 (2 plans)	10.34	2.07%	6.15%	8.38	0.4	–
Total					5.3	5.8

There are additional share-based payments within the Bertelsmann Group that are immaterial on a stand-alone basis and in total.

18 Provisions for Pensions and Similar Obligations

in € millions	12/31/2022	12/31/2021
Defined benefit obligation	649	1,410
Similar obligations	61	64
	710	1,474

in € millions	12/31/2022	12/31/2021
Balance as of 1/1	1,474	2,009
Income and expenses recognized in profit or loss		
– Additions	154	167
– Reversal	(8)	(4)
Usage	(184)	(188)
Actuarial gains (-)/losses (+) recognized in other comprehensive income	(716)	(277)
Net contributions to plan assets	(18)	(221)
Other effects	8	(12)
Balance as of 12/31	710	1,474

The Bertelsmann Group operates various pension plans for current and former employees and their surviving dependents. The model of such plans varies according to the legal, fiscal and economic environment of the country concerned. These company pension plans include both defined contribution and defined benefit plans.

In the case of defined contribution plans, the company makes payments into an external pension fund or another welfare fund through a statutory, contractual or voluntary model. The company has no obligation to provide further benefits once it has made these payments, so no provisions are recognized. Expenses for defined contribution plans in the amount of €66 million were recognized in the financial year 2022 (previous year: €60 million).

All other pension plans are defined benefit plans. The US companies' obligations for healthcare costs for employees after they retire (medical care plans) are also defined benefit obligations and are included in the provisions on the balance sheet. For all the retirement benefit plans, a distinction must be made as to whether or not these are financed through an external investment fund.

Net Defined Benefit Liability Recognized in the Balance Sheet

in € millions	12/31/2022	12/31/2021
Present value of defined benefit obligation of unfunded plans	549	960
Present value of defined benefit obligation of funded plans	2,649	3,592
Total present value of defined benefit obligation	3,198	4,552
Fair value of plan assets	(2,687)	(3,212)
Impact from asset ceiling	1	2
Net defined benefit liability recognized in the balance sheet	512	1,342
– thereof provisions for pensions	649	1,410
– thereof other assets	137	68

Provisions are recognized for these defined benefit plans. The following tables show the breakdown of the benefit by plan beneficiary and by type of benefit plan:

Plan Beneficiaries

	Number of employees		in € millions	
	2022	2021	2022	2021
Active members	34,114	31,579	800	1,373
Deferred member	11,140	11,081	604	966
Pensioners	17,487	17,395	1,794	2,213
Total	62,741	60,055	3,198	4,552
– thereof vested			3,144	4,485

Benefit Plans

in € millions	12/31/2022	12/31/2021
Flat salary plans	1,691	2,281
Final salary plans	974	1,502
Career average plans	330	510
Other commitments given	155	197
Medical care plans	48	62
Present value of defined benefit obligation	3,198	4,552
– thereof capital commitments	168	215

The obligations and plan assets available for the existing pension plans are, in some cases, exposed to demographic, economic and legal risks. The demographic risks are primarily the longevity risk for pensioners. Economic risks include, in this respect, mostly unforeseeable developments on the capital markets and the associated impacts on plan assets and pension obligations. Legal risks can result from restrictions to investments and minimum funding requirements. A Group-wide pension guideline was introduced in 2004 to substantially minimize these risks. This stipulates that all new pension plans are, as a rule, only to be designed as defined contribution plans so that the charges from benefit commitments are always acceptable, calculable and transparent, and so that no risks can arise that the company cannot influence. In addition, the Bertelsmann Group aims, in particular, to transfer existing final salary-related pension agreements to plans with fixed amounts and capital commitments that are independent from trends. As a result of these measures, the obligations are almost entirely due to the plans that have been closed.

The Bertelsmann Group has minimum funding obligations for the plans in the United States and the United Kingdom. The pension plan in the United States is subject to the minimum funding agreements according to the "Employee Retirement Income Security Act of 1974" (ERISA). In general, the aim under this agreement is to have a fully funded pension plan so that the annual contributions to the plan assets are limited to the pension entitlements the insured employee has earned during the year, as is the case for a defined contribution plan. If the pension obligations are not fully covered by the plan assets, an additional amount sufficient to ensure full financing over a seven-year period must be applied in excess of this contribution. The plans in the United Kingdom are subject to the "Pensions Act 2004," which includes reviewing the full financing of the pension plan from an actuarial perspective every three years with annual monitoring and, if necessary, eliminating any deficits that may have arisen by means of further additions to plan assets. There are no other material regulatory conditions over and above the minimum funding regulations in the United States and the United Kingdom.

Furthermore, one Group company participated in a multi-employer plan with other non-affiliated companies until December 31, 2014. As the relevant information required to account for this as a defined benefit plan was neither available on time nor available to a sufficient extent, this benefit plan was carried in the Consolidated Financial Statements in line with the requirements for defined contribution benefit plans. In the financial year 2015, the withdrawal from the plan with retrospective effect from January 1, 2015, was declared. As of December 31, 2022, the related provision in the balance sheet position "Other provisions" under other employee benefits amounts to 11 million. According to the notification of April 2017, the company has been making monthly contribution payments, which are expected to amount to €1 million in the financial year 2023.

The provisions are determined using actuarial reports in accordance with IAS 19. The amount of provisions depends on the employees' length of service with the company and their pensionable salary. Provisions are computed using the projected unit credit method, in which the benefit entitlement earned is allocated to each year of service, thus assuming an increasing cost of service in comparison to the entry age normal method. When identifying the present value of the pension obligation, the underlying interest rate is of material importance. In the Bertelsmann Group, this is based on the "Mercer Yield Curve Approach." With this approach, separate spot rate yield curves are created for the eurozone, the United Kingdom and the United States on the basis of high-quality corporate bonds. In order to appropriately present the time value of money in accordance with IAS 19.84, the basis does not consider either spikes for which the risk estimate may be substantially higher or lower, or bonds with embedded options that distort interest rates. Biometric calculations of domestic plans are based on the 2018 G mortality tables of Heubeck-Richttafeln-GmbH. Comparable country-specific calculation methods are used for foreign plans.

Further significant actuarial assumptions were made based on a weighted average as follows:

Actuarial Assumptions

	12/31/2022				12/31/2021			
	Germany	United Kingdom	United States	Other countries	Germany	United Kingdom	United States	Other countries
Discount rate	4.20%	4.88%	5.11%	3.97%	1.36%	1.80%	2.66%	1.53%
Salary trend	2.25%	4.33%	3.50%	2.63%	2.25%	2.64%	3.50%	3.28%
Pension trend	2.04%	3.11%	n/a	2.28%	1.61%	3.05%	n/a	1.88%

An increase or decrease in the assumptions set out above compared to the assumptions actually applied would have had the following effects on the present value of the defined benefit obligation as of December 31, 2022:

Effect of Actuarial Assumptions

in € millions	Increase	Decrease
Effect of 0.5 percentage point change in discount rate	(183)	203
Effect of 0.5 percentage point change in salary trend	17	(15)
Effect of 0.5 percentage point change in pension trend	133	(101)
Effect of change in average life expectancy by 1 year	108	(109)

In order to determine the sensitivity of the longevity, the mortality rates for all beneficiaries were reduced or increased evenly, so that the life expectancy of a person of a country-specific retirement age increases or decreases by one year.

Changes in the present value of defined benefit obligations and plan assets in the reporting period were as follows:

Development of the Defined Benefit Plans

	Defined benefit obligation (I)		Fair value of plan assets (II)		Net defined benefit balance (I)-(II)[1]	
in € millions	2022	2021	2022	2021	2022	2021
Balance as of 1/1	4,552	4,771	3,212	2,843	1,342	1,928
Current service cost	56	66	–	–	56	66
Interest expenses	66	56	–	–	66	56
Interest income	–	–	49	36	(49)	(36)
Past service cost	–	1	–	–	–	1
Income and expenses for defined benefit plans recognized in the consolidated income statement	**122**	**123**	**49**	**36**	**73**	**87**
Income/expense on plan assets excluding amounts included in net interest income and net interest expenses	–	–	(549)	119	549	(119)
Actuarial gains (-) and losses (+)						
– changes in financial assumptions	(1,345)	(175)	–	–	(1,345)	(175)
– changes in demographic assumptions	5	(5)	–	–	5	(5)
– experience adjustments	27	(15)	–	–	27	(15)
Remeasurements for defined benefit plans recognized in the consolidated statement of comprehensive income	**(1,313)**	**(195)**	**(549)**	**119**	**(764)**	**(314)**
Contributions to plan assets by employer	–	–	18	221	(18)	(221)
Contributions to plan assets by employees	3	3	3	3	–	–
Pension payments	(160)	(159)	(30)	(31)	(130)	(128)
Cash effects from settlements	–	(1)	–	(1)	–	–
Change of consolidation scope	–	(16)	–	1	–	(17)
Changes associated with assets held for sale	1	(39)	1	(39)	–	–
Changes in foreign exchange rates	(12)	64	(21)	60	9	4
Other changes	5	1	4	–	–	3
Other reconciling items	**(163)**	**(147)**	**(25)**	**214**	**(139)**	**(359)**
Balance as of 12/31	3,198	4,552	2,687	3,212	512	1,342
thereof						
Germany	2,486	3,501	1,971	2,287	515	1,214
United Kingdom	430	678	552	728	(122)	(50)
United States	149	189	119	153	30	36
Other European countries	111	155	33	29	79	128
Other countries	22	29	12	15	10	14

1) In the financial year 2022, for calculating the "Net defined benefit balance," the effects of the asset ceiling in accordance with IAS 19 amounting to €1 million were taken into account in the item "Other changes." Effects from the asset ceiling amounting to €2 million were recognized in the previous year.

Of the contributions to plan assets, €2 million (previous year: €202 million) pertains to Germany. Employer contributions to plan assets are expected to amount to €14 million in the next financial year. Reimbursement rights for defined benefit obligations in Germany amount to €24 million (previous year: €29 million) and are recognized in the balance sheet position "Trade and other receivables."

The expenses for defined benefit plans are broken down as follows:

Expenses for Defined Benefit Plans

in € millions	2022	2021
Current service cost	56	66
Past service cost and impact from settlement	–	1
Net interest expenses	17	20
Net pension expenses	73	87

The portfolio structure of plan assets is composed as follows:

Portfolio Structure of Plan Assets

in € millions	12/31/2022	12/31/2021
Debt instruments[1]	1,905	2,182
Equity instruments[1]	502	681
Cash and cash equivalents	115	55
Qualifying insurance policies	115	144
Other funds	99	139
Derivatives	(56)	3
Property	7	8
Fair value of plan assets	2,687	3,212

1) For almost all equity and debt instruments, market prices are listed on an active market.

The plan assets in the Bertelsmann Group are used exclusively for the fulfillment of benefit obligations. To avoid a concentration of risk, plan assets are invested in various classes of investments. The majority of plan assets are managed by Bertelsmann Pension Trust e.V. under a contractual trust arrangement (CTA) for pension commitments of Bertelsmann SE & Co. KGaA and some of the German subsidiaries. There is no funding requirement for the CTA. No net contribution was made to plan assets during the reporting period. The trust assets were invested in accordance with the investment guideline of the beneficiary, using a long-term total return approach. This approach is based on the aim of using strategic asset allocation to generate a suitable return in the long term regardless of short-term market fluctuations and/or crises. The management board of the pension trust is responsible for the investment and regularly informs the beneficiary of the status and performance of the pension assets.

The weighted-average duration of the pension obligations as of December 31, 2022, is as follows:

Weighted Average Duration

in years	2022	2021
Germany	13	16
United Kingdom	16	21
United States	10	14
Other countries	13	15

The maturity profile of the anticipated undiscounted pension payments is presented in the following table:

Maturity Profile of Pension Payments

in € millions	Expected pension payments
2023	166
2024	171
2025	179
2026	185
2027	194
2028–2032	984

Similar obligations relate to provisions for bonuses for employee service anniversaries, amounts due but not yet paid to defined contribution plans, partial retirement and severance payments at retirement. Severance payments at retirement are made when employees leave the company and are based on statutory obligations. Provisions for employee service anniversary bonuses and severance payments at retirement are recognized in the same way as defined benefit plans, but with actuarial gains and losses recognized in profit or loss. Employees in Germany who are at least 55 years old and have a permanent employment contract with the company qualify for the partial retirement schemes. The partial retirement phase lasts two to six years.

The following table shows the breakdown in similar obligations:

Breakdown of Similar Obligations

in € millions	12/31/2022	12/31/2021
Provisions for employee service anniversaries	26	31
Provisions for old-age part-time schemes	12	15
Other	23	18
Similar obligations	61	64

19 Other Provisions

in € millions	12/31/2021	of which > 1 year	Additions	Reversal	Usage	Other effects	Change of consolida-tion scope	Accrued interest	12/31/2022	of which > 1 year
Onerous contracts	121	22	57	(17)	(59)	6	–	–	108	24
Litigation	93	69	74	(48)	(65)	–	4	–	58	32
Restructuring	118	53	29	(18)	(65)	(2)	20	–	82	21
Other employee benefits	45	14	9	(10)	(19)	1	–	1	27	11
Other	109	40	27	(32)	(12)	13	38	(1)	142	68
	486	198	196	(125)	(220)	18	62	–	417	156

The provisions for onerous contracts concern RTL Group in the amount of €72 million (previous year: €85 million) and were recognized mainly for program rights. Of that amount, €68 million (previous year: €82 million) relates to RTL Deutschland. Provisions for litigation pertain in the amount of €29 million (previous year: €67 million), as well as their significant reversal due to the reassessment of the legal proceedings in the reporting period, to RTL Group companies. They cover expected losses from partly multiannual court proceedings and extrajudicial disputes. Please refer to the risk report in the Combined Management Report for the risk assessment of litigation. In accordance with IAS 37, restructuring provisions include termination benefits and other costs relating to market-related restructuring measures. Provisions in the amount of €82 million (previous year: €118 million) are recognized for various restructuring programs within the Bertelsmann Group. The additions relate mainly to the Bertelsmann Printing Group (€15 million), Arvato (€6 million) and RTL Group (€5 million) divisions.

The provisions for other employee benefits in the amount of €11 million (previous year: €15 million) relate to an obligation in connection with the withdrawal from a multi-employer plan. Further details are presented in note 18 “Provisions for Pensions and Similar Obligations.” The item “Other” is mainly attributable to the divisions RTL Group (€25 million, previous year: €12 million), Arvato (€47 million, previous year: €48 million), Bertelsmann Printing Group (€23 million, previous year: €28 million) and Bertelsmann Education Group (€31 million, previous year: €0 million), the increase in which is mainly due to the initial consolidation of Afya. In the Bertelsmann Printing Group division, a provision in the amount of €14 million (previous year: €18 million) refers to compensation obligations from pension entitlements for employees at the Prinovis location in Ahrensburg toward Axel Springer SE.

20 Profit Participation Capital

in € millions	12/31/2022	12/31/2021
Profit participation capital 1992	23	23
Profit participation capital 2001	390	390
	413	413

The market value of the 2001 profit participation certificates was €739 million with a closing rate of 260.00 percent on the last day of trading in the past financial year on the Frankfurt Stock Exchange (previous year: €1,021 million with a rate of 359.20 percent) and, correspondingly, €29 million for the 1992 profit participation certificates with a rate of 173.00 percent (previous year: €33 million with a rate of 195.12 percent). The market values are based on level 1 of the fair value hierarchy. Further information on profit participation capital is presented in detail in the Combined Management Report.

21 Financial Debt

Financial debt includes all interest-bearing liabilities to banks and capital markets as of the end of the reporting period. Carrying amounts are calculated as follows:

Current and Non-Current Financial Debt

	Current		Non-current	
in € millions	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Bonds	146	597	4,510	4,450
Promissory notes	–	–	325	325
Liabilities to banks	76	97	215	77
Other financial debt	56	53	149	5
	278	747	5,199	4,857

The Bertelsmann Group has access to floating-rate and fixed-rate funds through various contractual arrangements. Financial debt is generally unsecured.

In January 2022, early repayments of parts of the bonds maturing in August 2022, October 2024, September 2025 and April 2026 in the total nominal amount of €146 million were made as part of a public repurchase offer. The €750 million bond maturing in August 2022 was repaid on schedule, of which €211 million had already been repaid early. In addition, Bertelsmann placed a €750 million fixed-rate publicly listed bond with a six-and-a-half-year term in November 2022. Furthermore, an early repayment of €504 million of the hybrid bond with a nominal value of €650 million, callable for the first time in April 2023, was made in November 2022 as part of a public repurchase offer. In addition, the Brazilian education company Afya, which belongs to the Bertelsmann Group, placed a publicly listed bond for BRL 500 million in December 2022. The nominal volume of the bond is due in two equal tranches in 2027 and 2028. At the end of the reporting period, the Group had bonds, private placements and promissory notes outstanding with a nominal volume of €5,047 million (previous year: €5,397 million).

The differences in carrying amount versus nominal amount in the table below result from transaction costs, discounts and fair value effects from hedge accounting in connection with the conclusion of derivatives. In addition, early repayments of €74 million were taken into account in calculating the carrying amount of the €500 million bond maturing in October 2024. Furthermore, early repayments in the nominal amount of €233 million were taken into account for the calculation of the carrying amount of the bond maturing in September 2025. For the calculation of the carrying amount of the bond maturing in April 2026, an early repayment with a nominal value of €57 million was taken into account. In addition, an early repayment with a nominal value of €504 million was taken into account for the calculation of the carrying amount of the hybrid bond with an initial nominal value of €650 million.

Bonds and Promissory Notes

	in millions	in € millions			
	Nominal	Carrying amount		Fair value	
Interest rate; emission; maturity; fixed interest	amount	12/31/2022	12/31/2021	12/31/2022	12/31/2021
2.625%; 2012; 2022; fixed-interest bond[1]	750 €	–	597	–	608
1.500%; 2017; 2024; fixed-interest bond	50 €	50	50	48	52
1.750%; 2014; 2024; fixed-interest bond[1]	500 €	406	439	415	460
1.250%; 2018; 2025; fixed-interest bond[1]	750 €	495	532	489	557
1.787%; 2015; 2025; fixed-interest promissory note	150 €	150	150	142	160
1.125%; 2016; 2026; fixed-interest bond[1]	500 €	442	497	412	520
1.000%; 2019; 2026; floating- and fixed-interest promissory note[2]	75 €	75	75	68	78
1.600%; 2020; 2027; fixed-interest promissory note	100 €	100	100	92	107
1.000%; 2020; 2027; fixed-interest bond	100 €	100	100	89	104
CDI (Certificado de Depósito Interbancário) + 180 bp; 2022; 2028; floating-rate bond[1),3)]	500 BRL	88	–	89	–
2.000%; 2020; 2028; fixed-interest bond[1]	750 €	745	744	688	821
3.500%; 2022; 2029; fixed-interest bond[1]	750 €	743	–	728	–
1.500%; 2020; 2030; fixed-interest bond[1]	750 €	744	743	641	799
3.700%; 2012; 2032; fixed-interest bond	100 €	99	99	98	129
3.000%; 2015; 2075; fixed-interest hybrid bond[1]	650 €	146	649	146	667
3.500%; 2015; 2075; fixed-interest hybrid bond[1]	600 €	598	597	549	641
		4,981	5,372	4,694	5,703

1) Listed.
2) €10 million floating rate (6-month EURIBOR + 100 bp).
3) Of which BRL 250 million maturing in the financial year 2027.

The documentation of the bonds from Bertelsmann SE & Co. KGaA in 2012, 2014, 2016, 2018 and 2020 is within the framework of a base documentation for debt issuance programs. The hybrid bonds and promissory notes as well as the bonds of 2017 and 2022 were issued on the basis of separate documentation. The bonds mainly have a rating of “Baa2” (Moody’s) and “BBB” (Standard & Poor’s). The debt issuance program was last renewed in March 2020. Transaction costs and agreed discounts or premiums are taken into account in the interest result over the term, impacting the carrying amount of the bonds and promissory notes. This led to a difference to the nominal volume of €27 million (previous year: €25 million) at the end of the year.

As a rule, the quoted prices at the end of the reporting period are used to determine the fair value of the bonds issued. On December 31, 2022, the cumulative fair value of the listed bonds totaled €4,157 million (previous year: €5,073 million), with a nominal volume of €4,472 million (previous year: €4,822 million) and a carrying amount of €4,407 million (previous year: €4,798 million). The stock market prices are based on level 1 of the fair value hierarchy.

The fair values of private placements and promissory notes are determined using actuarial methods based on yield curves adjusted for the Group's credit margin. The interest premium results from the market price for credit-default swaps at the end of the respective reporting periods. Fair value is measured on the basis of discount rates ranging from 2.73 percent to 3.41 percent. The fair values of the private placements and promissory notes are based on level 2 of the fair value hierarchy.

Credit Facilities

The Bertelsmann Group has access to a syndicated loan agreement entered into with major international banks in the amount of €1,200 million (previous year: €1,200 million), which was extended by one more year to 2026 most recently in June 2021. Bertelsmann SE & Co. KGaA can draw down this credit facility using floating-rate loans in euros and US dollars on a revolving basis.

In addition, Bertelsmann has access to further bilateral credit facilities in the amount of €320 million (previous year: €330 million), which can also be drawn down primarily using floating-rate loans on a revolving basis. As of December 31, 2022, the credit facilities were drawn down in the amount of €130 million (previous year: €70 million).

22 Lease Liabilities

The maturities of lease liabilities are presented in the table below.

Maturity Analysis for Lease Liabilities

		Undiscounted cash flows			
in € millions	Carrying amount	Up to 1 year	1 to 5 years	Over 5 years	Total
Balance as of 12/31/2022	1,537	355	851	494	1,700
Balance as of 12/31/2021	1,356	311	763	452	1,526

As of December 31, 2022, potential future cash outflows of €353 million (previous year: €436 million) were not included in the lease liabilities, as it could not be assumed with reasonable certainty that the leases would be extended (or would not be terminated). Future payments arising from short-term leases and leases for low-value assets are not recognized as right-of-use assets and lease liabilities. For such leases, the payments are recognized on a straight-line basis as expenses (further explanations are presented in note 5 "Other Operating Expenses"). Expenses from variable lease payments not included in the lease liability were immaterial as in the previous year. The same applies for income from subleasing right-of-use assets and the resulting lease payments expected in the future. Details on the corresponding right-of-use assets are presented in note 10 "Property, Plant and Equipment and Right-of-Use Assets."

23 Liabilities

in € millions	12/31/2022	12/31/2021
Non-current		
Trade payables	145	160
Derivative financial instruments	149	89
Sundry financial payables	380	256
Contract liabilities	28	34
Sundry non-financial payables	357	363
Current		
Trade payables	3,843	3,902
Refund liabilities	445	483
Derivative financial instruments	135	64
Sundry financial payables	968	833
Contract liabilities	1,037	861
Sundry non-financial payables	1,458	1,433
– personnel-related liabilities	792	792
– tax liabilities	213	203
– social security liabilities	136	136
– deferred items	19	34
– other	298	268

The item “Contract liabilities” includes payments received by Bertelsmann in advance; that is, prior to satisfaction of the contractual obligations in accordance with IFRS 15. They are recognized as revenue as soon as the contractual obligation has been rendered. Accordingly, revenues amounting to €911 million were recognized in the financial year 2022 (previous year: €657 million) which were included in the balance of contract liabilities at the beginning of the financial year. The reported revenues also comprise the amounts included in the balance of contract liabilities at the beginning of the financial year for companies newly included in the scope of consolidation. As in the previous year, the contract liabilities as of December 31, 2022, mainly relate to deferred revenue from productions at RTL Group, deferred licensing revenue at BMG and services to be provided by the Arvato and Bertelsmann Education Group divisions, as a rule in the following period. As of January 1, 2021, contract liabilities amounted to €694 million.

In accordance with IFRS 15, the item “Refund liabilities” mainly comprises liabilities for expected returns of the Penguin Random House and RTL Group divisions of €270 million (previous year: €305 million). Correspondingly, in the balance sheet position “Other non-financial assets,” an asset for an immaterial amount is recognized for the customers’ right to recover products from customers upon settling the refund liability. The item “Sundry financial payables” includes, among other things, payables of €151 million (previous year: €97 million) from the Riverty business unit, which were recognized in relation to the receivables management service provided. In addition, the item comprises payables in the amount of €228 million (previous year: €177 million) relating to accounts receivables sold, which are acquired by Riverty from third parties in the course of conducting its financial services and then resold. Non-current sundry financial payables also include liabilities from put options relating to shareholders with non-controlling interests of €211 million (previous year: €131 million), minority interests in partnerships of €31 million (previous year: €34 million) and liabilities from the acquisition of assets in the amount of €145 million (previous year: €85 million). Current sundry financial payables also comprise liabilities from the acquisition of assets in the amount of €251 million (previous year: €147 million) and liabilities to participations in the amount of €23 million (previous year: €29 million).

24 Off-Balance-Sheet Liabilities

Off-balance-sheet liabilities break down as follows at the end of the financial year:

Contingent Liabilities and Other Commitments

in € millions	12/31/2022	12/31/2021
Commitments from productions and co-productions, TV licenses and broadcasting rights, as well as other rights and licenses	1,857	1,544
Commitments from royalty agreements	1,212	1,197
Commitments from assets under construction and lease contracts not recognized on the balance sheet	22	73
Purchase commitments for inventories	67	51
Commitments for the acquisition of intangible assets and property, plant and equipment	22	5
Guarantees	28	53
Other	412	439
	3,620	3,362

Of the commitments from productions and co-productions, TV licenses and broadcasting rights, as well as other rights and licenses, €1,857 million (previous year: €1,544 million) pertains to RTL Group. Commitments from royalty agreements relate to Penguin Random House in the amount of €1,113 million (previous year: €1,094 million) and to BMG in the amount of €99 million (previous year: €103 million). Commitments from assets under construction and not recognized lease contracts comprise leases not yet commenced, but to which the lessee is committed.

25 Additional Disclosures on Financial Instruments

Both of the following tables show the carrying amounts and measurement categories of financial assets and financial liabilities in accordance with IFRS 9 as of December 31, 2022:

Carrying Amounts and Measurement Categories of Financial Assets

in € millions	Balance sheet position	12/31/2022	12/31/2021
Financial assets measured at amortized cost			
– loans	Minority stakes and other financial assets	44	91
– trade receivables	Trade and other receivables	4,004	3,612
– receivables from participations	Trade and other receivables	20	30
– sundry financial receivables	Trade and other receivables	900	861
– bank balances and cash on hand	Cash and cash equivalents	1,583	1,446
– cash equivalents	Cash and cash equivalents	283	135
Financial assets measured at fair value through other comprehensive income			
– other financial assets	Minority stakes and other financial assets	28	78
Primary financial assets measured at fair value through profit or loss			
– loans	Minority stakes and other financial assets	31	25
– fund-of-fund investments	Minority stakes and other financial assets	203	183
– minority stakes in start-ups	Minority stakes and other financial assets	1,179	1,034
– sundry financial receivables	Trade and other receivables	14	7
– financial instruments of the consolidated special fund	Minority stakes and other financial assets	125	102
– other financial assets	Minority stakes and other financial assets	286	420
– cash equivalents	Cash and cash equivalents	1,362	3,064
Derivative financial instruments	Minority stakes and other financial assets	76	37
Continuing involvement	Trade and other receivables	183	126
		10,321	11,251

Carrying Amounts and Measurement Categories of Financial Liabilities

in € millions	Balance sheet position	12/31/2022	12/31/2021
Financial liabilities measured at amortized cost			
– profit participation capital	Profit participation capital	413	413
– bonds and promissory notes	Financial debt	4,981	5,372
– liabilities to banks	Financial debt	291	174
– other financial debt	Financial debt	205	58
– trade payables	Trade and other payables	3,988	4,062
– liabilities to participations	Trade and other payables	23	29
– other	Trade and other payables	1,528	1,398
Primary financial liabilities measured at fair value through profit or loss	Trade and other payables	59	19
Derivative financial instruments	Trade and other payables	284	153
Continuing involvement	Trade and other payables	183	126
		11,955	11,804

The fair values of the bonds and promissory notes are presented in note 21 "Financial Debt." The carrying amounts of the other financial assets and liabilities measured at amortized cost represent a reasonable approximation of fair value.

Financial Assets Measured at Fair Value Categorized Using the Fair Value Measurement Hierarchy

in € millions	Level 1: Quoted prices in active markets	Level 2: Observable market data	Level 3: Unobservable market data	Total as of 12/31/2022
Equity instruments measured at fair value	213	–	1,219	1,432
Debt instruments measured at fair value	65	1,479	252	1,796
Primary and derivative financial assets held for trading	–	63	–	63
Derivatives with hedge relation	–	13	–	13
	278	1,555	1,471	3,304

in € millions	Level 1: Quoted prices in active markets	Level 2: Observable market data	Level 3: Unobservable market data	Total as of 12/31/2021
Equity instruments measured at fair value	319	1	1,144	1,464
Debt instruments measured at fair value	63	3,168	218	3,449
Primary and derivative financial assets held for trading	–	27	–	27
Derivatives with hedge relation	–	10	–	10
	382	3,206	1,362	4,950

It is possible to allocate the financial instruments measured at fair value in the balance sheet to the three levels of the fair value hierarchy by category, based on the tables showing carrying amounts and measurement categories for the respective financial year. The financial assets of levels 1 and 3 mainly pertain to investments held by the Bertelsmann Investments division, which were recognized at fair value.

Level 2 financial assets primarily comprise investments in diversified money market funds reported as cash equivalents, which are measured at fair value through profit or loss and are subject to only insignificant fluctuations in value.

Financial Assets Measured at Fair Value Based on Level 3

in € millions	Financial assets measured at fair value	Primary and derivative financial assets held for trading	Total
Balance as of 1/1/2022	1,362	–	1,362
Total gain (+) or loss (-)	(4)	–	(4)
– in profit or loss	(3)	–	(3)
– in other comprehensive income	(1)	–	(1)
Purchases	213	–	213
Transfers into level 3 (including first-time classification as level 3)	168	–	168
Transfers out of level 3	(65)	–	(65)
Sales/settlements	(203)	–	(203)
Balance as of 12/31/2022	1,471	–	1,471
Gain (+) or loss (-) for assets still held at the end of the reporting period	(28)	–	(28)

in € millions	Financial assets measured at fair value	Primary and derivative financial assets held for trading	Total
Balance as of 1/1/2021	1,067	–	1,067
Total gain (+) or loss (-)	433	–	433
– in profit or loss	424	–	424
– in other comprehensive income	9	–	9
Purchases	656	–	656
Transfers out of level 3	(363)	–	(363)
Sales/settlements	(431)	–	(431)
Balance as of 12/31/2021	1,362	–	1,362
Gain (+) or loss (-) for assets still held at the end of the reporting period	445	–	445

The purchases relate mainly to various new and follow-up investments by the Bertelsmann Investments division, in particular new investments of the Bertelsmann India Investments fund, none of which were material on a standalone basis. A major portion of the sales in the financial year 2022 is attributable to the sale of RTL Group's investment in VideoAmp, a US software and data company for media measurement. Further sales relate to the investment in Synergis and, within the Bertelsmann Investments division, mainly to the investments of the Bertelsmann Digital Media Investments fund. The transfers into level 3 mainly relate to the investment in the online education platform Udacity, which was previously accounted for as an associate and belongs to the Bertelsmann Education Group, as a result of the change in the governance structure and the resulting loss of significant influence. There were no transfers into level 3 in the previous year. Transfers out of level 3 were made in the financial year 2022 mainly at Bertelsmann Investments as a result of expiring lock-up periods.

Financial Liabilities Measured at Fair Value Categorized Using the Fair Value Measurement Hierarchy

in € millions	Level 1: Quoted prices in active markets	Level 2: Observable market data	Level 3: Unobservable market data	Total as of 12/31/2022
Financial liabilities measured at fair value through profit or loss	–	–	59	59
Primary and derivative financial liabilities held for trading	–	200	–	200
Derivatives with hedge relation	–	84	–	84
	–	284	59	343

in € millions	Level 1: Quoted prices in active markets	Level 2: Observable market data	Level 3: Unobservable market data	Total as of 12/31/2021
Financial liabilities measured at fair value through profit or loss	–	–	19	19
Primary and derivative financial liabilities held for trading	–	77	–	77
Derivatives with hedge relation	–	76	–	76
	–	153	19	172

Financial Liabilities Measured at Fair Value Based on Level 3

in € millions	Financial liabilities measured at fair value through profit or loss	Total
Balance as of 1/1/2022	19	19
Total gain (-) or loss (+)	(1)	(1)
– in profit or loss	–	–
– in other comprehensive income	(1)	(1)
Purchases	56	56
Settlements	(15)	(15)
Transfers out of/into level 3	–	–
Balance as of 12/31/2022	59	59
Gain (-) or loss (+) for liabilities still held at the end of the reporting period	–	–

in € millions	Financial liabilities measured at fair value through profit or loss	Total
Balance as of 1/1/2021	17	17
Total gain (-) or loss (+)	6	6
– in profit or loss	5	5
– in other comprehensive income	1	1
Purchases	3	3
Settlements	(7)	(7)
Transfers out of/into level 3	–	–
Balance as of 12/31/2021	19	19
Gain (-) or loss (+) for liabilities still held at the end of the reporting period	6	6

Level 1:
The fair value of the listed financial instruments is determined on the basis of stock exchange listings at the end of the reporting period.

Level 2:
For measuring the fair value of unlisted derivatives, Bertelsmann uses various financial methods reflecting the prevailing market conditions and risks at the respective balance sheet dates. Irrespective of the type of financial instrument, future cash flows are discounted at the end of the reporting period based on the respective market interest rates and yield curves at the end of the reporting period. The fair value of forward exchange transactions is calculated using the middle spot prices at the end of the reporting period and taking into account forward markdowns and markups for the remaining term of the transactions. The fair value of interest rate derivatives is calculated on the basis of the respective market rates and yield curves at the end of the reporting period. The fair value of forward commodity transactions is derived from the stock exchange listings published at the end of the reporting period. Any mismatches to the standardized stock exchange contracts are reflected through interpolation or additions. The fair values of the money market funds correspond to the price quotations funds not directly listed on the stock exchange.

Level 3:
If no observable market data is available, fair value measurement is based primarily on cash flow-based valuation techniques. As a rule, so-called qualified financing rounds are used for minority stakes in the

Bertelsmann Investments division. Listed financial instruments with contractual lockups are also based on level 3.

The measurement of financial assets and financial liabilities according to level 2 and level 3 requires management to make certain assumptions about the model inputs, including cash flows, discount rate and credit risk, as well as the life and development cycle of start-up investments. Transfers between levels of the fair value hierarchy are recognized at the date of the event or change in circumstances that caused the transfer. There were no transfers between level 1 and 2 during the financial year 2022.

Financial assets and liabilities are offset on the balance sheet if master netting agreements or similar agreements allow the Bertelsmann Group and the counterparty to reach settlement on a net basis. Settlement on a net basis is thus legally valid both as part of ordinary business activities and in the event of payment default by one of the parties. In addition, Bertelsmann enters into transactions in financial derivatives that do not meet the criteria for offsetting on the balance sheet, as future events determine the right to offset. As of December 31, 2022, as in the previous year, no on-balance-sheet offsetting was performed, whereas there was a non-recognized offsetting potential of €66 million (previous year: €22 million) in connection with derivative financial instruments.

Credit Risk

In accordance with IFRS 9, Bertelsmann uses a simplified approach to measure expected credit losses on trade receivables and contract assets. According to this, the loss allowance is measured using lifetime expected credit losses. For this purpose, impairment matrices based on historic bad debt losses, maturity bands and expected credit losses are prepared. The impairment matrices are created for division-specific or business unit-specific groups of receivables, each with similar default patterns. In addition, separate risk assessments are performed. Bertelsmann also considers other quantitative and qualitative information and analyses based on the Group's historical experience and reasonable assessments, including forward-looking information such as customer-specific information and forecasts of future economic conditions. Contract assets have substantially the same risk characteristics as trade receivables for the same types of contracts, so that the expected loss rates for trade receivables are also a reasonable approximation of the loss rates for contract assets.

Based on this, the loss allowance as of December 31, 2022, was determined as follows for both trade receivables and contract assets:

Credit Risk for Trade Receivables and Contract Assets

	Not credit-impaired				
in € millions	Not overdue	Overdue 1 to 30 days	Overdue 31 to 90 days	Overdue more than 90 days	Credit-impaired
Expected loss rate	0.78%	1.10%	3.08%	8.09%	n/a
Trade receivables and contract assets	2,548	453	130	136	926
Loss allowance for expected credit losses	(20)	(5)	(4)	(11)	(105)
Balance as of 12/31/2022	2,528	448	126	125	821

	Not credit-impaired				
in € millions	Not overdue	Overdue 1 to 30 days	Overdue 31 to 90 days	Overdue more than 90 days	Credit-impaired
Expected loss rate	0.72%	1.01%	3.00%	8.65%	n/a
Trade receivables and contract assets	2,346	396	100	104	867
Loss allowance for expected credit losses	(17)	(4)	(3)	(9)	(109)
Balance as of 12/31/2021	2,329	392	97	95	758

The expected loss rates correspond to the average rates for the respective division-specific or business unit-specific groups of receivables. In the financial year 2022, impairment losses and reversals amounting to €-5 million (previous year: €-4 million) were recognized on trade receivables and contract assets. The following table shows a reconciliation from the opening balance to the closing balance of loss allowances for trade receivables and contract assets in the financial year 2022:

Reconciliation of Loss Allowance for Trade Receivables and Contract Assets

in € millions	2022	2021
Balance as of 1/1	(142)	(164)
Additions	(47)	(44)
Usage	14	31
Reversal	42	40
Change of consolidation scope	(12)	–
Exchange rate effect	–	(5)
Balance as of 12/31	(145)	(142)

Bertelsmann applies the general approach for all other financial assets that are subject to the expected credit loss model. The following table shows a reconciliation from the opening balances to the closing balances of loss allowances for the corresponding financial instruments:

Reconciliation of Loss Allowance for Other Financial Assets

in € millions	Loans	Sundry financial receivables	Purchased or originated financial assets which are credit-impaired	Total
Balance as of 1/1/2022	(10)	(117)	(26)	(153)
Additions	(30)	(28)	(12)	(70)
Usage	5	7	–	12
Reversal	3	8	10	21
Change of consolidation scope	–	–	–	–
Exchange rate effect	(1)	1	–	–
Balance as of 12/31/2022	(33)	(129)	(28)	(190)
– thereof 12-month expected credit loss	(32)	(13)	n/a	(45)
– thereof lifetime expected credit loss but not credit-impaired	–	(99)	n/a	(99)
– thereof lifetime expected credit loss and credit-impaired	(1)	(17)	n/a	(18)

in € millions	Loans	Sundry financial receivables	Purchased or originated financial assets which are credit-impaired	Total
Balance as of 1/1/2021	(11)	(95)	(20)	(126)
Additions	(1)	(35)	(15)	(51)
Usage	2	4	–	6
Reversal	1	9	9	19
Change of consolidation scope	–	1	–	1
Exchange rate effect	(1)	(1)	–	(2)
Balance as of 12/31/2021	(10)	(117)	(26)	(153)
– thereof 12-month expected credit loss	(2)	(49)	n/a	(51)
– thereof lifetime expected credit loss but not credit-impaired	–	(57)	n/a	(57)
– thereof lifetime expected credit loss and credit-impaired	(8)	(11)	n/a	(19)

The impairment loss identified for cash and cash equivalents was immaterial in both the financial year 2022 and the previous year.

As in the previous year, the carrying amount of all receivables, loans and securities constitutes the Bertelsmann Group's maximum default risk as of the end of the reporting period.

The following table presents the contractually fixed undiscounted cash flows of the financial liabilities for settlement. The figures are based on undiscounted cash flows at the earliest date at which the Bertelsmann Group can be held liable for payment.

Maturity Analysis for Non-Derivative Financial Liabilities

in € millions	Carrying amount	Undiscounted cash flows Up to 1 year	1 to 5 years	Over 5 years	Total
Profit participation capital	413	–	–	413	413
Fixed-interest bonds and promissory notes	4,883	146	1,852	2,949	4,947
Floating-rate bonds and promissory notes	98	–	54	45	99
Liabilities to banks	291	76	236	–	312
Other financial debt	205	56	227	4	287
Trade payables	3,988	3,843	140	5	3,988
Liabilities to participations	23	23	–	–	23
Other	1,770	1,390	323	88	1,801
Balance as of 12/31/2022	11,671	5,534	2,832	3,504	11,870
Profit participation capital	413	–	–	413	413
Fixed-interest bonds and promissory notes	5,362	597	1,740	3,050	5,387
Floating-rate bonds and promissory notes	10	–	10	–	10
Liabilities to banks	174	97	8	70	175
Other financial debt	58	52	1	5	58
Trade payables	4,062	3,902	160	2	4,064
Liabilities to participations	29	29	–	–	29
Other	1,543	1,303	251	1	1,555
Balance as of 12/31/2021	11,651	5,980	2,170	3,541	11,691

Current cash outflows from financial liabilities are offset by planned cash inflows from receivables and other financial assets. To cover current cash flows, Bertelsmann SE & Co. KGaA also has adequate financial reserves in the amount of cash and cash equivalents and unutilized credit facilities existing at the end of the reporting period.

The maturity analysis for lease liabilities as of December 31, 2022, is presented in note 22 “Lease Liabilities.”

Based on the remaining contractual terms of its financial liabilities at the end of the reporting period, the Bertelsmann Group will have to make the following future interest payments:

Future Interest Payments

	Undiscounted interest payments			
in € millions	Up to 1 year	1 to 5 years	Over 5 years	Total
Profit participation capital	45	181	45	271
Bonds and promissory notes	102	413	123	638
Liabilities to banks	22	33	–	55
Other financial debt	11	23	–	34
Balance as of 12/31/2022	180	650	168	998
Profit participation capital	45	181	45	271
Bonds and promissory notes	113	304	121	538
Liabilities to banks	4	2	–	6
Other financial debt	–	–	–	–
Balance as of 12/31/2021	162	487	166	815

Financial Services Related to Receivables Acquired and Sold

In certain individual cases, Bertelsmann sells receivables purchased from third parties to financial intermediaries. The receivables sold relate primarily to short-term receivables, some covered by credit insurance, that Riverty acquires from third parties in the course of conducting its financial services, and some of which it resells to financial intermediaries on an ongoing basis. This business can be changed at any time during the year. As part of the contractual agreements on the sale of receivables, substantially neither all the rewards nor all risks that are associated with the receivables were transferred or retained. This relates in particular to possible defaults and late payments of receivables sold, so that a receivable was accounted for in the amount of the continuing involvement of €183 million (previous year: €126 million). The carrying amount of the associated liability is €197 million (previous year: €137 million). The underlying volume of receivables sold amounts to €794 million as of the end of the reporting period (previous year: €673 million).

Risk Management of Financial Instruments

Financial Risk Management

The Bertelsmann Group is exposed to various forms of financial risk through its international business operations. Above all, this includes the effects of changes in foreign exchange rates and interest rates. Bertelsmann's risk management activities are designed to effectively mitigate these risks. The Executive Board establishes basic risk management policy, outlining general procedures for hedging currency and interest rate risks and the utilization of derivative financial instruments. The Central Financial Department advises subsidiaries on operating risks and hedges risks using derivative financial instruments as necessary. However, subsidiaries are not obliged to use the services provided by this department for their operating risks. Some subsidiaries, such as RTL Group in particular, have their own finance department. They report their hedge transactions to the Central Finance Department each quarter. Further information on financial market risks and financial risk management is presented in the Combined Management Report.

Currency Risk

The Bertelsmann Group is exposed to exchange rate risk in various foreign currencies. Its subsidiaries are advised, but not obliged, to hedge themselves against foreign currency risks in the local reporting currency by signing forward agreements with banks that have a high credit rating. Loans within the Bertelsmann Group that are subject to currency risk are hedged using derivative financial instruments. If foreign currency transactions designated as hedging instrument adequately meet effectiveness requirements, hedge accounting as defined by IFRS 9 is applied under the cash flow hedge model. A number of subsidiaries are based outside the eurozone. The resulting translation risks to the leverage factor (ratio of economic debt to operating EBITDA) is managed over the long term by aligning the debt in the main foreign currencies with the current leverage factor and the maximum permitted leverage for the entire Group.

Interest Rate Risk

There are interest rate risks for interest-bearing assets and financial debt. Interest rate risk in the Bertelsmann Group is analyzed centrally and managed on the basis of the Group's planned net financial debt. A key factor in this management is the Group's interest result over time and its sensitivity to interest rate changes. The Group aims for a balanced relationship between floating rates and long-term fixed-interest rates, under consideration of the absolute amount, forecast performance of the interest-bearing liability and interest level. This is implemented using underlying and derivative financial instruments for control.

Liquidity Risk

Liquidity risks may arise through a lack of rollover financing (liquidity risk in a narrow sense), delayed receipt of expected payment and unforeseen expenditure (budgeting risk). Budgeting risk is determined by comparing deviations in actual spending with budget and reserve amounts. In a narrow sense, liquidity risk depends on the volume of debt due within a given period. Liquidity risk is monitored on an ongoing basis with reference to the budget for current and future years. New and unplanned transactions (e.g., acquisitions) are continuously tracked. The maturity profile of financial assets and liabilities is also reconciled on a regular basis. Budget risks are managed through effective cash management and constant monitoring of projected versus actual cash flows. Debt maturities are also diversified over the time to ensure that rising financing costs do not have a short-term impact. Credit facilities with banks are also maintained for unplanned expenditures.

Counterparty Risk

The Bertelsmann Group is exposed to default risks in the amount of the invested cash and cash equivalents and the positive fair value of the derivatives in its portfolio. Transactions involving money market securities and other financial instruments are exclusively conducted with a defined group of banks with a high credit rating ("core banks"). The credit ratings of core banks are constantly monitored and classified on the basis of quantitative and qualitative criteria (rating, CDS spreads, stock price, etc.). Counterparty limits determined on the basis of credit ratings refer to cash holdings and positive fair values of the derivatives in its portfolio. The drawdown of limits is monitored on a regular basis. Funds are invested in very short-term portfolios in some cases to preserve flexibility in the event of credit rating changes. Furthermore, cash and cash equivalents are held in money market funds with high credit ratings for the purpose of risk diversification. Default risks arising from trade receivables are partially mitigated through credit insurance coverage. The Bertelsmann Group has obtained credit collateralization in the amount of €662 million for these receivables (previous year: €654 million).

Capital Management

The financing guidelines adopted by the Bertelsmann Group are designed to ensure a balance between financing security, return on equity and growth. The Group's indebtedness is based specifically on the requirements for a credit rating of "Baa1/BBB+." Financial management at Bertelsmann is conducted using quantified financing objectives that are a central factor in ensuring the Group's independence and capacity to act. These objectives, as elements of the planning process and regular monitoring, are broadly defined performance indicators. The key performance indicator for limiting economic debt within the Bertelsmann Group is a maximum leverage factor of 2.5. As of December 31, 2022, the leverage factor was 1.8 (previous year: 1.3). In addition, the coverage ratio is to remain above four. The coverage ratio amounted to 11.1 on December 31, 2022 (previous year: 8.3). The equity ratio is not to fall below 25 percent of total assets. Management of the equity ratio is based on the definition of equity in IFRS. Although minority interests in partnerships represent equity in financial terms, they are classified as debt for accounting purposes. In the financial year 2022, the equity ratio was 45.8 percent (previous year: 42.8 percent), meeting the internal financial target set by the Group.

Interest Rate and Currency Sensitivity

For the analysis of interest rate risk, a distinction is made between cash flow and present value risks. Financial debt, cash and cash equivalents and interest rate derivatives with variable-interest terms are subject to a greater degree of cash flow risk, as changes in market interest rates impact the Group's interest result almost immediately. In contrast, medium- and long-term interest rate agreements are subject to a greater degree of present value risks. The accounting treatment of present value risks depends on the respective financial instrument or a hedging relationship documented in conjunction with a derivative (micro-hedge). Upon initial recognition, originated financial debt is measured at fair value less transaction costs. Subsequent measurement is based on amortized cost. Changes in fair value are generally limited to opportunity effects, as changes in interest rates have no effect on the balance sheet or the income statement. Where primary financial liabilities and derivative hedging transactions are designated as fair value hedges, changes in the fair value of the hedged item and the hedging instrument due to changes in interest rates almost completely offset each other. Furthermore, the effects of derivative financial instruments from interest rate changes are generally recognized in the income statement. In the case of documented hedging relationships (cash flow hedges), however, these effects are recognized in other comprehensive income.

The cash flow or present value risks existing at the end of the reporting periods are analyzed using a sensitivity calculation as an after-tax observation. A parallel shift in the interest rate curve of plus or minus 1 percent is assumed for all significant currencies. The analysis is performed on the basis of financial debt, cash and cash equivalents, and derivatives at the end of the reporting period. The underlying total risk position amounts to €1,822 million (previous year: €3,916 million). The results are shown in the following table:

Sensitivity Analysis of Cash Flow and Present Value Risks

	12/31/2022		12/31/2021	
in € millions	Shift +1%	Shift (1)%	Shift +1%	Shift (1)%
Cash flow risks (income statement)	13	(13)	30	(30)
Present value risks (income statement)	2	(2)	–	–
Present value risks (equity)	1	(1)	–	–

The analysis of foreign currency sensitivity includes the Group's financial debt and operating transactions at the end of the reporting period and the hedging relationships entered into. The calculation is performed for the unsecured net exposure on the basis of an assumed 10 percent appreciation of the euro versus all foreign currencies, and is presented after tax. Based on a total risk position of €306 million (previous year: €184 million), a uniform devaluation of foreign currencies would have resulted in a change in the carrying amount recognized in profit or loss of €-21 million (previous year: €-13 million). Thereof, €-12 million (previous year: €-5 million) relates to fluctuations in the US dollar exchange rate with a net exposure of US$192 million (previous year: US$74 million). Shareholders' equity would have changed by €-16 million (previous year: €6 million) as a result of fluctuations in the fair values of documented cash flow hedges. Thereof, €-16 million (previous year: €6 million) relates to fluctuations in the US dollar exchange rate on the basis of a documented cash flow hedge volume of US$243 million (previous year: US$-96 million). If there had been a uniform increase in the value of foreign currencies, this would have led to opposite changes in these amounts for the Bertelsmann Group.

Other Price Risks and Sensitivity

The valuation model for the minority stakes in the Bertelsmann Investments division comprises an extensive portfolio of more than 330 investments in companies and other funds, the vast majority of which are classified in level 3 of the fair value hierarchy. Due to the numerous inputs, some of which are only relevant for subsets of the portfolio, developing a meaningfully interpretable sensitivity indication for the model addressing the specifics of the valuation objects in the venture capital environment is only possible to a limited extent – in contrast to traditional discounted cash flow or multiplier-based models. This, together with the fragmented size structure and the fact that no meaningful and feasible alternative assumptions can be derived for a variety of inputs – such as the maturity structure underlying the life-cycle model – necessitates a restriction of sensitivity information in quantitative terms to the fungibility discounts for fund-of-fund investments and to the effects of contractual lockups for listed instruments: As of December 31, 2022, the valuation of fund-of-fund investments would have been €61 million (previous year: €57 million) higher excluding fungibility discounts. There were no contractual lockups for listed instruments as of December 31, 2022. As of December 31, 2021, the valuation of listed instruments would have been €8 million higher excluding fungibility discounts due to contractual lockups.

Financial Derivatives

Bertelsmann uses standard market financial derivatives, primarily unlisted (OTC) instruments. These include, in particular, forward agreements, currency swaps, currency options, interest rate swaps and individual commodities forwards. Transactions are entered into solely with banks with a high credit rating. As a rule, the Central Financial Department's transactions are only performed with a group of banks approved by the Executive Board. The nominal volume is the total of all underlying buying and selling amounts of the respective transactions.

The majority of the financial derivatives at the end of the reporting period with a gross nominal volume of €7,110 million (previous year: €6,291 million) are used to hedge currency rate risks from intercompany financing activities. These financial derivatives account for a total of €3,342 million or 47 percent as of the balance sheet date (previous year: €3,624 million or 58 percent). A total of €2,553 million or 36 percent (previous year: €2,335 million or 37 percent) is due to financial derivatives used to hedge currency risks from operating business as of the end of the reporting period. Financial derivatives are also used to hedge against interest rate risks from interest-bearing receivables and liabilities. By entering into interest rate derivatives designated as fair value hedges, changes in the fair value of the hedged item and the hedging instrument due to changes in interest rates almost completely offset each other. However, changes in interest rates have an impact on the amount of interest payments and therefore also on the interest result (note 6 "Interest Income and Interest Expenses"). In contrast, hedges of interest rate risks that do not qualify for hedge accounting under IFRS 9 have an impact on other financial income and expenses (note 7 "Other Financial Income and Expenses"). Financial derivatives are used exclusively for hedging purposes.

All relationships between hedging instruments and hedged items are documented, in addition to risk management objectives and strategies in connection with the various hedges. This method includes linking all derivatives used for hedging purposes to the underlying assets, liabilities, firm commitments and forecasted transactions. Furthermore, the Bertelsmann Group assesses and documents the degree to which changes in the fair values or cash flows of hedged items are effectively offset by changes in the corresponding derivatives used as hedging instruments, both when the hedges are initiated and on an ongoing basis.

Nominal Volume and Fair Values of Financial Derivatives

in € millions	12/31/2022 Nominal volume < 1 year	1 to 5 years	> 5 years	Total	Fair value
Currency derivatives					
Forward contracts and currency swaps	4,493	1,265	237	5,995	(167)
Interest rate derivatives					
Interest rate swaps	375	740	–	1,115	(41)
Other derivative financial instruments	–	–	–	–	–
	4,868	2,005	237	7,110	(208)

	12/31/2021 Nominal volume < 1 year	1 to 5 years	> 5 years	Total	Fair value
Currency derivatives					
Forward contracts and currency swaps	3,879	1,586	596	6,061	(119)
Interest rate derivatives					
Interest rate swaps	–	230	–	230	3
Other derivative financial instruments	–	–	–	–	–
	3,879	1,816	596	6,291	(116)

The Group designates certain derivatives as hedging instruments to hedge the variability in cash flows, particularly in connection with foreign currency risk relating to the purchase and sale of program rights and output deals for the TV business. Bertelsmann hedges between 80 percent and 100 percent of the short-term (within one year) future cash flows, and between 10 percent and 80 percent of the longer-term (two to five years) future cash flows. As a rule, the derivatives used are recognized as cash flow hedges, taking into account the volume of the cash flows to be hedged. In individual cases, the Group also hedges certain foreign currency risks arising from intercompany monetary items.

The effective portion of changes in the fair value of a cash flow hedge is recognized in accumulated other comprehensive income until the effects of the hedged underlying transaction affect profit or loss, or until a basis adjustment occurs. The total nominal volume designated as a cash flow hedge amounts to US$488 million (previous year: US$1,131 million). The amount of €39 million relating to cash flow hedges (previous year: €81 million) was reclassified from accumulated other comprehensive income to the income statement. These are amounts before tax. The portion remaining in accumulated other comprehensive income as of December 31, 2022, will thus mainly impact the income statement in the years to come. Bertelsmann exercised the option not to designate the forward elements and foreign currency basis spreads as part of the hedging relationship, but to recognize them separately in equity as hedging costs for individual hedges. As in the previous year, no ineffective portion of the cash flow hedges existed.

The effects from fair value hedges for hedging interest rate risks led to a decrease of the carrying amount of the reported financial debt in the amount of €39 million; the carrying amount of the hedged item (including cumulative fair value adjustments) amounts to €901 million as of the end of the reporting period. The total nominal volume designated as fair value hedge amounts to €700 million (previous year: €0 million). An ineffective portion from fair value hedges existed to a minor extent and was recognized in the consolidated income statement in the item "Other financial income." In the financial year 2021, no hedging transactions were recognized with fair value hedges. Furthermore, interest rate swaps with a nominal volume in the amount of €185 million (previous year: €0 million) are designated as cash flow hedges to hedge interest rate risks.

The following table provides an overview of the carrying amounts of the derivative financial instruments, which correspond to their fair values. A distinction is made between derivatives that are included in an effective hedging relationship in accordance with IFRS 9 and those that are not.

Derivative Financial Instruments

in € millions	Carrying amount as of 12/31/2022	Carrying amount as of 12/31/2021
Assets		
Forward contracts and currency swaps		
– without hedge relation	63	24
– in connection with cash flow hedges	12	10
Interest rate swaps		
– without hedge relation	–	3
– in connection with cash flow hedges	1	–
Other derivative financial instruments without hedge relation	–	–
Equity and liabilities		
Forward contracts and currency swaps		
– without hedge relation	199	77
– in connection with cash flow hedges	43	76
Interest rate swaps		
– without hedge relation	1	–
– in connection with cash flow hedges	–	–
– in connection with fair value hedges	41	–
Other derivative financial instruments without hedge relation	–	–

The following table presents the remaining terms of the contractual amounts to be exchanged in a derivative financial instrument for which gross cash flows are exchanged:

Liabilities from Derivatives with Gross Settlement

	Remaining term of liabilities		
in € millions	Up to 1 year	1 to 5 years	Over 5 years
Cash outflow	(3,702)	(1,055)	(314)
Cash inflow	3,510	927	274
Balance as of 12/31/2022	(192)	(128)	(40)
Cash outflow	(2,080)	(1,415)	(712)
Cash inflow	2,015	1,304	641
Balance as of 12/31/2021	(65)	(111)	(71)

26 Cash Flow Statement

The Bertelsmann consolidated cash flow statement has been prepared in accordance with IAS 7 and is used to evaluate the Group's ability to generate cash and cash equivalents. Cash flows are divided into those relating to operating activities, investing activities and financing activities. Cash flows from operating activities are presented using the indirect method, whereby Group earnings before interest and taxes are adjusted for the effects of a non-cash nature, any deferrals or accruals of past or future operating receipts or payments, and items of income or expenses associated with investing cash flows. In addition, cash flows arising from income taxes are classified as cash flows from operating activities as well as other cash flows that are neither investing nor financing. Since the financial year 2022, interest received has been recognized in the cash flow from operating activities. Further details are presented in the section "Prior-Year Information."

The change in provisions for pensions and similar obligations represents the balance of personnel costs for pensions and similar obligations and company payments for these obligations (further explanations are presented in note 18 "Provisions for Pensions and Similar Obligations"). Contributions to pension plans totaling €-18 million (previous year: €-221 million) were also included in this item. "Other effects" of the cash flow from operating activities mainly include the adjustments of results from investments accounted for using the equity method, taking into account dividends received from these investments, and adjustments in connection with non-cash income and expenses.

The consolidated cash flow statement includes the effects of changes in foreign currencies and changes in the scope of consolidation. Items in the consolidated cash flow statement thus cannot be reconciled with changes in items reported on the consolidated balance sheet. Investing activities include payments for investments in non-current assets and purchase price payments for acquisitions as well as proceeds from the disposal of non-current assets and investments. Further explanations concerning acquisitions made during the financial year are presented in the section "Acquisitions and Disposals." Disposals made during the financial year are also presented separately in that section. Financial debt of €309 million (previous year: €7 million) was assumed during the reporting period. In the financial year 2022, as in the previous year, losing control of subsidiaries or other businesses resulted in the disposal of financial debt of an immaterial amount.

Cash flow from financing activities includes changes in equity, financial debt, lease liabilities and dividend distributions affecting cash, and interest paid (including interest paid due to leases). Total cash outflows from leases amounted to €-358 million (previous year: €-317 million) in the financial year 2022. The item "Change in equity" amounts to €-187 million, of which €99 million relates to the acquisition of additional Afya shares and €55 million to the acquisition of the remaining shares in Eureka through the exercise of a call option. In the previous year, the item "Change in equity" amounted to €304 million and mainly related to the sale of the Majorel shares in the course of the IPO.

The following tables show the cash changes and non-cash changes of liabilities arising from financing activities:

Changes in Liabilities Arising from Financing Activities

in € millions	1/1/2022	Cash changes	Non-cash changes: Acquisitions through business combinations	Disposals through business combinations	Exchange rate effects	Other changes	12/31/2022
Bonds	5,047	(353)	–	–	(3)	(35)	4,656
Promissory notes	325	–	–	–	–	–	325
Liabilities to banks	174	(19)	144	–	(8)	–	291
Lease liabilities	1,356	(358)	170	(1)	(1)	372	1,538
Other financial debt	58	(6)	165	–	(13)	2	206
Liabilities arising from financing activities	6,960	(736)	479	(1)	(25)	339	7,016

in € millions	1/1/2021	Cash changes	Non-cash changes: Acquisitions through business combinations	Disposals through business combinations	Exchange rate effects	Other changes	12/31/2021
Bonds	5,968	(927)	–	–	–	6	5,047
Promissory notes	424	(99)	–	–	–	–	325
Liabilities to banks	126	40	7	–	1	–	174
Lease liabilities	1,355	(317)	14	(37)	49	292	1,356
Other financial debt	108	(28)	–	–	–	(22)	58
Liabilities arising from financing activities	7,981	(1,331)	21	(37)	50	276	6,960

In financial years 2022 and 2021, the other non-cash changes mainly relate to newly concluded lease contracts.

The following tables show the changes in net liabilities arising from financing activities:

Changes in Net Liabilities Arising from Financing Activities

in € millions	2022	2021
Net liabilities arising from financing activities as of 1/1	(2,315)	(3,410)
Cash flow from operating activities	1,382	1,820
Cash flow from investing activities	(1,118)	(267)
Interest paid, dividends and changes in equity, additional payments (IAS 32.18(b))	(979)	(355)
Exchange rate effects and other changes in net liabilities arising from financing activities	(757)	(103)
Net liabilities arising from financing activities as of 12/31	(3,787)	(2,315)

Net liabilities arising from financing activities are the balance of the balance sheet positions “Cash and cash equivalents,” “Financial debt” and “Lease liabilities.”

27 Segment Reporting

IFRS 8 Operating Segments requires that external segment reporting must be based on the internal organizational and management structure, and on management and reporting indicators used internally. Since January 1, 2022, the Bertelsmann Group comprises seven (previous year: eight) operating reportable segments (RTL Group, Penguin Random House, BMG, Arvato, Bertelsmann Printing Group, Bertelsmann Education Group and Bertelsmann Investments), differentiated according to the type of products and services offered and which are reported by segment managers to the Executive Board of Bertelsmann Management SE in its role as the chief operating decision-maker in accordance with IFRS 8.

As of January 1, 2022, Gruner + Jahr is no longer reported as an independent division. The German magazine businesses and brands have been part of the RTL Group division since the beginning of the year and are part of the cash-generating unit RTL Germany due to the full integration into this cash-generating unit. The other Gruner + Jahr activities (particularly Territory, the AppLike Group, DDV Mediengruppe and the investment in the Spiegel Group) were allocated to the Bertelsmann Investments division and are monitored as cash-generating units. The prior-year comparatives for RTL Group, Bertelsmann Investments and Consolidation have been adjusted in the table on segment information.

Corporate is mainly responsible for activities in the areas of taxes, legal, human resources, information technology, internal audit, accounting and reporting, corporate communications and management, internal control and strategic development of the Group, securing the required financing, risk management and optimization of the Group's investment portfolio.

Intersegment eliminations are included in the column "Consolidation."

As in the past, specific segment information is defined according to the definitions on which Group management is based. As a rule, accounting and measurement in the segment reporting uses the same IFRS principles as in the Consolidated Financial Statements. Invested capital is calculated on the basis of the Group's operating assets less non-interest-bearing operating liabilities. Intercompany revenues are recognized using the same arm's-length conditions applied to transactions with third parties.

Operating EBITDA serves as a key performance indicator for a sustainable determination of operating result. Assessment of the operating segments' performance is also based on this performance indicator. Operating EBITDA represents the operating earnings generated by the respective segment management before interest and taxes, as well as amortization/depreciation, impairment and reversals, and it is adjusted for special items. Elimination of these special items allows the determination of a normalized performance indicator, thus simplifying forecasting and comparability. Segment amortization/depreciation, impairment and reversals relate to property, plant and equipment and right-of-use assets, and to intangible assets as set out in notes 9 "Intangible Assets" and 10 "Property, Plant and Equipment and Right-of-Use Assets." For segment reporting, intercompany leases are generally presented as operating leases with income and expenses recognized using the straight-line method in accordance with IFRS 8, in line with internal management. The business development of the venture capital business of Bertelsmann Investments is presented primarily on the basis of EBIT.

Each segment shows the investments accounted for using the equity method and their results, provided these companies can be clearly allocated to the segment concerned. In addition to the segment breakdown, revenues are broken down by customer location and revenue source. Non-current assets are also stated according to the location of the respective company.

Tabular segment information is presented on page 72 f.

The following table shows the reconciliation of segment information to the Consolidated Financial Statements:

Reconciliation of Segment Information to Group Profit or Loss

in € millions	2022	2021
Operating EBITDA from continuing operations	3,192	3,241
Amortization/depreciation, impairment and reversals on intangible assets, property, plant and equipment and right-of-use assets	(1,099)	(909)
Adjustments on amortization/depreciation, impairment and reversals on intangible assets, property, plant and equipment and right-of-use assets included in special items	22	29
Special items	(562)	963
EBIT	1,553	3,324
Financial result	(258)	(352)
Earnings before taxes from continuing operations	1,295	2,972
Income tax expense	(246)	(662)
Earnings after taxes from continuing operations	1,049	2,310
Earnings after taxes from discontinued operations	3	–
Group profit or loss	1,052	2,310

28 Related Party Disclosures

For the Bertelsmann Group, related parties as defined in IAS 24 are those persons and entities that control or exercise a significant influence over the Bertelsmann Group, and those persons and entities controlled or jointly controlled by the Bertelsmann Group, or over which it exercises a significant influence. Accordingly, certain members of the Mohn family, the members of the Executive Board of Bertelsmann Management SE as the general partner, and the Supervisory Board of Bertelsmann SE & Co. KGaA, including close members of their families and including the companies that are controlled or jointly managed by them, and the joint ventures and associates forming part of the Bertelsmann Group and their subsidiaries, are defined as related parties. Furthermore, Bertelsmann Pension Trust e.V. is considered a related party (further details on this are presented in note 18 “Provisions for Pensions and Similar Obligations”).

Bertelsmann Verwaltungsgesellschaft mbH (BVG), Gütersloh, a holding company with no operating activities, has control of the Bertelsmann Group. Johannes Mohn GmbH has informed Bertelsmann SE & Co. KGaA that it directly owns more than 50 percent of the shares in Bertelsmann Management SE and of

Bertelsmann SE & Co. KGaA. Reinhard Mohn Verwaltungsgesellschaft mbH continues to own more than one quarter of the shares in Bertelsmann Management SE and in Bertelsmann SE & Co. KGaA, respectively.

In the legal form of a KGaA, the business is managed by a general partner. In the case of Bertelsmann SE & Co. KGaA, Bertelsmann Management SE, represented by its Executive Board, is responsible for the management of the business. The statutory bodies consist of the Supervisory Board and the General Meeting at the Bertelsmann SE & Co. KGaA level and the Executive Board, Supervisory Board and General Meeting at the Bertelsmann Management SE level. The Supervisory Board of the KGaA is elected by the limited partners at the General Meeting. The members of the Bertelsmann Management SE Supervisory Board are appointed at the General Meeting of Bertelsmann Management SE. BVG controls the voting rights at the Bertelsmann SE & Co. KGaA and Bertelsmann Management SE General Meeting.

Remuneration for key management personnel includes the following:

Remuneration for Key Management Personnel

in € millions	2022	2021
Short-term employee and termination benefits	30	20
Post-employment benefits	2	2
Other long-term benefits	10	8

The remuneration shown also includes remuneration for activities by the members of the Supervisory Board of Bertelsmann SE & Co. KGaA on the Supervisory Board of Bertelsmann Management SE. Transactions with subsidiaries included in the scope of consolidation are eliminated and are not further disclosed. In addition to transactions with consolidated subsidiaries, the following transactions with related parties and entities were conducted in the reporting period:

Transactions with Related Parties

in € millions	Parent and entities with significant influence	Key members of management	Joint ventures	Associates	Other related parties
2022					
Goods delivered and services provided	–	1	34	53	–
Goods and services received	–	(2)	(16)	(35)	(1)
Receivables from	–	–	13	30	–
Amounts owed to	–	60	15	24	34
2021					
Goods delivered and services provided	–	1	52	71	–
Goods and services received	–	(1)	(21)	(50)	(1)
Receivables from	–	–	17	58	–
Amounts owed to	–	56	13	30	27

The amounts owed to key members of management include pension obligations, variable remuneration components and long-term incentives. The item "Other related parties" primarily includes transactions with the general partner Bertelsmann Management SE. The obligations as of the end of the reporting period result from expenses passed on by Bertelsmann Management SE.

In December 2021, Penguin Random House LLC agreed a convertible loan with an acquisition cost of US$35 million. The loan has a conversion option in the amount of US$21 million, exercisable from January 1, 2023, into additional shares in the investment Sourcebooks LLC, which is accounted for as an associate until December 31, 2022. As of December 31, 2022, the share is €20 million and is measured as a convertible loan at fair value through profit or loss (level 3). The remaining part of the loan in the amount of €12 million is measured at cost and reported under receivables from associates.

Other Transactions with Joint Ventures and Associates

in € millions	2022	2021
Outstanding contingent liabilities by		
– joint ventures	4	14
– associates	9	10
Contribution obligations to		
– associates	13	4
Capital contributions to		
– joint ventures	44	–
– associates	4	2
Capital distributions from		
– associates	24	4
Loans granted to		
– joint ventures	35	30
– associates	–	33
Loans received from		
– joint ventures	2	1
– associates	–	1
Impairment on loans to		
– joint ventures	28	–

In the financial year 2022, the contribution obligations to associates and the capital distributions from associates are mainly (previous year: fully) attributable to the University Ventures Funds. The impairment on loans to joint ventures relates to the impairment of a loan provided by Groupe M6 to the joint venture Salto (a streaming platform held jointly by Groupe M6, TF1 and France Télévisions).

29 Events after the Reporting Period

In early January 2023, Afya announced the closing of the acquisition of 100 percent of the shares of Sociedade Educacional e Cultural Sergipe DelRey Ltda., which encompasses the operations of Centro Universitario Tiradentes Alagoas (“UNIT Alagoas”) and Faculdade Tiradentes Jaboatao dos Guararapes (“FITS Jaboatao dos Guararapes”). The transaction does not enclose the “UNIT” and “FITS” brands, which will be licensed for Afya during the first year of operation. The aggregate purchase price before adjustments and deduction of net debt was BRL825 million. At the time the Consolidated Financial Statements were prepared, the purchase price allocation was at a very preliminary stage. In particular, the valuations have not yet been finalized.

In January 2023, Global Savings Group (GSG), an at-equity investment held by Groupe M6, completed the acquisition of pepper.com. This transaction resulted in a dilution of the Groupe M6’s investment in GSG from 41.49 percent at December 31, 2022 to 31.16 percent. The preliminary impact on profit or loss in 2023 is currently under estimation and will be recognized under “Results from disposals of investments” in the Consolidated Income Statement for the financial year 2023.

In January 2023, Prinovis announced plans to cease production at its Ahrensburg location as of January 31, 2024. The reason for this is the negative market development, which has accelerated in recent years. The number of employees affected by this business decision is 545.

In early February 2023, it was announced that RTL Deutschland would restructure its publishing business and focus on the core brands Stern, Geo, Capital, Stern Crime, Brigitte, Gala, Schöner Wohnen, Häuser, Couch, Eltern, Chefkoch, Geolino and Geolino Mini. All other titles are to be sold or discontinued. This will affect around 700 jobs, 200 of those as a result of the planned sale of titles.

In March 2023, Bertelsmann exercised a termination option on the hybrid bond with a nominal value of €650 million. The early repayment of the outstanding nominal value of €146 million will be in April 2023, after a nominal amount of €504 million was already repaid early in December 2022 as part of a public repurchase offer.

30 Exemption for Subsidiaries in accordance with Sections 264 (3) and 264b of the German Commercial Code (HGB)

The following subsidiaries took advantage of the exemption regulations set out in section 264 (3) of the German Commercial Code (HGB) for the financial year ended December 31, 2022. The Bertelsmann Consolidated Financial Statements are the exempting Consolidated Financial Statements for these subsidiaries.

Name of the entity	Place
99 pro media GmbH	Leipzig
adality GmbH	Gütersloh
Ad Alliance GmbH	Cologne
adjoe GmbH	Hamburg
AppLike Group GmbH	Hamburg
arvato CRM Healthcare GmbH	Berlin
arvato direct services GmbH	Gütersloh
arvato distribution GmbH	Harsewinkel
arvato services Dresden GmbH	Dresden
arvato services Gera GmbH	Gera
arvato services Leipzig GmbH	Leipzig
Arvato Supply Chain Solutions SE	Gütersloh
Arvato Systems Digital GmbH	Leipzig
arvato systems GmbH	Gütersloh
AVE Gesellschaft für Hörfunkbeteiligungen mbH	Berlin
AZ Direct Beteiligungs GmbH	Gütersloh
AZ Direct GmbH	Gütersloh
BAG Business Information Beteiligungs GmbH	Gütersloh
BAI GmbH	Gütersloh
BDMI GmbH	Gütersloh
BePeople GmbH	Gütersloh
Bertelsmann Accounting Services GmbH	Gütersloh
Bertelsmann Accounting Services Schwerin GmbH	Schwerin
Bertelsmann Aviation GmbH	Gütersloh
Bertelsmann Capital Holding GmbH	Gütersloh
Bertelsmann China Holding GmbH	Gütersloh
Bertelsmann Data Services GmbH	Gütersloh
Bertelsmann Investments Digital Health GmbH	Gütersloh
Bertelsmann Transfer GmbH	Gütersloh
Bertelsmann Treuhand- und Anlagegesellschaft mit beschränkter Haftung	Gütersloh
BMG Production Music (Germany) GmbH	Berlin
BMG RIGHTS MANAGEMENT (Europe) GmbH	Berlin
BMG RIGHTS MANAGEMENT GmbH	Berlin
Campaign Services Neckarsulm GmbH	Neckarsulm
Campaign Services Offenbach GmbH	Frankfurt am Main
Checkout Charlie GmbH	Berlin
Chefkoch GmbH	Bonn
COUNTDOWN MEDIA GmbH	Hamburg
Der Audio Verlag GmbH	Berlin
DeutschlandCard GmbH	Munich
Digital Media Hub GmbH	Cologne
Direct Analytics GmbH	Gütersloh
direct services Gütersloh GmbH	Gütersloh
Dorling Kindersley Verlag GmbH	Munich
DPV Deutscher Pressevertrieb GmbH	Hamburg

Name of the entity	Place
Eat the World GmbH	Berlin
EMBRACE GmbH	Gütersloh
Erste TD Gütersloh GmbH	Gütersloh
Erste WV Gütersloh GmbH	Gütersloh
European SCM Services GmbH	Gütersloh
frechverlag GmbH	Stuttgart
FremantleMedia International Germany GmbH	Potsdam
GGP Media GmbH	Pößneck
G+J Digital Ventures GmbH	Berlin
G+J Electronic Media Sales GmbH	Hamburg
G+J LIVING Digital GmbH	Hamburg
G+J Medien GmbH	Hamburg
G+J Vermietungsgesellschaft Sächsischer Verlag mbH	Dresden
Global Assekuranz Vermittlungsgesellschaft mit beschränkter Haftung	Gütersloh
Gruner + Jahr Deutschland GmbH	Hamburg
Henri-Nannen-Schule Gruner+Jahr/DIE ZEIT GmbH	Hamburg
Honey GmbH	Hamburg
infoscore Business Support GmbH	Baden-Baden
infoscore Finance GmbH	Baden-Baden
infoscore Portfolio Management International GmbH	Gütersloh
inmediaONE] GmbH	Gütersloh
justDice GmbH	Hamburg
justtrack GmbH	Hamburg
Like to KNOW GmbH	Cologne
Majorel Chemnitz GmbH	Chemnitz
Majorel Neubrandenburg GmbH	Neubrandenburg
Majorel Schwerin GmbH	Schwerin
mbs Nürnberg GmbH	Nuremberg
Mohn Media Energy GmbH	Gütersloh
Mohn Media Mohndruck GmbH	Gütersloh
MSP Medien-Service und Promotion GmbH	Hamburg
Penguin Books Deutschland Gesellschaft mit beschränkter Haftung	Munich
Penguin Random House Verlagsgruppe GmbH	Gütersloh
Prinovis Ahrensburg Weiterverarbeitung und Logistik GmbH	Hamburg
PRINOVIS Service GmbH	Hamburg
Prinovis Verwaltungs GmbH	Gütersloh
Probind Mohn media Binding GmbH	Gütersloh
PSC Print Service Center GmbH	Oppurg
Random House Audio GmbH	Cologne
Reinhard Mohn GmbH	Gütersloh
Relias Learning GmbH	Berlin

Name of the entity	Place
rewards arvato services GmbH	Munich
Riverty Administration Services GmbH	Münster
Riverty Group GmbH	Baden-Baden
Riverty Services GmbH	Verl
RM Buch und Medien Vertrieb GmbH	Gütersloh
RM Elfte Beteiligungsverwaltungs GmbH	Gütersloh
RM Hamburg Holding GmbH	Hamburg
Rote Liste Service GmbH	Frankfurt am Main
RTL Audio Center Berlin GmbH	Berlin
RTL Audio Vermarktung GmbH	Berlin
RTL Deutschland GmbH	Cologne
RTL Group Financial Services GmbH	Cologne
RTL Group GmbH	Cologne
RTL Group Markenverwaltungs GmbH	Cologne
RTL Group Vermögensverwaltung GmbH	Cologne
RTL Hessen GmbH	Frankfurt am Main
RTL interactive GmbH	Cologne
RTL Journalistenschule GmbH	Cologne
RTL MUSIC PUBLISHING GmbH	Cologne
RTL NEWS GmbH	Cologne
RTL Nord GmbH	Hamburg
RTL Radio Berlin GmbH	Berlin
RTL Radio Deutschland GmbH	Berlin
RTL Radio Luxemburg GmbH	Cologne
RTL STUDIOS GmbH	Cologne
RTL Technology GmbH	Cologne
RTL West GmbH	Cologne
rtv media group GmbH	Nuremberg
smartclip Deutschland GmbH	Cologne

Name of the entity	Place
smartclip Europe GmbH	Düsseldorf
Sonopress GmbH	Gütersloh
SSB Software Service und Beratung GmbH	Gütersloh
SUNDAY GmbH	Hamburg
Telamo Musik & Unterhaltung GmbH	Munich
TERRITORY EMBRACE GmbH	Bochum
TERRITORY GmbH	Hamburg
TERRITORY Influence GmbH	Munich
TERRITORY MEDIA GmbH	Munich
trndnxt GmbH	Munich
trndsphere blue GmbH	Munich
UFA Distribution GmbH	Potsdam
UFA Documentary GmbH	Potsdam
UFA Fiction GmbH	Potsdam
UFA Fiction Productions GmbH	Potsdam
UFA Film und Fernseh GmbH	Cologne
UFA GmbH	Potsdam
Ufa Radio-Programmgesellschaft in Bayern mbH	Ismaning
UFA Serial Drama GmbH	Potsdam
UFA Show & Factual GmbH	Cologne
Undercover GmbH	Schwülper
Verlag RM GmbH	Gütersloh
Verlegerdienst München GmbH	Gilching
versorgung.plus GmbH	Dortmund
VIVENO Group GmbH	Gütersloh
Vogel Druck und Medienservice GmbH	Höchberg
VOX Holding GmbH	Cologne
VSG Schwerin - Verlagsservicegesellschaft mbH	Schwerin
we are era GmbH	Berlin

In addition, the exemption regulations set out in section 264 (3) of the German Commercial Code (HGB) have been applied for UFA GmbH, UFA Fiction GmbH, FremantleMedia International Germany GmbH, UFA Serial Drama GmbH, UFA Show & Factual GmbH, UFA Distribution GmbH, UFA Fiction Productions GmbH and UFA Documentary GmbH also for the financial year ending December 31, 2021.

In addition, the exemption regulations set out in section 264b of the German Commercial Code (HGB) were used by the following companies for the financial year ended December 31, 2022. The Bertelsmann Consolidated Financial Statements are the exempting Consolidated Financial Statements for these subsidiaries.

Name of the entity	Place
11 Freunde Verlag GmbH & Co KG	Berlin
Antenne Niedersachsen GmbH & Co. KG	Hannover
AVE II Vermögensverwaltungsgesellschaft mbH & Co. KG	Cologne
AZ fundraising services GmbH & Co. KG	Gütersloh
DDV Mediengruppe GmbH & Co. KG	Dresden

Name of the entity	Place
Deutsche Medien-Manufaktur GmbH & Co. KG	Münster
infoscore Portfolio Management GmbH & Co. KG	Verl
infoscore Portfolio Management II GmbH & Co. KG	Baden-Baden
Prinovis GmbH & Co. KG	Gütersloh
Sellwell GmbH & Co. KG	Hamburg

In addition, the exemption regulations set out in section 264b of the German Commercial Code (HGB) have been applied for Antenne Niedersachsen GmbH & Co. KG also for the financial year ending December 31, 2021.

The consolidated subsidiary Arvato SCM Ireland Limited in Dublin, Ireland, has used the exemption option offered in section 357 of the “Republic of Ireland Companies Act 2014” for publication requirements for its annual financial statements. The consolidated subsidiary Arvato Benelux B.V. in Heijen, the Netherlands, has elected to make use of the exemption to publish annual accounts in accordance with section 403 (1) of book 2 of the Dutch Civil Code.

31 Additional Information in accordance with Section 315e of the German Commercial Code (HGB)

The compensation of the Supervisory Board of Bertelsmann SE & Co. KGaA for the financial year 2022 amounted to €2 million plus statutory value-added tax. Members of the Executive Board received total remuneration in the reporting period of €28 million, including €19 million from Bertelsmann Management SE. Former members of the Executive Board of Bertelsmann Management SE and Bertelsmann AG and their surviving dependents received compensation of €15 million, including €5 million from Bertelsmann SE & Co. KGaA. The provision for pension obligations to former members of the Executive Board of Bertelsmann AG and Bertelsmann Management SE accrued at Bertelsmann SE & Co. KGaA and Bertelsmann Management SE amounts to €64 million. The members of the Executive Board and Supervisory Board are listed in the chapter “Boards/Mandates” of this Annual Report.

The following fees were incurred in the financial year for the services of the auditor of the consolidated financial statements, KPMG AG Wirtschaftsprüfungsgesellschaft:

in € millions	2022
Audit services	4.6
Other audit-related services	1.1
Other services	0.1
Total	5.8

The audit services include the fees for the audit of the consolidated financial statements, the review of the interim consolidated financial statements and the audit of the statutory financial statements of Bertelsmann SE & Co. KGaA and its subsidiaries. Other audit-related services include audits required by law or contract, such as audits under the German Renewable Energies Act (EEG), voluntarily commissioned assurance services in connection with information technology, compliance management, internal control systems and other contractually agreed assurance services. Other services related to quality assurance support and analysis services.

The following table shows the number of employees as of December 31, 2022, and on an annual average:

Number of Employees

	Number of employees (closing date)	Number of employees (average)
RTL Group	18,308	18,882
Penguin Random House	12,330	12,269
BMG	1,111	1,058
Arvato	108,775	104,847
Bertelsmann Printing Group	6,431	6,599
Bertelsmann Education Group	10,588	8,326
Bertelsmann Investments	5,648	5,513
Corporate	1,500	1,503
Total	164,691	158,997

32 Proposal for the Appropriation of Net Retained Profits

The general partner Bertelsmann Management SE and the Supervisory Board of Bertelsmann SE & Co. KGaA will propose to the General Meeting that the remaining net retained profits of Bertelsmann SE & Co. KGaA of €744 million be appropriated as follows: payment of a dividend to shareholders of €220 million (dividend per ordinary share thus amounts to €2,627) and carry forward to the new financial year in the amount of €524 million).

The general partner Bertelsmann Management SE approved the Consolidated Financial Statements for submission to the Supervisory Board of Bertelsmann SE & Co. KGaA on March 16, 2022. The Supervisory Board's task is to review the Consolidated Financial Statements and declare whether it approves these.

Gütersloh, March 20, 2023

Bertelsmann SE & Co. KGaA
Represented by:
Bertelsmann Management SE, the general partner
Executive Board

Thomas Rabe

Rolf Hellermann Immanuel Hermreck

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the Consolidated Financial Statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Combined Management Report includes a fair review of the development and performance of the business and the position of the Bertelsmann Group and Bertelsmann SE & Co. KGaA, together with a description of the material opportunities and risks associated with the expected development of the Bertelsmann Group and Bertelsmann SE & Co. KGaA.

Gütersloh, March 20, 2023

Bertelsmann SE & Co. KGaA
Represented by:
Bertelsmann Management SE, the general partner
Executive Board

Thomas Rabe

Rolf Hellermann   Immanuel Hermreck

Independent Auditor's Report

To Bertelsmann SE & Co. KGaA, Gütersloh

Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report

Opinions

We have audited the consolidated financial statements of Bertelsmann SE & Co. KGaA, Gütersloh, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2022, the consolidated income statement, the consolidated statement of comprehensive income, consolidated statement of changes in equity and the consolidated cash flow statement for the financial year from 1 January to 31 December 2022, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the management report for the Company and the Group (hereinafter: the "combined management report") of Bertelsmann SE & Co. KGaA, including the combined non-financial statement pursuant to Sections 315b (1) and 315c HGB for the financial year from 1 January to 31 December 2022.

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 at 31 December 2022, and of its financial performance for the financial year from 1 January to 31 December 2022, and
- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and the EU Audit Regulation No 537/2014 (referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2)(f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the combined management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 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 the general principles set out in the notes to the consolidated financial statements for information on the accounting policies applied. Please also refer to Section 9 of the notes to the consolidated financial statements concerning the assumptions used.

The financial statement risk

Goodwill amounted to EUR 8,872 as at 31 December 2022 and, at 27 % of total assets and 59 % of group equity, has a significant impact on the financial position.

Goodwill is tested for impairment annually at the level of the cash-generating units to which the relevant goodwill is allocated, without this requiring a specific cause. If impairment triggers arise during the financial year, an event-driven impairment test is also carried out during the year. For the impairment test of goodwill, the carrying amount is compared with the recoverable amount of the respective cash-generating unit. If the carrying amount is higher than the recoverable amount, there is a need for an impairment. The recoverable amount is the higher of fair value less costs of disposal and value in use of the cash-generating unit. The effective date for the impairment test is 31 December 2022.

For the listed cash-generating units RTL Group, Majorel and Groupe M6, and Afya, in a first step, the market capitalization is compared with the carrying amount of the cash-generating unit. In a second step, the respective value in use determined on the basis of a discounted cash flow method (DCF) is compared with the carrying amount of the cash-generating unit for the RTL Group, Groupe M6 and Afya units, as the market capitalization only incompletely reflects the value of the respective unit. In the impairment tests of the other cash-generating units, the fair value less costs of disposal was determined on the basis of future expected cash inflows using a DCF method and compared with the carrying amount of the cash-generating unit. In fiscal 2022, the difficult market environment for printing services with rising factor costs for energy and personnel as well as reduced print runs led to declining earnings, which also had a negative impact on the future business and earnings prospects of the Bertelsmann Printing Group business segment. As part of the annual impairment test, an impairment loss of EUR 10 million was recognized, which is fully attributable to the goodwill of the cash-generating unit Mohn Media Group, which belongs to the Bertelsmann Printing Group division.

The impairment test of goodwill is complex and is based on a number of discretionary assumptions. These include, among other things, the expected business and earnings development of the cash-generating units for the detailed planning period, the assumed long-term growth rates and the discount rate used.

There is a risk for the consolidated financial statements that an existing impairment loss has not been recognized or that the identified impairment has not been recognized in an appropriate amount. In addition, there is a risk that the related disclosures in the notes are inappropriate.

Our audit approach

With the involvement of our valuation specialists, we assessed, among other things, the appropriateness of the Company's material assumptions and calculation method. To this end, we discussed the expected business and earnings development in the detailed planning period as well as the assumed long-term growth rates with those responsible for planning. We also carried out reconciliation with the 2023 budget prepared by the Executive Board and approved by the Supervisory Board as well as the medium-term business plan (2024 and 2025) and made an assessment of planning updates into the detailed planning period as well as the termination period.

Furthermore, we have convinced ourselves of the company's forecast quality to date by comparing plans for previous financial years with the results actually realized and analyzing deviations. We compared the assumptions and data underlying the discount rate, in particular the risk-free rate, the market risk premium and the beta coefficient, with our own assumptions and publicly available data.

To ensure the arithmetical correctness of the valuation method used, we have reproduced the company's calculations and reproduced them on the basis of risk-oriented selected elements on the basis of our own calculations.

In order to take account of the existing forecast uncertainty, we have examined the effects of possible changes in the discount rate, earnings development or long-term growth rate on the recoverable amount by reconstructing the sensitivity analyses carried out by the company and comparing them with the valuation results.

Finally, we assessed whether the disclosures in the notes on the recoverability of goodwill are appropriate. This also included assessing the appropriateness of disclosures in the notes in the notes in accordance with IAS 36.134(f) on sensitivities in the event of a change in material assumptions underlying the measurement deemed possible.

Our observations

The calculation method used for impairment testing of goodwill is appropriate and in line with the applicable accounting policies.

The Company's assumptions and data used for measurement are appropriate.

The related disclosures in the notes are appropriate.

Measurement of the non-controlling interests in start-ups and fund-in-fund investments

Please refer to Section 2 and Section 25 in the notes to the consolidated financial statements for information on the accounting policies applied and the assumptions used. Disclosures on the amount of the non-controlling interests in start-ups and fund-in-fund investments can be found in Section 12 in the notes to the consolidated financial statements. Disclosures on the amount of the changes in fair value recognized in profit or loss can be found in Section 2.

The financial statement risk

The non-controlling interests in start-ups and fund-in-fund investments totaled EUR 1,382 as at 31 December 2022 and, at 9 % of the group equity, are significant for assets and liabilities.

In terms of measurement, the non-controlling interests in start-ups and fund-in-fund investments are allocated to the fair value through profit or loss category in accordance with IFRS 9. Investments in associates that are measured at fair value through profit or loss in application of IAS 28.18 are also included here. The majority of the fair values of non-controlling interests in start-ups and fund-in-fund investments calculated as at 31 December 2022 are based on unobservable measurement inputs (level 3). As no observable market data is available in this case, the fair values are calculated primarily on the basis of different complex valuation models. If no observable data is available, the valuation for acquired non-controlling interests in start-ups in the Bertelsmann Investments division for unlisted investments is generally based on observable achievable prices from recent qualifying financing rounds that fulfill the minimum requirements in terms of volume and group of participants, taking into consideration the entity's life and development cycle. In determining the fair values of listed financial instruments market prices are used. Furthermore, the calculation of the fair values of fund-in-fund investments is based on valuations of the external fund management pursuant to regular reporting and taking a fungibility discount into consideration.

The determination of the valuation of the non-controlling interests in start-ups and fund-in-fund investments is complex and based for unlisted investments on a number of assumptions requiring judgement. These include the investment-specific assumptions about credit risks as well as life/development cycles of the start-up investments and fungibility discounts, which are required for the inputs of the model.

There is the risk for the consolidated financial statements that the fair values as at the reporting date are not calculated in an appropriate way and that the changes in value resulting from this are not recognized in the appropriate amount.

Our audit approach

We have assessed the appropriateness, setup and effectiveness of controls that the Company has set up to ensure that the data for the inputs for measuring the non-controlling interests in start-ups and fund-in-fund investments is determined correctly and in full.

With the support of our valuation specialists, we assessed, among other things, the appropriateness of the Company's key assumptions and valuation models. If the measurement was performed by external fund management, we assessed the measurements made by external management as well as the assessment carried out in this respect by the Company. To ensure the computational accuracy of the valuation model used, we verified the Company's calculations on the basis of selected risk-based elements and compared them with contractual information as well as publicly available data.

Our observations

The valuation models underlying the calculation of the non-controlling interests in start-ups and fund-to-fund investments are appropriate and consistent with the applicable accounting policies. The Company's assumptions and data used for measurement are appropriate.

Other Information

The Executive Board and/or the Supervisory Board are/is responsible for the other information.

The other information comprises the annual report. The other information does not include the consolidated financial statements, the combined management report information audited for content and our auditor's report thereon.

Our opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the combined management report information audited for content or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Board and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

The Executive Board is responsible for the preparation of consolidated financial statements that comply, in all material respects, with the IFRS 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, the Executive Board is responsible for such internal controls as may be deemed necessary to enable the establishment of a system that is free from material misrepresentation due to fraudulent acts (i.e. accounting manipulation and pecuniary damage) or error.

In preparing the consolidated financial statements, the Executive Board is responsible for assessing the Group's ability to continue as a going concern. It also has the responsibility for disclosing, as applicable, matters related to going concern. In addition, it is 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, the Executive Board is responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the Executive Board is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group’s position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor’s report that includes our opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgement and maintain professional skepticism throughout the audit. We also:
- Identify and assess the risks of material misstatement of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal 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 combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of these systems.
- Evaluate the appropriateness of accounting policies used by the Executive Board and the reasonableness of estimates made by the Executive Board and related disclosures.
- Conclude on the appropriateness of the Executive Board’s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor’s report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor’s report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.
- Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the Executive Board in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the Executive Board as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Note on emphasis of matter – Inherent risk due to uncertainties regarding the legal conformity of the interpretation of the EU Taxonomy Regulation

Please refer to the statements of the Executive Board in the section "EU taxonomy", the non-financial statement contained in the section "Combined non-financial statement" of the combined management report pursuant to Section 289b (1) HGB and Section 315b (1) HGB. It describes that the EU Taxonomy Regulation and the delegated acts adopted for it contain formulations and terms that are still subject to considerable interpretation uncertainties and for which clarifications have not yet been published in every case. The Board explains how it has made the necessary interpretations of the EU Taxonomy Regulation and the delegated acts adopted thereto. Due to the inherent risk that vague legal concepts may be interpreted differently, the legal conformity of the interpretation is subject to uncertainties. Our opinion on the combined management report has not been modified in this respect.

Other Legal and Regulatory Requirements

Report on the Assurance on the Electronic Rendering of the Consolidated Financial Statements and the Combined Management Report Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB

We have performed assurance work in accordance with Section 317 (3a) HGB to obtain reasonable assurance about whether the rendering of the consolidated financial statements and the combined management report (hereinafter the "ESEF documents") contained in the electronic file "Bertelsmann_KA+LB_2022-12-31_DE.zip" (SHA256 hash value: 1f30618eed8ffc1a105dc263f8e6f881b39230bbf9b94d8dee1b79c0d263bbb1) made available 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 extends only to the conversion of the information contained in the consolidated financial statements and the combined management report into the ESEF format and therefore relates neither to the information contained in these renderings nor to any other information contained in the file identified above.

In our opinion, the rendering of the consolidated financial statements and the combined management report contained in the electronic file made available, identified above and prepared for publication purposes complies in all material respects with the requirements of Section 328 (1) HGB for the electronic reporting format. Beyond this assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying combined management report for the financial year from 1 January to 31 December 2022 contained in the "Report on the Audit of the Consolidated Financial Statements and the Combined Management Report" above, we do not express any assurance opinion on the information contained within these renderings or on the other information contained in the file identified above.

We conducted our assurance work on the rendering of the consolidated financial statements and the combined management report contained in the file made available and identified above in accordance with Section 317 (3a) HGB and the IDW Assurance Standard: Assurance Work on the Electronic Rendering of Financial Statements and Management Reports Prepared for Publication Purposes in Accordance with Section 317 (3a) HGB (IDW AsS 410 (06.2022)). Our responsibility in accordance therewith is further described below. Our audit firm applies the IDW Standard on Quality Management 1: Requirements for Quality Management in Audit Firms (IDW QS 1).

The Company's Executive Board is responsible for the preparation of the ESEF documents including the electronic rendering of the consolidated financial statements and the combined 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 Executive Board is responsible for such internal control that it has considered 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 Supervisory Board is responsible for overseeing the process of preparing 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 on 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 file made available containing the ESEF documents meets the requirements of the Delegated Regulation (EU) 2019/815, as amended as at the reporting date, on the technical specification for this electronic file.
- Evaluate whether the ESEF documents provide an XHTML rendering with content equivalent to the audited consolidated financial statements and the audited combined management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL), in accordance with the requirements of Articles 4 and 6 of Delegated Regulation (EU) 2019/815, as amended as at the reporting date, enables an appropriate and complete machine-readable XBRL copy of the XHTML rendering.

Further information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor at the Annual General Meeting on 9 May 2022. We were engaged by the Supervisory Board on 6 July 2022. We have been the group auditor of Bertelsmann SE & Co. KGaA since financial year 2020.

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).

Other Matter – Use of the Auditor's Report

Our auditor's report must always be read together with the audited consolidated financial statements and the audited combined management report as well as the examined ESEF documents. The consolidated financial statements and the combined management report converted to the ESEF format – including the versions to be published in the German Federal Gazette [Bundesanzeiger] – are merely electronic renderings of the audited consolidated financial statements and the audited combined management report and do not take their place. In particular, the ESEF report and our assurance opinion contained therein are to be used solely together with the examined ESEF documents made available in electronic form.

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the audit is Frank Thiele.

Bielefeld, 21 March 2023

KPMG AG
Wirtschaftsprüfungsgesellschaft

Dr Tonne	Thiele
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Corporate Governance at Bertelsmann

The pursuit of responsible corporate governance is part of the Bertelsmann identity, and an important element of its corporate culture.

Bertelsmann SE & Co. KGaA is a capital market-oriented but unlisted company. The corporate governance of Bertelsmann SE & Co. KGaA largely follows the recommendations and suggestions contained in the German Corporate Governance Code ("Code"), the current version of which entered into force on April 28, 2022. Due to Bertelsmann's specific shareholder structure, the company predominantly deviates from those recommendations and suggestions of the Code that are primarily aimed at publicly traded companies with a larger group of shareholders. Bertelsmann is not required to issue a declaration pursuant to section 161 of the German Stock Corporation Act stating that it complies with the recommendations of the Code.

Statutory Bodies of the Company

Bertelsmann's legal form is that of a Kommanditgesellschaft auf Aktien (KGaA) (partnership limited by shares). The statutory bodies of the KGaA are the General Meeting, the Supervisory Board and the general partner. The general partner serves as the management and representative body of the KGaA. In the case of Bertelsmann, this is Bertelsmann Management SE, a European stock corporation (Societas Europaea), represented by its Executive Board. Bertelsmann SE & Co. KGaA and Bertelsmann Management SE each have their own Supervisory Boards. The members of the Executive Board of Bertelsmann Management SE are appointed and monitored by the Supervisory Board of Bertelsmann Management SE (dual leadership structure). The Supervisory Board of Bertelsmann SE & Co. KGaA supervises the management of the business by Bertelsmann Management SE. The duties and responsibilities of the individual bodies are clearly defined in each case and are strictly separated from each other. Simultaneous membership in the Executive Board of Bertelsmann Management SE and the Supervisory Board of Bertelsmann Management SE and of Bertelsmann SE & Co. KGaA, respectively, is not permitted. The Bertelsmann boards are obliged to secure the continuity and independence of the company and to enhance the enterprise value in the long term through responsible and sustainable corporate management.

Closed Group of Shareholders

Three foundations (Bertelsmann Stiftung, Reinhard Mohn Stiftung and BVG-Stiftung) indirectly hold 80.9 percent of Bertelsmann SE & Co. KGaA shares, with the remaining 19.1 percent held indirectly by the Mohn family. Bertelsmann Verwaltungsgesellschaft (BVG) controls all voting rights at the General Meetings of Bertelsmann SE & Co. KGaA and Bertelsmann Management SE. BVG is responsible for upholding the interests of the foundations invested in Bertelsmann and of the Mohn family as indirect shareholders in Bertelsmann SE & Co. KGaA, as well as ensuring the continuity of the company's management and Bertelsmann's corporate culture. BVG is controlled by a steering committee composed of three representatives of the Mohn family and three additional non-family members.

Corporate Management

Transparent structures and clear decision-making processes are characteristic for Bertelsmann's corporate management. The general partner, Bertelsmann Management SE, represented by its Executive Board, is responsible for independently managing the company. Its duties consist of determining the corporate objectives, the strategic direction of the Group, Group management, management training, and corporate planning and financing. Bertelsmann is committed to fulfilling its corporate responsibility and pursues high standards in this regard. To this end, Bertelsmann defines Group-wide ESG (environmental, social, governance) goals and incorporates them into management and decision-making processes.

The Executive Board provides the respective Supervisory Boards with regular, prompt and comprehensive reports on all matters that are relevant to business development and strategy implementation, planning, financial position and results of operations, and the risk situation and risk management. It ensures compliance with the provisions of law and corporate guidelines within the Group. The members of the Executive Board bear joint responsibility for the overall management. Matters of fundamental or material significance and matters concerning the spheres of responsibility of multiple Executive Board members are addressed by the overall Executive Board. Notwithstanding this overall responsibility, the individual members of the Executive Board manage their departments as part of the duties stipulated by the overall Executive Board. The Executive Board Chairman coordinates the cooperation within the Executive Board and between the Executive Board and the Supervisory Boards, and has regular consultation meetings with the chairs of the two Supervisory Boards. In addition, the Executive Board has established the Group Management Committee (GMC), which advises on important corporate strategy and development matters, and other issues that affect the Group as a whole. This committee had 20 members at the end of the 2022 financial year and includes the Executive Board as well as executives representing key businesses, countries, regions and select Group-wide functions.

The Supervisory Board of Bertelsmann SE & Co. KGaA supervises the management of the business by the general partner and uses its extensive information and control rights for this purpose. In addition, the Supervisory Boards advise the Executive Board on strategic matters and significant transactions. The Executive and Supervisory Boards work in close, trusting cooperation and are able to reconcile the demands of effective corporate governance with the need for rapid decision-making processes. The organization and duties of the Supervisory Board of Bertelsmann SE & Co. KGaA are described in greater detail in the Report of the Supervisory Board on pages 180 ff. The work of the Supervisory Board in the 2022 financial year is also covered in the report. The members of the Executive and Supervisory Boards are obliged to serve the company's best interests in their work.

The Bertelsmann SE & Co. KGaA and Bertelsmann Management SE shareholders exercise their rights and vote at the respective General Meetings. The General Meetings vote on matters such as amendments to the articles of association and the appropriation of net income, and elect the members of the respective Supervisory Boards.

Diversity in Practice

At a global company like Bertelsmann, diversity within the workforce is a prerequisite for creativity and entrepreneurship, and therefore for the Group's long-term economic success. In the Bertelsmann Diversity, Equity & Inclusion Policy, the Bertelsmann Executive Board emphasizes its aim of further increasing diversity of staff at all levels and in every respect, and of creating general conditions that foster the appreciation and inclusion of employees and ensure equal opportunities.

An interdivisional and international working group consistently promotes diversity, equity and inclusion at all levels of the company (see "Combined Non-Financial Statement" within the Combined Management Report, p. 52 ff.). The focus in 2022 – in addition to measures addressing disabilities as well as sexual orientation and gender identity – continued to be on increasing gender diversity. As of December 31, 2022, in the GMC, in which eight nationalities are represented, seven of the 20 members were women. Bertelsmann had set a goal to have one third of its top and senior management positions across all divisions occupied by women by the end of 2021. This goal was reached in 2022, with 35% in top management and 36% in senior management. Through development measures within the talent pools and standardized talent management processes, Bertelsmann promotes the sustainable structure of a diverse talent pipeline. The targets set for the talent pools of one-third women in the top management and senior management pools and 50 percent women in the career development pool will be achieved for the 2021/2022 classes. The Supervisory Board and the Executive Board are notified annually of progress in regard to these targets. The Supervisory Board supports the goal of having equal representation of women and men in management positions.

Bertelsmann SE & Co. KGaA is an unlisted company and is not subject to parity codetermination. The "Equal Participation of Women and Men in Leadership Positions in the Private and Public Sector Act" does not apply to the two Supervisory Board bodies. Nevertheless, Bertelsmann supports the goal of this legislation. Four of the 14 Supervisory Board members are women. Even though the Supervisory Board will not be setting a target quota for women on the Supervisory Board for the time being, the share of women in new appointments should not go down. When candidates are nominated for election as new members of the Supervisory Board, consideration is always given to the aim of increasing the proportion of female members or members from other countries.

Integrity & Compliance

Corporate responsibility, lawful behavior and acting with integrity toward employees, customers, business partners and government agencies are an integral part of our value system at Bertelsmann. Bertelsmann has always been committed to the principle of adhering to laws and has internal policies on the prevention of risks and their consequences.

To ensure compliance, the Executive Board has established a compliance organization and the Integrity & Compliance program. It oversees this program and ensures that it is continuously improved. The Supervisory Board Audit and Finance Committee monitors the effectiveness and proper functioning of the compliance organization. The Executive Board established the Corporate Compliance Committee (CCC). Each year, the CCC submits an extensive report about compliance within the Group to the Executive and Supervisory Boards. It also provides ad hoc reports to the Executive and Supervisory Boards in the event of any significant compliance violations. The CCC is responsible for the effectiveness of measures designed to ensure compliance, and for promoting a culture of integrity and compliant conduct within the Bertelsmann Group. In particular, the CCC monitors investigations into compliance violations and the measures taken to prevent violations. The Integrity & Compliance department is responsible for the day-to-day work to ensure compliance, implementing Board-mandated compliance initiatives and managing the whistleblowing systems.

The Bertelsmann Integrity & Compliance program is based on the relevant standards for compliance management systems and helps mitigate risks in various ways. Its basic elements include, in particular, the Bertelsmann Code of Conduct, risk analysis, advice on compliance topics, and communication and training measures, whistleblowing systems that give not only employees but also third parties the opportunity to confidentially report misconduct in the company without fear of reprisal, and case management. It also includes additional measures in specific subject areas, such as anticorruption, antitrust law, compliance by business partners, foreign trade law and antidiscrimination.

The Executive Board has continuously developed and expanded Bertelsmann's compliance structure and organization over time, including during the 2022 financial year. New Code of Conduct training for all employees was introduced in 2022. Additional training was offered on topics such as anti-corruption, antitrust law and foreign trade law. Activities were further intensified in 2022 in the areas of compliance by business partners and antidiscrimination. Over the last few years, the interlinks between the compliance organization and the risk management system have been strengthened and the Supplier Code of Conduct has been applied. Guidelines on the compliance organization and the role of local Compliance Officers are continually implemented.

All reports of compliance violations received were investigated, and appropriate actions were taken.

Executive Board Supervisory Board

Report of the Supervisory Board

Christoph Mohn
Chairman of the Supervisory Board of Bertelsmann SE & Co. KGaA

Dear shareholders,

The global economic developments in the 2022 reporting period were dominated by the war in Ukraine, a sharp increase in inflation and the aftermath of the pandemic. Against this background, growth was uneven in markets relevant to Bertelsmann. European TV advertising markets recorded declines in Germany and France as well as growth in the Netherlands and Hungary. At the same time, streaming markets in Germany and the Netherlands continued to experience strong growth. The relevant markets for printed books declined in the English- and German-speaking regions, but developed positively in the Spanish-speaking region. While publisher sales of digital audio books grew overall, publisher sales of e-books declined. Sustained growth was recorded both in the music markets for publishing and recording rights and in the service markets in the sectors relevant to Bertelsmann. In contrast, the European printing markets for offset and gravure printing and the book printing markets in the United States declined. The education markets relevant to Bertelsmann continued to grow. In this heterogeneous market environment, the Bertelsmann Group increased its revenues to more than €20 billion and, despite high inflation, generated operating EBITDA of more than €3 billion for the third consecutive year.

This report covers the activities of the Supervisory Board of Bertelsmann SE & Co. KGaA. The activities of the Supervisory Board of Bertelsmann Management SE are not the subject of this report. The Supervisory Board of Bertelsmann SE & Co. KGaA supervises the management of the business by the Executive Board of Bertelsmann Management SE and uses its extensive information and control rights for this purpose. In addition, the Supervisory Board advises the Executive Board on strategic matters and significant transactions. The Executive and Supervisory Boards work in close, trusting cooperation and are able to reconcile the demands of effective corporate governance with the need for rapid decision-making processes.

For some time, the delegation of tasks to committees of experts has been an integral component of the Supervisory Boards' work at Bertelsmann. This increases the monitoring efficiency and advisory expertise of the Supervisory Boards. These committees also prepare the topics to be addressed during the plenary meetings. The committee chairs – or, where applicable, their representatives – then report to the plenary meetings on the work performed by their committees.

The Supervisory Board has formed an Audit and Finance Committee and the Working Group of Employee and Management Representatives. The Audit and Finance Committee of the Supervisory Board of Bertelsmann SE & Co. KGaA is also involved in financial reporting and the financial reporting process, and monitors the effectiveness of the risk management system, the internal control system and the internal auditing system. Other important topics regularly discussed are compliance, information security and data protection as well as non-financial reporting. One focus of the work is, of course, the audit of the Annual Financial Statements and the Consolidated Financial Statements as well as monitoring the quality of the audit process.

The tasks of the Supervisory Board are augmented by the responsibilities of the Supervisory Board of Bertelsmann Management SE. A Personnel Committee and Program Committee have also been set up there. The Personnel Committee of Bertelsmann Management SE is likewise a Nomination Committee and, in this function, recommends to the plenary session of the Supervisory Board suitable candidates for the Supervisory Board. The Program Committee, instead of the Supervisory Board, decides on the approval of the Supervisory Board to enter into program supply deals – for example, for feature films, series or sports rights.

Advising and Monitoring the Executive Board of Bertelsmann Management SE in the 2022 Financial Year

In the reporting period, the Supervisory Board of Bertelsmann SE & Co. KGaA again diligently fulfilled the duties incumbent upon it by law and under the articles of association and bylaws. Its members regularly advised and monitored the general partner, Bertelsmann Management SE, represented by its Executive Board, in the task of managing and directing the company’s operations. As part of its advisory and monitoring activities, the Supervisory Board of Bertelsmann SE & Co. KGaA was directly involved in important company decisions and transactions at an early stage, and discussed and reviewed these at length on the basis of reports from the Executive Board.

The general partner provided the Supervisory Board with regular, prompt and comprehensive written and verbal reports on all significant issues of strategy, planning, business performance, intended business policies and other fundamental management issues of importance for Bertelsmann SE & Co. KGaA. A wide range of topics and projects were presented for discussion at the meetings of the Supervisory Board during the 2022 financial year.

Supervisory Board Plenary Meeting

In the plenary meetings, the Supervisory Board of Bertelsmann SE & Co. KGaA regularly heard reports from the Executive Board on the current business and financial position of the Group and of the individual divisions. They also heard reports on Group planning and material business transactions, particularly major planned investments and divestments. The Supervisory Board Chairman, who at the same time is the Chairman of the Supervisory Board of Bertelsmann Management SE, reported regularly and comprehensively to the plenary session of the Supervisory Board concerning the topics and the progress of the discussions of the Supervisory Board of Bertelsmann Management SE and in its committees. The Supervisory Board was kept regularly informed of the status of the implementation of the Group’s strategy by the Executive Board. To the extent stipulated by law and the articles of association and bylaws, the necessary decisions were made during the plenary meeting. In 2022, the meetings of the Supervisory Board and its committees were held in person or in person with the option to participate by video. In the 2022 financial year, the Supervisory Board held four regular meetings and also met with the Executive Board for a strategy retreat.

The first meeting of the Supervisory Board, on January 26, 2022, focused on discussing the Group budget prepared by the Executive Board for 2022 and on the report of the current business situation and financial position. Subsequently, the Supervisory Board was updated on the implementation of the Group strategy, including the ongoing investment and divestment measures.

At the next meeting on March 25, 2022, the Executive Board reported in particular on the current business situation and the status of strategy implementation. The main focus of the meeting was on addressing the Annual and Consolidated Financial Statements for 2021 and the Combined Management Report. At the recommendation of the Audit and Finance Committee and after discussion with the auditors KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, the Supervisory Board approved the Annual and Consolidated Financial Statements for the 2021 financial year and the Combined Management Report of Bertelsmann SE & Co. KGaA. The proposal of the general partner for the appropriation of net income was also approved. In addition, the Supervisory Board followed the recommendation of the Audit and Finance Committee for the auditor for the 2022 financial year and for the auditor of the Interim Report, and approved its corresponding proposal to the Annual General Meeting. Furthermore, the Supervisory Board resolved on its report for the Annual General Meeting and approved the Corporate Governance Report that it prepared together with the Executive Board for the 2021 financial year. In addition to the current financial results, including the major risks to the Group, the Supervisory Board also focused on the topic of sustainability and the company's sustainability strategy.

In the two-day meeting on July 5 and 6, 2022, the Supervisory Board was briefed again about the current business situation, the development of the Group’s businesses and the status of strategy implementation. In addition, the Supervisory Board focused on exemplary growth businesses of the Group.

In the last Supervisory Board meeting of the financial year on October 28, 2022, the Supervisory Board again dealt with the Group’s business situation and financial position and with internal Supervisory Board matters. In addition, the Executive Board gave the Supervisory Board a report on the outlook for the overall 2022 financial year.

The Supervisory Board meeting on October 28, 2022 also included the annual Strategic Planning Dialog between the Executive Board and the Supervisory Board, which had already begun the previous day, October 27, 2022. The Supervisory Board was first updated on the status of strategy implementation. Bertelsmann made noticeable progress in the portfolio transformation in 2022; the quality of the business portfolio improved further, and the financial position is very good. Implementation of the Boost plans was advanced in the individual divisions. The Group’s growth ambitions remain unchanged despite a deteriorated macroeconomic environment. Bertelsmann’s strategic focus is on a fast-growing, digital, international and diversified Group portfolio. New businesses in which Bertelsmann invests are required to have strong long-term growth prospects, global reach, sustainable business models, high market-entry barriers and scalability. The strategic priorities are to create national media champions, expand global content businesses, grow through global services, expand the education business and develop the investment portfolio. This further development of the strategy aims to meet new challenges such as growing competition from global tech platforms. The Group aims to grow in existing and new lines of business through organic initiatives and acquisitions. In addition to the three earnings pillars of entertainment, book publishing and services, the music and education businesses and new businesses in the investment portfolio are to be expanded as growth areas. A further reduction in capacity is expected in the printing business. Bertelsmann’s corporate strategy and planning also include due consideration of ecological and social goals. Based on the insights gained during the strategy retreat, the Supervisory Board believes that the Group is continuing to make good progress.

Supervisory Board Audit and Finance Committee

The Supervisory Board of Bertelsmann SE & Co. KGaA formed the Audit and Finance Committee to perform its tasks within its sphere of responsibility efficiently. The Audit and Finance Committee has four members; the Chair of the Supervisory Board does not lead this committee. The Chair of the Audit and Finance Committee is Bodo Uebber. Both the Chair of the Audit and Finance Committee and at least one additional committee member are independent as defined by the Code and have special knowledge and experience in the areas of financial reporting and of auditing. All members of the Audit and Finance Committee are familiar with the sectors in which Bertelsmann SE & Co. KGaA operates.

In particular, and in accordance with its mandate for the reporting year, the Audit and Finance Committee discussed issues of corporate financing, the financial position of the Group, financial planning, fiscal policy and individual negative deviations of the performance of Group businesses from budgeted performance. The Committee also extensively addressed the financial reporting and financial reporting processes and monitored the effectiveness and functional capability of the risk management system, the internal control system and the internal auditing system. It also requested regular reports from the Head of Corporate Audit and Consulting. Furthermore, the Committee addressed issues relating to integrity and compliance, in particular the effectiveness and proper functioning of the compliance management system. In this connection, the Committee heard reports on significant compliance-related events in the Group. The Audit and Finance Committee determined to its satisfaction that Bertelsmann has an adequate and effective internal control system and risk management system with regard to the scope and risk situation of the company.

In addition, the Audit and Finance Committee reviewed the implementation of the EU’s General Data Protection Regulation (GDPR) at Bertelsmann. During this part of the meeting, the Audit and Finance Committee was briefed on the further development of the data protection strategy, the status of its implementation and the further development of data protection requirements. An issue regularly addressed in the meetings of the Audit and Finance Committee was the situation and ongoing development of the Group’s cybersecurity and IT security structure. The expansion of cybersecurity continues to be one of the top priorities in the Group. Thus, the multi-year Basic Infrastructure Measures (BIM) initiative was also at the core of the activities for further developing and improving the security level in the existing IT infrastructures. This program was successfully completed in the financial year, resulting in sustainable structural improvements. The Audit and Finance Committee was also informed about the increasing digitalization in Group accounting and auditing processes. An additional issue for the Audit and Finance Committee in the reporting period was non-financial reporting and its further development due to new regulatory requirements, such as the EU Taxonomy Regulation. The corresponding implementation processes are closely monitored by the Committee.

As required by law, the Committee focused on the auditing of the Annual Financial Statements and the Consolidated Financial Statements (see also the section “Audit of the Annual and Consolidated Financial Statements” below). The Audit and Finance Committee had already discussed the focal points of the 2021 audit with the auditor during the 2021 financial year and then finalized them in a Committee meeting at the end of August 2021. The key audit matters from the auditor’s report were likewise discussed with the auditor in advance during the Committee meeting held at the end of January 2022. The Chair of the Audit and Finance Committee regularly discussed with the auditor the provisional findings from the audit of the Annual and Consolidated Financial Statements for the 2021 financial year; all members of the Audit and Finance Committee then also discussed these findings with the auditor in a video conference that took place on March 9, 2022. The financial review meeting of the Audit and Finance Committee was held on March 25, 2022. The meeting was attended by the auditor, who was available to address the Committee members' questions while the Annual Financial Statements documents and audit reports were discussed in detail. The findings of the auditor were reviewed in an internal audit of the Annual and Consolidated Financial Statements. The non-financial reporting of the Executive Board was also reviewed within the framework of the Combined Non-Financial Statement as a separate part of the Combined Management Report and by means of the Executive Board's statement at the end of its voluntary report to Bertelsmann SE & Co. KGaA concerning the relationships to affiliated companies. In the financial review meeting of the Supervisory Board, the Audit and Finance Committee reported comprehensively to the plenary session concerning the audit of the Annual and Consolidated Financial Statements and the audit reports and related reviews; the Committee also proposed the corresponding resolutions.

The Committee monitored the quality of the audit on the basis of an annual report by the auditor and using specifically developed qualitative and quantitative audit quality indicators. Another element was a detailed statement from the Executive Board member responsible for Finance. In this role, the Audit and Finance Committee also addressed in-depth the independence of the auditor and the additional services performed by the auditor. There was no indication of grounds for bias or a risk to independence. By intensively monitoring the preparation and performance of the audit and by dealing on an ongoing and intensive basis with the process of auditing and other accounting-related topics, the Audit and Finance Committee has made an important contribution to ensuring the integrity of the accounting process at Bertelsmann. The Audit and Finance Committee of Bertelsmann SE & Co. KGaA held four regular meetings during the 2022 reporting period, two of which were held in hybrid form. In addition, the Committee held one extraordinary video conference in the reporting period in preparation for the financial review meeting. The Chair of the Audit and Finance Committee continuously briefed the plenary session of the Supervisory Board on the work of the Committee through regular reports. The corresponding department heads were represented during the discussion of individual agenda items. In addition, the Chair of the Audit Committee held individual meetings with the responsible auditor.

Audit of the Annual and Consolidated Financial Statements for the 2022 Financial Year

KPMG AG Wirtschaftsprüfungsgesellschaft, based in Berlin, has been the auditor for Bertelsmann SE & Co. KGaA and the Group since the financial year 2020. The German Public Auditors responsible for signing the audit are Dr. Knut Tonne and Frank Thiele.

KPMG has audited the Annual Financial Statements and the Consolidated Financial Statements prepared by the Executive Board of Bertelsmann Management SE as well as the Combined Group Management Report of Bertelsmann SE & Co. KGaA, which is combined with the management report of the Company, including the Combined Non-Financial Statement as a separate part of the Combined Management Report for the financial year from January 1, 2022 to December 31, 2022, and issued an unqualified audit opinion in each case. The Annual Financial Statements were prepared in accordance with the German Commercial Code (HGB); the Consolidated Financial Statements of Bertelsmann SE & Co. KGaA have been prepared in accordance with International Financial Reporting Standards (IFRS) as applicable in the European Union and the additional requirements of German law pursuant to section 315e (1) HGB. The auditor was mandated by the Supervisory Board's Audit and Finance Committee to audit the Annual Financial Statements and Consolidated Financial Statements in accordance with the Annual General Meeting resolution. The auditor performed the audit in observance of German accepted auditing principles established by the German Institute of Independent Auditors (IDW). The auditor was additionally instructed to audit the risk early-warning system at Bertelsmann SE & Co. KGaA, which it found to be satisfactory in terms of section 91 (2) of the German Stock Corporation Act (AktG) to identify developments that may threaten the Company's continued existence at an early stage. The provisional results of key audit matters were discussed with the auditor in a video conference on March 8, 2023. The Annual Financial Statements documents as well as the audit reports of the auditor were submitted to all members of the Supervisory Board by the specified deadline in advance of the financial review meeting. On March 28, 2023, the auditor attended the financial review meetings of the Audit and Finance Committee and on March 29, 2023 the plenary session of the Supervisory Board, where he gave an extensive report and answered questions. He was able to confirm that, in the course of the audit, no significant weaknesses had been identified in the accounting-related internal control system. The Audit and Finance Committee discussed the Annual Financial Statements documents and audit reports in detail. The findings of the auditor of the Annual Financial Statements were carefully reviewed in an internal audit of the Annual and Consolidated Financial Statements. The Audit and Finance Committee reported comprehensively to the plenary session of the Supervisory Board concerning the audit of the Annual and Consolidated Financial Statements and the audit reports.

On March 29, 2023, the plenary session of the Supervisory Board reviewed and discussed the Annual Financial Statements, Consolidated Financial Statements and Combined Management Report in detail, taking into account the recommendations of the Audit and Finance Committee and those contained in the audit reports and following further discussion with the auditor. The Supervisory Board concurred with the audit findings. After its own final scrutiny of the Annual and Consolidated Financial Statements and the Combined Management Report, the Supervisory Board – acting in accordance with the Audit and Finance Committee’s recommendation – raised no objections. The financial statements prepared by the Bertelsmann Management SE Executive Board were thus approved. Moreover, the Supervisory Board approved the Report of the Supervisory Board for the Annual General Meeting and the Corporate Governance Report, as well as its resolution proposals concerning the agenda items for the ordinary Annual General Meeting taking place on May 8, 2023. The Supervisory Board has furthermore reviewed the Bertelsmann Management SE Executive Board proposal as to the amount of net retained profits for appropriation to shareholders, and concurs with said proposal. The amount of the dividend proposed by the Executive Board of Bertelsmann Management SE is appropriate, in the view of the Supervisory Board, in consideration of the level of net retained profits, the economic environment, the company’s economic situation and the interests of the shareholders.

Changes in the Executive Board of Bertelsmann Management SE and in the Supervisory Board, Objectives for the Composition of the Supervisory Board

The business of Bertelsmann SE & Co. KGaA is managed by its general partner, Bertelsmann Management SE, represented by its Executive Board.

The following change occurred in the Executive Board of Bertelsmann Management SE in the past financial year: Effective December 31, 2022, Mr. Markus Dohle resigned from the Executive Board of Bertelsmann Management SE on the best of terms with the Supervisory Board. The Supervisory Board sincerely thanks Mr. Dohle for his extraordinary commitment and outstanding achievements during his many years with the Bertelsmann Group.

The following changes occurred in the Supervisory Board of Bertelsmann SE & Co. KGaA during the financial year and the reporting period, respectively: At an extraordinary general meeting of Bertelsmann SE & Co. KGaA on November 23, 2021, Dominik Asam, CFO of Airbus SE (CFO of SAP SE from March 7, 2023), was elected as a new member of the Supervisory Board effective January 1, 2022. Ms. Christiane Sussieck resigned as a member of the Supervisory Board with effect from the end of September 30, 2022, and Mr. Kai Brettmann resigned from the Supervisory Board with effect from October 20, 2022. At an extraordinary general meeting of the company on October 20, 2022, Ms. Ilka Stricker and Mr. Jens Maier were elected as additional members of the Supervisory Board as employee representatives.

At an extraordinary general meeting of Bertelsmann SE & Co. KGaA on March 20, 2023, Nitsa Kalispera, Executive Vice President BMG, was elected as employee representative as a new member of the Supervisory Board effective March 23, 2023. At present, all ten members of the Supervisory Board of Bertelsmann Management SE are also members of the currently 15-strong Supervisory Board of Bertelsmann SE & Co. KGaA.

The appropriate size of the Supervisory Boards and the experience and professional expertise of their members, who are drawn from a broad range of industries and areas of activity, are key factors in the effectiveness and independence of the work carried out by the Supervisory Board. With the exception of Supervisory Board members who are also members of the Mohn family (Dr. Brigitte Mohn, Christoph Mohn, Liz Mohn) and the employee representatives on the Supervisory Board (Günter Göbel, Nitsa Kalispera, Jens Maier, Ilka Stricker) or the representative of the Bertelsmann Management Representative Committee (Núria Cabutí), the Supervisory Board considers all other members of the Supervisory Board (Dominik Asam, Prof. Dr. Werner Bauer, Bernd Leukert, Gigi Levy-Weiss, Henrik Poulsen, Hans Dieter Pötsch, Bodo Uebber) to be independent as defined in the German Corporate Governance Code. Accordingly, the Supervisory Board has an appropriate number of independent members among the shareholders. All Supervisory Board members attended at least half of the Supervisory Board meetings convened. No potential conflicts of interest arose on the Supervisory Board. The "Equal Participation of Women and Men in Leadership Positions in the Private and Public Sector Act" does not apply to the Supervisory Board of Bertelsmann SE & Co. KGaA as it is an unlisted company. However, the Supervisory Board does support the aim of the act. From a strategic point of view, the Supervisory Board also aims to properly fulfill its monitoring and consulting function by ensuring diversity among its members. The Supervisory Board will not at this time, however, set any target quota for women on the Supervisory Board. It firmly believes that suitable measures have been taken within the company in the areas of succession planning, management development and the selection processes to ensure the equal participation of men and women on an ongoing basis. In the Supervisory Board, the aim is to ensure that the existing proportion of women will not be reduced when new members are appointed. Ideally, the backgrounds of new members will show links to Bertelsmann's growth regions and markets (see also the "Diversity in Practice" section in the Corporate Governance Report on page 177 f.) The Supervisory Board recognizes the intention of the Government Commission on the German Corporate Governance Code in its call for a specification of targets for an age limit and a standard limit for length of service on the Supervisory Board. In view of Bertelsmann's particular shareholder structure and the age limit regulations already contained in the company's articles of association, the Supervisory Board does not feel it is necessary or appropriate to introduce further or more extensive specifications on age limit and length of service at Bertelsmann.

The members of the Supervisory Board undertake the training measures required for their duties in principle on their own initiative and receive appropriate support from the company in this regard. For example, Bertelsmann supports members of the Supervisory Board in attending specific seminars as needed and covers the associated costs. Members of the Supervisory Board appointed for the first time are also introduced to specific topics relevant to the Bertelsmann Group in detail as part of a comprehensive onboarding process. Internal information events on specific topics are offered as needed for targeted training. In addition, Supervisory Board members are regularly briefed about the regulatory environment relevant to their Supervisory Board activities and other legal developments affecting them.

From the perspective of the Bertelsmann Group, the 2022 financial year can be described as highly successful despite the geopolitical challenges and high rates of inflation in core countries. The basis for this success was the employees and the entrepreneurial management performance of the Executive Board and executives. With their high level of personal commitment and sense of responsibility, all of them played a decisive role in ensuring that Bertelsmann is able to look back on a successful 2022 financial year.

The Supervisory Board wishes to express its special thanks and appreciation for this to all employees, all executives and the members of the Executive Board.

Gütersloh, March 29, 2023

Christoph Mohn
Chairman of the Supervisory Board

Supervisory Board

Christoph Mohn
Chairman
Chairman of the Board of Bertelsmann Verwaltungsgesellschaft mbH (BVG)
Chairman of the Reinhard Mohn Stiftung
Managing Director, Christoph Mohn Internet Holding GmbH
- Bertelsmann Management SE (Chairman)

Prof. Dr.-Ing. Werner J. Bauer
Vice Chairman
Former Executive Vice President of Nestlé AG for Innovation, Technology, Research and Development
- Bertelsmann Management SE (Vice Chairman)
- Givaudan S.A. (Vice Chairman)
- LONZA S.A. (until May 5, 2022)
- SIG Group AG (Vice Chairman)

Dominik Asam
Chief Financial Officer and Member of the Executive Board SAP SE (since March 7, 2023)
Chief Financial Officer Airbus SE (until February 28, 2023)
- Bertelsmann Management SE
- Airbus Bank GmbH (Chairman) (until February 28, 2023)
- Airbus Defence and Space GmbH (Chairman) (until February 28, 2023)
- Premium Aerotec GmbH (Chairman) (until February 28, 2023)
- Airbus Canada L.P. (until February 28, 2023)

Kai Brettmann (until October 20, 2022)
Editorial Director RTL Nord GmbH, Hamburg
Chairman of the RTL Group European Works Council (until February 22, 2023)
Chairman of RTL Deutschland Corporate Works Council (until February 8, 2022)
Chairman of the Works Council of RTL Nord (until February 23, 2023)

Núria Cabutí
Chairwoman of the international Management Representative Committee Bertelsmann SE & Co. KGaA (BMRC)
- CELESA S.A.

Günter Göbel
Chairman of the Corporate Works Council, Bertelsmann SE & Co. KGaA

Bernd Leukert
Member of the Executive Board for Technology, Data and Innovation of Deutsche Bank AG
- Bertelsmann Management SE
- DWS Group GmbH & Co. KGaA

Gigi Levy-Weiss
General Partner NfX, Angel Investor
- Bertelsmann Management SE
- Authorizon, Inc.
- Breeze (Blue Ocean Data Solutions, Inc.)
- Bridgecrew inc.
- Caja Elastic Dynamic Solutions Ltd.
- Circles Workshops Ltd. (7 Chairs Ltd.)
- Constru Ltd. (until May 2, 2022)
- Elmik Touristic Services Ltd.
- Faddom Ltd. (since January 31, 2022)
- Fantasy Advantage Ltd. (Sidelines)
- GameJam Ltd.
- Hip Mobility, Inc.
- IMA Ventures Ltd.
- ImagenAI Ltd.
- Inception VR, Inc.
- Inception VR (Israel) Ltd.
- Inception VR (UK) Ltd.
- Karma (Shoptagr Ltd.)
- Komodor, Inc.
- Landa Holdings, Inc.

• Membership of statutory domestic supervisory boards
• Membership of comparable domestic and foreign supervisory bodies of business enterprises

- Moon Active Ltd.
- Mov.AI Ltd.
- NFX Capital Israel Ltd.
- NFX Capital UK, Ltd.
- Octoplay Ltd. (since January 20, 2022)
- Papaya Gaming Ltd.
- PayEM Card, Ltd.
- Permit, Inc.
- Pocket Pie Ltd.
- Premium Domains Ltd.
- Propel (Z. M. Corporation Ltd.)
- Reach Digital Inc.
- Renegade Insurance, Inc.
- Ridge (Tectonic Labs Ltd.)
- Sauce (Say2Eat, Inc.) (since November 20, 2022)
- ScaleOps Labs Ltd. (since May 25, 2022)
- Snax Games Ltd.
- Super.ai, Inc.
- Theator Inc.
- Triple Whale, Inc.
- TrustMed Ltd.
- Ultra Horse Ltd. (since August 9, 2022)
- Utila Inc. (since March 17, 2022)
- Veriti (Cytune, Ltd.)
- Volunteer Directly Ltd.
- Walnut Ltd.
- Zengaming, Inc.

Jens Maier (since October 20, 2022)

Chairman of RTL Deutschland Corporate Works Council (since June 15, 2022)

Dr. Brigitte Mohn

Member of the Executive Board, Bertelsmann Stiftung

- Bertelsmann Management SE
- Phineo gAG
- Stiftung RTL – Wir helfen Kindern e.V.
- Clue by Biowink GmbH

Liz Mohn

- Bertelsmann Management SE

Hans Dieter Pötsch

Chairman of the Supervisory Board, Volkswagen AG
Chairman of the Executive Board, Porsche Automobil Holding SE

- AUDI AG, Ingolstadt
- Autostadt GmbH, Wolfsburg
- Bertelsmann Management SE
- Dr. Ing. h.c. F. Porsche AG
- TRATON SE, München (Chairman)
- Wolfsburg AG
- Porsche Austria Gesellschaft m.b.H., Salzburg (Chairman)
- Porsche Holding Gesellschaft m.b.H., Salzburg (Chairman)
- Porsche Retail GmbH, Salzburg (Chairman)

Henrik Poulsen

Former Chairman of the Executive Board Ørsted, Senior Advisor to A.P. Møller Holding

- Bertelsmann Management SE
- Carlsberg A/S (Chairman)
- Faerch Group A/S (Chairman)
- ISS A/S (Vice Chairman) (until April 7, 2022)
- Novo Holdings A/S
- Novo Nordisk A/S (Vice Chairman) (since March 24, 2022)
- Ørsted A/S (until March 7, 2023)

Ilka Stricker (since October 20, 2022)

Vice Chairwoman of the General Works Council, Arvato Supply Chain Solutions (since June 7, 2022)
Vice Chairwoman of the Corporate Works Council, Bertelsmann SE & Co. KGaA (since June 28, 2022)
Chairwoman Works Council European SCM Services GmbH (since March 15, 2022)

- Membership of statutory domestic supervisory boards
- Membership of comparable domestic and foreign supervisory bodies of business enterprises

Christiane Sussieck (until September 30, 2022)
Chairwoman of the Corporate General Works Council, Bertelsmann SE & Co. KGaA
Vice Chairwoman of the Corporate Works Council, Bertelsmann SE & Co. KGaA (until June 28, 2022)

Bodo Uebber
Former Member of the Executive Board, Daimler AG
Finance & Controlling / Daimler Financial Services
- Adidas AG
- Bertelsmann Management SE
- Evercore GmbH (Chairman)

Bertelsmann SE & Co. KGaA's Supervisory Board Committees 2022

Audit and Finance Committee
Bodo Uebber (Chairman)
Kai Brettmann (until October 20, 2022)
Günter Göbel (since January 1, 2023)
Christoph Mohn
Hans Dieter Pötsch

Working Group of Employee Representatives
Liz Mohn (Chairwoman)
Kai Brettmann (until October 20, 2022)
Núria Cabutí
Günter Göbel
Jens Maier (since October 20, 2022)
Ilka Stricker (since October 20, 2022)
Christiane Sussieck (until September 30, 2022)

Bertelsmann Management SE's Supervisory Board Committee 2022

Personnel Committee
Christoph Mohn (Chairman)
Prof. Dr.-Ing. Werner J. Bauer
Liz Mohn
Hans Dieter Pötsch
Bodo Uebber

Program Committee
Christoph Mohn (Chairman)
Prof. Dr.-Ing. Werner J. Bauer
Dr. Brigitte Mohn
Hans Dieter Pötsch

• Membership of statutory domestic supervisory boards
• Membership of comparable domestic and foreign supervisory bodies of business enterprises

Executive Board

Thomas Rabe
Chairman
- Adidas AG[1] (Chairman)

Markus Dohle
Chief Executive Officer, Penguin Random House **(until December 31, 2022)**
- Direct Group Grandes Obras S.L. (until December 31, 2022)
- DK Publishing LLC (until December 31, 2022)
- Editora Schwarcz S.A. (until December 31, 2022)
- Frederick Warne & Co. LLC (until December 31, 2022)
- Golden Treasures LLC (until December 31, 2022)
- Penguin Random House Grupo Editorial (USA) LLC (until December 31, 2022)
- Penguin Random House LLC (until December 31, 2022)
- Random House Children's Entertainment LLC (until December 31, 2022)
- Sasquatch Books LLC (until December 31, 2022)

Rolf Hellermann
Chief Financial Officer
- Bertelsmann, Inc. (Chairman)
- Majorel Group Luxembourg S.A.
- Penguin Random House LLC (since December 21, 2022)
- RTL Group S.A.

Immanuel Hermreck
Chief Human Resources Officer
- RTL Group S.A.

• Membership of statutory domestic supervisory boards
• Membership of comparable domestic and foreign supervisory bodies of business enterprises

1) External mandates

Selected Terms at a Glance

Alternative Performance Measures
Additional financial measures that are not directly specified by financial reporting regulations. These are determined by means of a company-specific reconciliation and are based on mandatory (IFRS) measures.

Bertelsmann Value Added (BVA)
A performance indicator for assessing the profitability of operations and return on invested capital. BVA is calculated as the difference between net operating profit after tax (NOPAT) and the cost of capital. NOPAT is calculated on the basis of operating EBITDA. By deducting amortization, depreciation, impairment and reversals, and adjusting for special items, and after modifications and less a flat tax, NOPAT, which is used as the basis for calculating BVA, is determined. Cost of capital is the product of the weighted average cost of capital (WACC, where uniform WACC after taxes is 8 percent) and the level of capital invested (Group's operating assets less non-interest-bearing operating liabilities).

Cash Conversion Rate
The cash conversion rate is a performance indicator used to measure the release of financial resources. It is calculated as the ratio of operating free cash flow to operating EBIT. For this purpose, the amounts reported in the Consolidated Financial Statements are modified.

Cash Flow
A company's cash inflows and outflows during a specific period.

Contractual Trust Arrangement (CTA)
The concept of funding and insolvency protection of pension obligations by transferring assets into a structure similar to a trust. Assets are classified as plan assets under IFRS and are netted against the company's pension obligations.

Corporate Governance
The term for responsible corporate management and control in the interest of creating sustainable value.

Coverage Ratio
The (interest) coverage ratio is a financing target. It represents the ratio of operating EBITDA to financial result. Amounts reported in the Consolidated Financial Statements are modified incalculating the coverage ratio.

Enabling Activity
Economic activity that directly enables other activities to make a substantial contribution to one or more of the environmental objectives.

Equity Method
The equity method is a method of accounting to recognize associates and joint ventures, whereby the investment is initially recognized at cost and adjusted thereafter for the post-acquisition change in the investor's share of the investee's net assets.

Goodwill
Goodwill represents the future economic benefits arising from those assets acquired in a business combination that are not individually identified and separately recognized.

IFRS
Abbreviation of International Financial Reporting Standards. Accounting standards intended to ensure internationally comparable accounting and reporting.

Leverage Factor
The leverage factor is the ratio of economic debt to operating EBITDA. In order to enable Bertelsmann's actual financial strength to be reflected on an economic level, the figures reported in the Consolidated Financial Statements are modified.

Minimum Safeguards
Procedures that are implemented to ensure the alignment of labor and human rights.

Operating EBITDA
Earnings before interest, taxes, amortization, depreciation, impairment and reversals, and special items.

Rating
An expression of the creditworthiness of a creditor or financial instrument by an agency specialized in evaluating credit risk.

SE & Co. KGaA
A partnership limited by shares (KGaA) with a European stock corporation (Societas Europaea, or SE) as the general partner. The general partner is responsible for the management and representation of the KGaA.

Significant Harm
Significant and long-term harm to one of the environmental objectives.

Special Items
Income and expense items that are distinguished by their nature, amount or frequency of occurrence, and the disclosure of which is relevant for assessing the earnings power of the company or its segments in the period affected. They include, for example, restructuring measures, impairments and capital gains or losses. Not included in the special items are disposal effects of strategic real estate transactions.

Syndicated Credit Facility
A credit facility involving a consortium of banks.

Transitional Activity
Economic activity that assists the transition to a climate-neutral economy.

Financial Calendar

May 4, 2023
Announcement of figures for
the first three months of 2023

May 9, 2023
Payout of dividends on profit participation
certificates for the 2022 financial year

August 30, 2023
Announcement of figures for
the first half of 2023

November 8, 2023
Announcement of figures for
the first nine months of 2023

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