

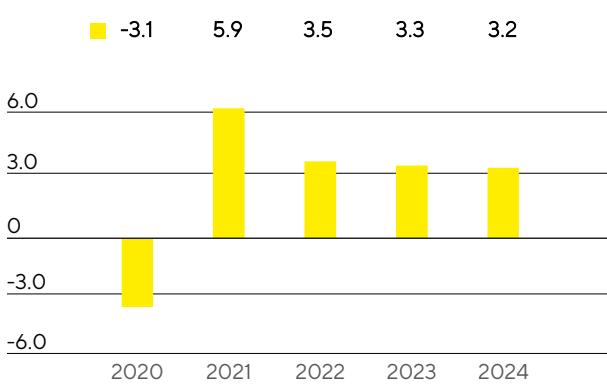
# Macroeconomic and Industry-Specific Environment

The Sartorius Group is active in sectors that differ in their dependence on the economy. The Bioprocess Solutions Division, for instance, operates in an environment that is largely independent of economic fluctuations. The Lab Products & Services Division, in contrast, is partly active in sectors whose development is more strongly affected by economic factors.

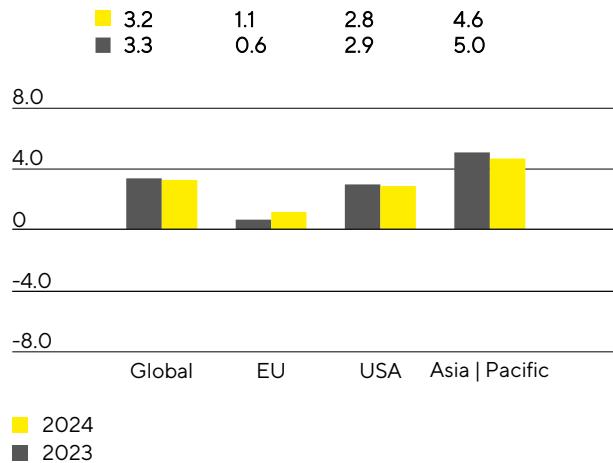
## Modest Economic Momentum Continues

According to IMF estimates, the global economy grew at a rate of 3.2% in 2024 (2023: +3.3%). Economic momentum thus remained subdued in a long-term comparison and weakened slightly for the third year in a row. However, in view of the largely synchronized, significantly tightened monetary policy worldwide since 2022 and numerous other pressures and risk factors, the global economy proved resilient overall. Inflation rates fell significantly in 2024, from 5.7% globally in January to 4.5% at the end of the year, prompting numerous central banks to cut interest rates in the second half of the year. In addition, the cyclical imbalances between the economies narrowed in the course of the year: gross domestic product (GDP) in the industrialized nations grew slightly by 1.8% (2023: +1.7%), while growth in the emerging and developing nations slowed slightly to 4.2% (2023: +4.4%).

Global Economic Growth (2020 to 2024)  
in %



Economic Growth by Region  
in %



Source: International Monetary Fund

According to the IMF, the European Union's economy grew by 1.1% (2023: +0.6%), with the major eurozone countries developing at different rates. In Germany, economic output stagnated at the previous year's level (2024: 0.0%, 2023: -0.3%), while France recorded growth of 1.1% (2023: +1.1%) and Italy grew by 0.7% (2023: +0.7%). The United Kingdom, another core European market, grew by 1.1% (2023: +0.3%).

The world's largest economy, the United States, generated a significant increase in GDP of 2.8% in 2024 (2023: 2.9%).

The Asia | Pacific economic region saw an increase of 4.6% (2023: +5.0%). In this region, India again saw the strongest growth in the reporting year, with an increase of 7.0% (2023: +8.2). Growth in China was 4.8% (2023: +5.2%). South Korean economic output increased by 2.5% (2023: +1.4%) and in Japan gross domestic product rose by 0.3% (2023: +1.7%).

## Exchange Rate and Interest Rate Trends

In addition to the euro, the Sartorius Group's key currencies include the U.S. dollar, along with several others such as the British pound, Singapore dollar, South Korean won, Japanese yen, Chinese renminbi, and Swiss franc.

### Exchange Rates Against the Euro

	Year-End Exchange Rates		Average Exchange Rate	
	2024	2023	2024	2023
U.S. dollar	1.0414	1.1065	1.0823	1.0815
British pound	0.8298	0.8691	0.8466	0.8699
Singapore dollar	1.4183	1.4607	1.4458	1.4525
South Korean won	1,534.45	1,428.67	1,475.13	1,412.19
Japanese yen	163.32	156.81	163.80	152.01
Chinese renminbi	7.6015	7.8673	7.7879	7.6623
Swiss franc	0.9418	0.9266	0.9524	0.9718

In the reporting year, the European Central Bank lowered the key interest rate in four steps to 3.00% by the end of 2024. The 3-month EURIBOR, the interest rate for euro-denominated term deposits in the interbank market, stood at 2.7% on December 31, 2024, significantly below the previous year's level of 3.9%.

Sources: International Monetary Fund: World Economic Outlook, October 2024; Bloomberg; [www.euribor-rates.eu](http://www.euribor-rates.eu).

## Industry-Specific Environment

Sartorius' key customer groups include the biopharmaceutical and pharmaceutical industries as well as public research institutions. In addition, the company's customers include quality control laboratories in the chemical and food industries. Accordingly, the progress of the Group's business depends on developments in these industries.

## Growth of the Biopharmaceutical Market

After the global pharmaceutical market stagnated in 2023, mainly due to lower sales of coronavirus vaccines and therapeutics, drug sales increased again in 2024, growing by 6%. In particular, sales of biopharmaceutical drugs, which are growing at an above-average rate within the pharmaceutical market, rose significantly by around 9% to \$458 billion. Biopharma's share of the total pharmaceutical market was thus 41%, compared to 40% in 2023.

The bioprocess market, which includes products for the manufacture of biopharmaceuticals, stabilized in 2024 after the pandemic-related highly volatile development in previous years. Following significant declines in 2023, the leading manufacturers of bioprocess technology recorded revenues at around the previous year's level, with the business situation gradually improving over the course of the year. The positive development

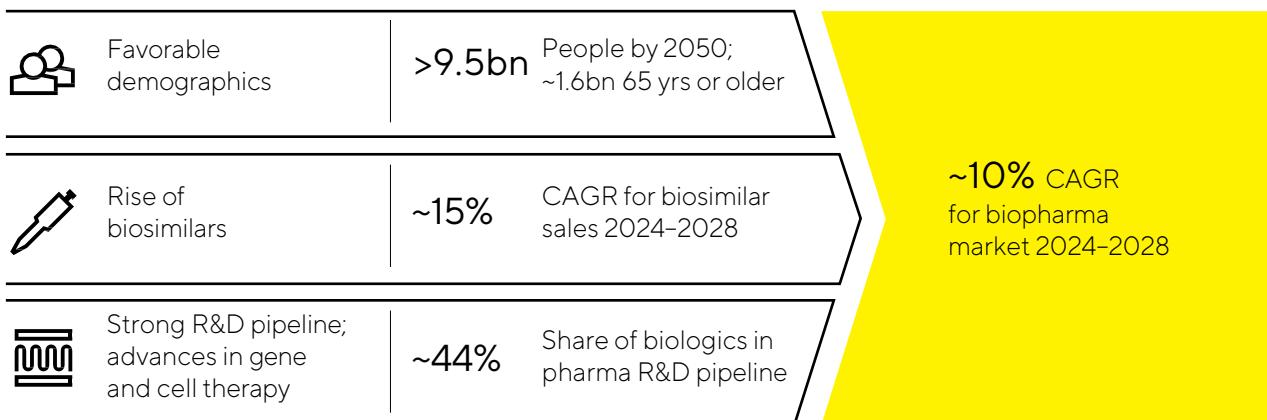
was particularly evident in the consumables business, which benefited from the fact that customers had largely completed the reduction of their elevated inventory levels. By contrast, biopharmaceutical customers remained hesitant about investing in new capacities, which affected demand for equipment and instruments. Regionally, this was particularly visible in China, where business development was significantly damped by the ongoing general market weakness.

The growth of the biopharma market fundamentally depends more on medium- and long-term trends than on short-term economic developments. Significant impetus here is provided by the globally increasing demand for drugs from a growing and ageing world population, as well as by the approval and market launch of innovative biopharmaceuticals. Other growth factors are the extension of the range of indications for already approved medications and their further market penetration. The number of new biopharmaceutical approvals by the U.S. Food and Drug Administration (FDA) remained high in the year under review, at 47 (2023: 41).

The growing significance and acceptance of biologics is reflected not only in their increasing share of sales revenue within the global pharmaceutical market, but also in the development activities of the pharmaceutical industry. For example, biopharmaceutical therapies account for around 44% of the R&D pipeline. A growing number of active substances manufactured using biotech production methods are being approved for the treatment of rare illnesses that have been incurable so far. In this context, the pharmaceutical industry is increasingly focusing on advanced therapies, such as cell and gene therapeutics and biotechnologically processed tissue products. In 2024, more than 1,800 clinical trials with such treatment approaches were conducted, meaning that this area offers significant growth potential over the medium to long term. The rising number of approved biopharmaceuticals and an increasing variety of therapy types and substance classes, coupled with growing demand for medications, are the main drivers for the worldwide increase in production capacities for biopharmaceuticals.

Biosimilars, the generic versions of reference biologics that have lost their patent protection, are also playing an increasingly important role in the biotechnology market. According to market studies, their sales volume in 2024 remained modest at an estimated \$24 billion, but is expanding at faster rates than the biopharma market as a whole. The market is expected to continue to grow during the years to come, owing to the expiration of several patents for high-selling biopharmaceuticals and an increasing number of new approvals of biosimilars and market launches. A compound annual growth rate of around 15% is expected globally through 2028.

### Attractive Market Environment with Good Growth Prospects



## Laboratory Market Grows Slightly

The global laboratory market had a total value of around \$85 billion in the reporting year and, according to estimates by various market observers, is growing at an average annual rate of around 5% over the long term. Market growth is related, among other things, to the levels of research and development spending in the individual end markets, which is partly linked to economic development.

However, this applies to a lesser extent to labs in the pharmaceutical and biopharma industries, the leading customer groups for laboratory instruments and consumables: in this industry, demand is more strongly influenced by fundamental growth drivers, such as continuous research to find new active pharmaceutical ingredients. The investment focus is on the automation of process workflows and innovative analytical instruments that are equipped with enhanced or novel functionalities. Products from the field of bioanalytics, for example, have above-average growth rates within the laboratory market, and demand in the life science sector is generally growing faster than in other industries. In 2023, a demand normalization which led to declining sales in the laboratory market set in as a result of the significant growth rates during the coronavirus pandemic. In the reporting year, the business situation gradually stabilized again, but demand for laboratory instruments remained at a subdued level due to the ongoing reluctance of pharmaceutical and biopharmaceutical customers to invest. Business in China, in particular, continued to be strongly influenced by the general market weakness. This was also reflected in the development of sector-specific research spending, which grew moderately by 1.5% to \$306 billion in 2024, according to EvaluatePharma, and thus significantly slower than in the previous five-year period.

Research and quality-assurance labs in the chemical and food industry are another customer group whose demand for laboratory products depends in part on economic trends. Additional momentum could also come from regulatory changes, such as stricter requirements for quality control tests in the food industry. Despite a weaker macroeconomic environment, demand from industrial end markets was generally robust in 2024 according to several leading laboratory product manufacturers.

Academic and public-sector research institutions also use laboratory instruments and consumables manufactured by Sartorius. Growth in demand is related to such factors as government budgets and funding programs, all of which can vary from one country to another. In the USA, the National Institutes of Health (NIH) is the leading government agency for biomedical research and also the world's largest research funding agency. The NIH's budget fell slightly by 0.8% in the reporting year, the first cutback since 2013. The proposed budget for 2025 provides for a slight increase. The European Union has continuously scaled up its research spending in past budget cycles. Around €95.5 billion of research and innovation funding is to be provided in the period from 2021 to 2027, an increase of 19% compared with the previous program. Demand from academic and public research institutions developed quite differently in the reporting year, depending on the product segment considered, so that no clear trend emerged.

## Competitive Position

The competitive environment of the Bioprocess Solutions Division is characterized by relatively high entry barriers arising in part from the biopharmaceutical industry's strong degree of regulation and its technological complexity. In this environment, the Bioprocess Solutions Division operates as a total solutions provider, covering the core process steps in biopharmaceutical production and preceding process development. It has leading market positions in key technologies, especially in the areas of bioreactors, filtration, and the transportation and storage of liquids. The Bioprocess Solutions Division's principal competitors are certain business units of Danaher Corporation, Merck KGaA, and Thermo Fisher Scientific Inc. These companies also offer a broad range of products and services that cover the main steps of the biopharmaceutical value chain.

In addition, a number of other, often smaller companies in one or a few product segments are among the competitors of the Bioprocess Solutions Division, some of which are only relevant in certain regions.

The Lab Products & Services Division is positioned as a premium provider of laboratory instruments. It serves both R&D laboratories and quality control laboratories with a focus on the biopharmaceutical industry. The division's product range includes, for example, instruments for bioanalytics, laboratory balances, pipettes, and a wide range of lab consumables. The division ranks among the leading providers worldwide in most of these areas. Major competitors include certain divisions of Danaher Corporation, Merck KGaA, and Thermo Fisher Inc. Among these competitors are also Mettler-Toledo Intl. Inc. for laboratory balances in particular; Eppendorf AG for pipettes; and companies such as Agilent Technologies Inc., Becton Dickinson Co., and PerkinElmer Inc. for cell analytics.

Sources: BioPlan: 21st Annual Report and Survey of Biopharmaceutical Manufacturing Capacity and Production, April 2024; Evaluate Pharma: World Preview 2024, August 2024; Alliance for Regenerative Medicine: Sector Snapshot, August 2024; citeline: Pharma R&D Annual Review 2024, May 2024; Research and Markets: Biosimilars Market, 2024; SDI: Global Assessment Report 2024, June 2024; [www.fda.gov](http://www.fda.gov)

# Group Business Development

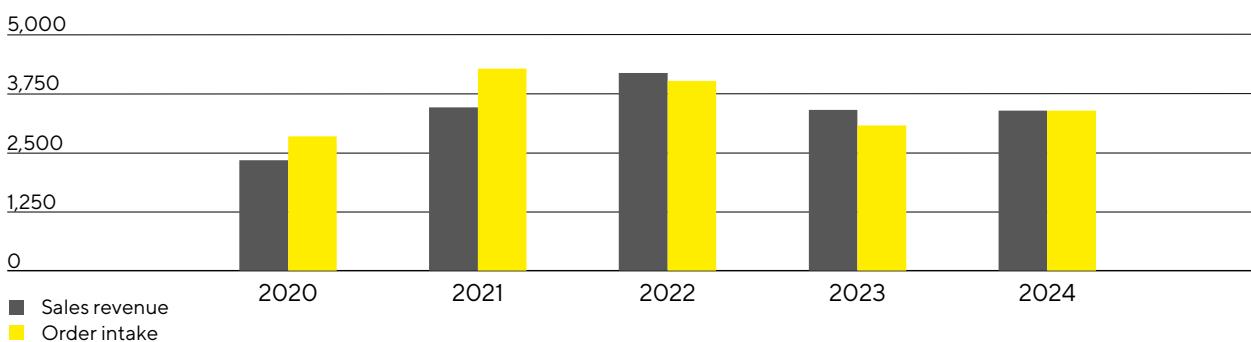
## Sales Revenue and Order Intake

After the very volatile development in previous years due to the pandemic, the business situation at Sartorius stabilized in 2024, despite a difficult environment throughout the life science industry that lasted longer than expected. In particular, the second half of the year and especially the last quarter showed a significant improvement compared to the first half. The trend in the consumables business was increasingly positive as most customers are reaching their target inventory levels, some of which have been revised downwards several times, and are gradually returning to an order level that corresponds to their production activities. Sales revenue from products for advanced therapies also continued to grow at an above-average rate, while business with bioprocessing equipment and lab instruments remained muted due to customers' reluctance to invest. Also, business in China was weak. Group sales revenue amounted to €3,380.7 million, reaching the level of the previous year (in constant currencies<sup>1</sup>: +0.1%; reported: -0.4), with acquisitions<sup>2</sup> contributing around 2% to sales.

Order intake<sup>3</sup> developed even better than sales revenue, with a double-digit increase of 10.8% in constant currencies to €3,377.5 million (reported: +10.1%).

Sales Revenue and Order Intake 2020 to 2024

€ in millions



Sales Revenue and Order Intake

€ in millions	2024	2023	in % reported	in % cc <sup>1</sup>
Sales revenue	3,380.7	3,395.7	-0.4	0.1
Order intake	3,377.5	3,066.9	10.1	10.8

1 Figures given in constant currencies eliminate the impact of changes in exchange rates by applying the same exchange rate for the current and the previous period.

2 Acquisition of Polyplus

3 Order intake: All customer orders contractually concluded and booked during the respective reporting period.

## Development of the Two Divisions

In the reporting year, both divisions showed different developments. The Bioprocess Solutions Division, which offers a wide range of innovative technologies for the efficient and sustainable manufacture of

biopharmaceuticals, achieved a slight increase in sales revenue of 0.9% in constant currencies to €2,690.2 million (reported: +0.5%), with acquisitions contributing around 2.5% to sales revenue. The main drivers were the significant upturn in business with consumables and the above-average development of products for advanced therapies, which overcompensated for the muted investment activities of customers in bioprocess equipment.

The Lab Products & Services Division, which specializes in life science research and pharmaceutical laboratories, continued to be impacted by soft end markets, particularly in China, and a pronounced reluctance to invest on the customer side. Sales revenue amounted to €690.5 million, which corresponds to a decline of 3.0% in constant currencies (reported: -3.8%) compared with the previous year.

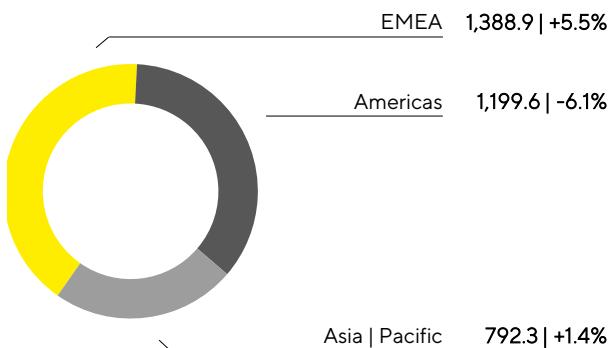
#### Sales by Division

€ in millions	2024	2023	in % reported	in % cc
Bioprocess Solutions	2,690.2	2,678.2	0.5	0.9
Lab Products & Services	690.5	717.5	-3.8	-3.0

Further information on the business development of the Group's divisions is given on pages 56 ff. for the Bioprocess Solutions Division and on pages 61 ff. for the Lab Products & Services Division.

## Regional Sales Development

**Sales Revenue and Growth<sup>1</sup> by Region<sup>2</sup>**  
€ in millions, unless otherwise specified



1 Constant currencies: Figures given in constant currencies eliminate the impact of changes in exchange rates by applying the same exchange rate for the current and the previous period.

2 Acc. to customer location.

Regional business performance varied in fiscal 2024. The EMEA region showed the highest momentum with growth of 5.5% to €1,388.9 million. This was mainly driven by the strong increase in the bioprocess division (+6.5%) and a slight increase in sales in the Lab Products & Services Division (+1.7%). At the end of the year, this region accounted for 41% of total Group sales.

In the Americas region, sales amounted to €1,199.6 million (-6.1%), which corresponds to a share of around 36% of total Group sales. While Bioprocess Solutions recorded a sharper decline of 6.8%, mainly due to soft equipment business, business volume in the laboratory division decreased by 2.7% in view of the muted investment activities of customers.

Despite a decline in business in China, the Asia | Pacific region grew slightly by 1.4% to €792.3 million and thus contributed around 23% to Group sales. The ongoing market weakness in China weighed particularly on the performance of the laboratory division (-9.4%), whereas the bioprocess division saw robust growth (+5.3%).

All growth rates for regional development are in constant currencies unless otherwise stated.

#### Sales by Region

€ in millions	2024	2023	in % reported	in % cc
EMEA	1,388.9	1,315.9	5.5	5.5
Americas	1,199.6	1,280.4	-6.3	-6.1
Asia   Pacific	792.3	799.4	-0.9	1.4

## Costs and Earnings

In the reporting year, the cost of sales was €1,856.3 million, slightly above the previous year's level (+1.5%). This development was primarily driven by lower capacity utilization in connection with the planned reduction of own inventories and increased amortization following the Polyplus acquisition, which was only consolidated from July 2023 in the comparative period. The corresponding cost of sales ratio was 54.9%, compared to 53.8% in the previous year.

Selling and distribution costs rose to €669.2 million (previous year: €634.2 million), while the ratio of these costs to sales revenue increased year-on-year to 19.8% (previous year: 18.7%). Research and development expenses increased by 15.3% to €196.8 million in the reporting year, with the increase being influenced, among other things, by rising personnel costs and the depreciation of development projects that were no longer being pursued; the corresponding R&D ratio was 5.8% (previous year: 5.0%). General administrative expenses remained constant at €214.8 million (previous year: €214.3 million), and the administrative expense ratio was almost unchanged at 6.4% in 2024 (previous year: 6.3%). In line with the final purchase price allocation for Polyplus, the previous year's figures have been slightly adjusted.

Expenses and income that could not be allocated to a functional area were recognized in the balance of other operating income and expenses, which amounted to €51.0 million in 2024 after €43.7 million in the previous year and includes net income of €1.2 million (previous year: net expenses of €16.4 million) from valuation effects and the realization of currency hedges.

This resulted in a decline in earnings before interest and taxes (EBIT) of 22.2% to €392.6 million compared to the previous year; the corresponding margin was 11.6% (previous year: 14.9%). This development reflects the higher amortization resulting from the full-year consolidation of Polyplus as well as the increase in extraordinary items to -€136.8 million (previous year: -€116.5 million). This increase resulted primarily from expenses for efficiency measures, which overlapped with the associated savings in the reporting year, as well as from expenses for various corporate projects or in connection with the latest acquisitions. The development of EBIT is also attributable to the decline in gross profit, driven by higher amortization and the aforementioned reduced capacity utilization and increased operating costs in the areas of sales and research and development.

The financial result was -€205.8 million in 2024, compared to -€118.0 million in the previous year. The previous year's result was influenced by non-cash-effective income of €71.5 million, predominantly from the reporting date valuation of the share-based earn-out liability in connection with the acquisition of BIA Separations. This effect was largely eliminated in the reporting year and amounted to €1.6 million. After adjustment for this factor, net financing costs increased to €207.4 million, compared to €189.5 million in the previous year, which is mainly due to higher interest payments compared to the previous year.

In the reporting year, tax expenses amounted to €49.4 million (previous year: €96.1 million). In relation to the reported earnings before taxes, the tax rate was 26.4% (previous year: 24.8%).

Net profit for the period fell by 52.7% to €137.4 million (previous year: €290.6 million).

Net profit attributable to shareholders of Sartorius AG was €84.0 million (-59.1%; previous year: €205.6 million). Non-controlling interest stood at €53.4 million (previous year: €85.0 million), which essentially reflected shares in Sartorius Stedim Biotech S.A. not held by the Sartorius Group.

#### Statement of Profit or Loss

€ in millions	2024	2023	Δ in %
Sales revenue	3,380.7	3,395.7	-0.4
Cost of sales	-1,856.3	-1,828.1	-1.5
<b>Gross profit on sales</b>	<b>1,524.4</b>	<b>1,567.6</b>	<b>-2.8</b>
Selling and distribution costs	-669.2	-634.2	-5.5
Research and development costs	-196.8	-170.8	-15.3
General administrative expenses	-214.8	-214.3	-0.2
Other operating income and expenses	-51.0	-43.7	-16.6
<b>Earnings before interest and taxes (EBIT)</b>	<b>392.6</b>	<b>504.6</b>	<b>-22.2</b>
Financial income	60.1	103.9	-42.1
Financial expenses	-265.9	-221.8	-19.9
<b>Financial result</b>	<b>-205.8</b>	<b>-118.0</b>	<b>-74.4</b>
<b>Profit before tax</b>	<b>186.8</b>	<b>386.7</b>	<b>-51.7</b>
Income taxes	-49.4	-96.1	48.6
<b>Net profit for the period</b>	<b>137.4</b>	<b>290.6</b>	<b>-52.7</b>
Attributable to:			
Equity holders of Sartorius AG	84.0	205.6	-59.1
Non-controlling interest	53.4	85.0	-37.2

The previous year's figures have been revised due to finalization of the purchase price allocation for Polyplus.

## Underlying EBITDA

The Sartorius Group uses underlying EBITDA – earnings before interest, taxes, depreciation, and amortization and adjusted for extraordinary items – as its key profitability indicator to provide a better picture of its operating development, also in an international comparison. More information on extraordinary items is provided on page 253.

### Reconciliation from EBIT to Underlying EBITDA

€ in millions	2024	2023
EBIT	392.6	504.6
Extraordinary items	136.8	116.5
Amortization depreciation	415.9	341.5
Underlying EBITDA	945.3	962.7

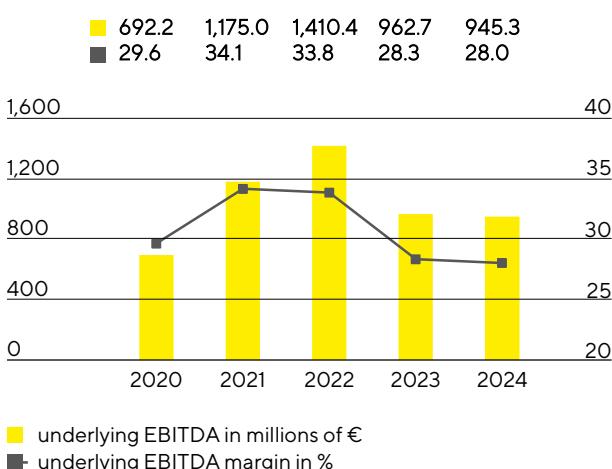
The previous year's figures have been revised due to finalization of the purchase price allocation for Polyplus.

### Extraordinary Items

€ in millions	2024	2023
M&A projects Integration costs	-8.1	-22.9
Efficiency measures	-122.8	-80.5
Other	-6.0	-13.1
Total	-136.8	-116.5

At €945.3 million, underlying EBITDA in the reporting year was almost on a par with the previous year's level of €962.7 million. The resulting margin was 28.0% (previous year: 28.3%) and thus remained at a high level. The dampening effect of the planned reduction of own inventories and the associated lower capacity utilization was offset by positive contributions from the efficiency program.

### Underlying EBITDA<sup>1</sup> and Margin



<sup>1</sup> Underlying EBITDA: Earnings before interest, taxes, depreciation, and amortization and adjusted for extraordinary items.

## Underlying EBITDA by Division

	Underlying EBITDA € in millions	Underlying EBITDA margin in %
<b>Group</b>	<b>945.3</b>	<b>28.0</b>
Bioprocess Solutions	787.2	29.3
Lab Products & Services	158.1	22.9

The underlying EBITDA of the Bioprocess Solutions Division rose by 0.6% to €787.2 million, with the corresponding margin increasing to 29.3% (previous year: 29.2%).

The underlying EBITDA of the Lab Products & Services Division recorded a decline of 12.3% to €158.1 million. The corresponding margin decreased to 22.9% (previous year: 25.1%), mainly due to volume and product mix effects.

## Underlying Net Profit

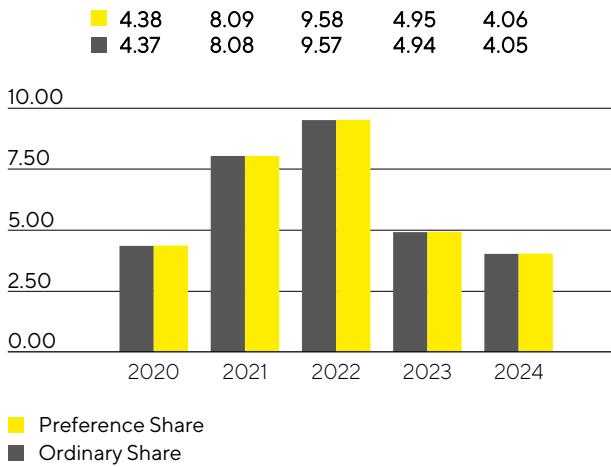
The underlying net profit attributable to the shareholders of Sartorius AG declined by 17.3% year-over-year to €279.9 million. This figure forms the basis for profit appropriation, is calculated by adjusting for extraordinary items, excluding amortization, and is based on a normalized financial result and normalized tax rate. Underlying earnings per ordinary share decreased by 18.0% to €4.05 (previous year: €4.94) and per preference share by 18.0% to €4.06 (previous year: €4.95).

€ in millions	2024	2023 <sup>1</sup>
EBIT	392.6	504.6
Extraordinary items	136.8	116.5
Amortization	159.0	132.7
Normalized financial result <sup>2</sup>	-168.5	-146.3
Normalized income tax (27%) <sup>3</sup>	-140.4	-164.0
Underlying earnings	379.5	443.5
Non-controlling interest	-99.7	-105.0
Underlying earnings after taxes and non-controlling interest	279.9	338.5
Underlying earnings per share		
per ordinary share (in €)	4.05	4.94
per preference share (in €)	4.06	4.95

1 The previous year's figures have been revised due to finalization of the purchase price allocation for Polyplus.

2 Financial result adjusted for valuation effects from the subsequent measurement of contingent purchase price liabilities as well as for effects of foreign currency translation and hedging.

3 Income tax considering the average expected Group tax rate, based on the underlying profit before tax.

**Underlying Earnings per Share<sup>1</sup>**  
in €

<sup>1</sup> After non-controlling interest, adjusted for extraordinary items and amortization, as well as based on the normalized financial result and the normalized tax rate.

Further information on earnings development and extraordinary items for the Group divisions is given on pages 58 ff. and 63 ff.

## Research and Development

Sartorius expands its existing product groups through continuous innovations and further developments, while also enhancing its product portfolio by integrating new technologies and cooperations. In 2024, the Group recognized €196.8 million for research and development (R&D) as a direct expense compared to €170.8 million in the previous year (-15.3%). The R&D ratio of expenses to sales revenues was 5.8% (previous year: 5.0%).

The International Financial Reporting Standards (IFRS) require certain development costs to be capitalized on the statement of financial position and then to be amortized over subsequent years. In the reporting year, capitalized R&D amounted to €99.8 million, compared with €100.3 million the year before. This equates to a share of 33.7% (previous year: 37.0%) of the Group's total R&D expenditures. Scheduled amortization of capitalized development costs totaled €43.2 million in 2024 (previous year: €30.0 million). Total research and development expenses, including capitalized development costs, amounted to €296.7 million (previous year: €271.1 million). At 8.8%, the resulting gross R&D ratio<sup>1</sup>, which includes all innovation-related expenses, was higher than the previous year's figure of 8.0%.

Sartorius pursues a strategic intellectual and industrial property rights policy across its divisions to protect its expertise. The Group systematically monitors compliance with these rights on a cost|benefit basis to determine which specific individual rights are to be maintained.

In 2024, Sartorius filed a total of 250 applications for intellectual and industrial property rights (previous year: 301). As a result of these applications, including those of prior years, 420 patents and trademarks during the reporting year (previous year: 435) were issued. As of the reporting date, the company had a total of 7,806 patents and trademarks in its portfolio (previous year: 7,260).

Further information is provided in the sections covering the individual divisions on pages 56 ff. and 61 ff.

<sup>1</sup> Gross R&D ratio: Sum of research and development expenses recognized in profit or loss and development costs recognized in the balance sheet in the fiscal year in relation to sales revenue.

## Investments

In the reporting year, Sartorius continued its multi-year investment program, which, in addition to expanding research and production capacities, is aimed at further diversifying the production network and making it more flexible. In line with the development of demand, the timing of certain projects was adjusted and the overall timeframe was extended. At €409.9 million, capital expenditures in 2024 were significantly below the previous year's figure of €559.7 million, and the corresponding Capex ratio<sup>1</sup> decreased to 12.1% (previous year: 16.5%).

Among the larger projects in the reporting year was the expansion of production for sterile disposable bags at the Aubagne site in France, where an extended warehouse is also being built.

At the Group's headquarters in Goettingen, Germany, the expansion of membrane and filter manufacturing capacity continued, and additional laboratory space for product development was put into operation.

In Ann Arbor, USA, Sartorius merged its previous three sites into a new center of excellence for bioanalytics, which was opened in the reporting year, two years after construction began. The building includes research laboratories, production capacities and a customer interaction center.

Further investments were also made at the site in Freiburg, Germany, where a center of excellence for components used in the manufacture of cell and gene therapies is being built.

To better meet customer demand, particularly in the Asia|Pacific region, and to expand regional value creation, Sartorius continued construction of its new facility in Songdo, South Korea, during the reporting year. Upon completion, cell culture media and sterile consumables will be produced here. Additionally, plans for the new location, situated in the heart of a biopharma park, include a technology center for customer consulting and product demonstrations, as well as laboratory space.

<sup>1</sup> Capital expenditures in relation to sales revenue.

# Employees

The following chapter contains information in grey that is typical for a management report and also covers reporting requirements under the ESRS.

The following employee figures include all employees of the Sartorius Group, except for vocational trainees, interns, permanent absent employees, and employees in partial retirement. Employee figures are shown as headcount and not as full-time equivalents.

[ESRS 2 SBM-1.40 a) iii.] As of 31 December 2024, Sartorius had a total of 13,528 employees in 37 countries worldwide, a decrease of 7.4% compared to 31 December 2023. The reduction resulted primarily from the expiry of fixed-term employment contracts and regular attrition.

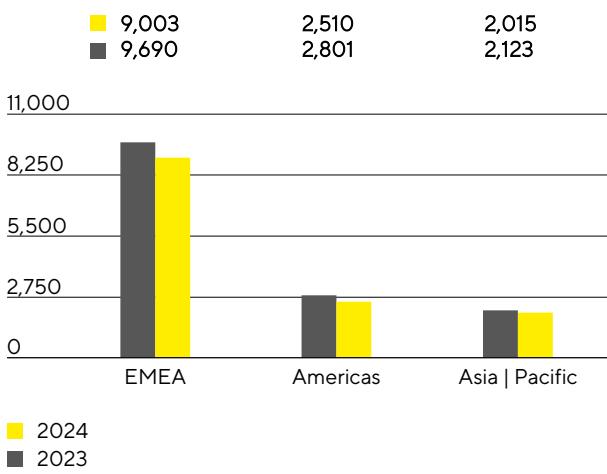
## Employees

	2024	2023	Change in %
Group	13,528	14,614	-7.4
Bioprocess Solutions	10,487	11,293	-7.1
Lab Products & Services	3,041	3,321	-8.4

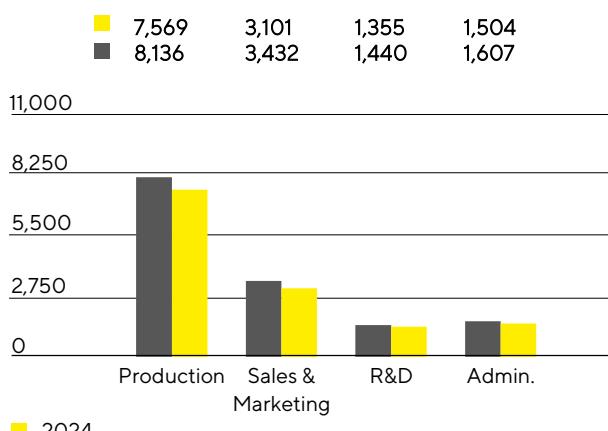
The Bioprocess Solutions Division had 10,487 employees at the end of the reporting year (previous year: 11,293). The Lab Products & Services Division had 3,041 employees (previous year: 3,321).

The employees of the central administrative functions were allocated to the divisions on the basis of their activities.

## Employees by Region



## Employees by Function



[ESRS 2 SBM-1.40 a) iii.] The number of employees in the EMEA region fell by 7.1% in 2024 versus December 2023, taking the figure to 9,003. In Germany, Sartorius had 4,614 employees at the end of the reporting year, which corresponds to 34.1% of the total workforce.

In the Americas, Sartorius had 2,510 employees as of December 31, 2024, representing a drop of 10.4%. The number of employees in the Asia | Pacific region fell by 5.1% to 2,015.

At the end of 2024, approximately 56% of all Sartorius employees worked in production. Headcount decreased by 7.0% year over year to 7,569.

At the end of the year, 3,101 people were employed in marketing and sales, representing a decrease of 9.6% and a share of around 23% of the total workforce.

Almost 10% of all employees worked in R&D. This corresponded to a year-on-year increase of 85 individuals or 5.9%, bringing the total number of employees to 1,355.

As of the reporting date, 1,504 people worked in administrative positions. This corresponds to a decrease of 6.4% compared with the same date of the previous year and to 11% of all Sartorius employees.

Further information on employees can be found in the Sustainability Report starting on page 111.

# Net Worth and Financial Position

## Cash Flow

Cash flow from operating activities rose by 14.4% to €976.2 million (previous year: €853.6 million). In addition to the development of earnings, this reflects the particular focus on working capital optimization.

Based on fundamentally intact growth drivers in the end markets and its medium-term growth targets, Sartorius continued its multi-year investment program, although the timing of certain expansion projects has been adjusted to take account of the respective demand situation. Cash outflows from investing activities decreased as expected by 26.9% to €425.8 million (previous year: -€582.4 million). As no acquisitions were made in 2024, the cash flow from investment activities and acquisitions was also -€425.8 million, whereas the previous year's figure of -€2,823.3 million was significantly impacted by acquisition-related expenses in connection with the purchase of Polyplus.

Cash flow from financing activities amounted to -€128.3 million, compared to €2,165.7 million in the previous year, in which Sartorius issued new bonds with a volume of €3 billion. This also included dividend payments for the 2023 financial year in the amount of €70.8 million (previous year: €134.4 million). Net proceeds of €1.0 billion from the equity measures successfully completed at the beginning of February 2024 by Sartorius AG and Sartorius Stedim Biotech S.A. (see Notes, sections 21 and 22) were mainly used to repay financial liabilities.

### Cash Flow Statement

€ in millions	2024	2023
Cash flow from operating activities	976.2	853.6
thereof change in net working capital	254.3	182.4
Cash flow from investing activities and acquisitions	-425.8	-2,823.3
Cash flow from financing activities	-128.3	2,165.7
Cash and cash equivalents	813.4	379.2
Gross debt	4,559.8	5,311.4
Net debt	3,746.4	4,932.1

## Consolidated Statement of Financial Position

The balance sheet total of the Sartorius Group increased by €357.5 million to €10,103.0 million at the end of fiscal year 2024. This increase is largely due to the rise in non-current assets by €200.6 million to €7,989.3 million, mainly as a result of the increase in property, plant and equipment due to the continuation of the multi-year investment program. At €2,113.7 million, current assets were also above the previous year's figure of €1,956.9 million, primarily driven by the increase in cash and cash equivalents as a result of the successful equity measures carried out at the beginning of February 2024, which generated net proceeds of €1.0 billion for the Group. In contrast, a significant reduction in inventories, driven by focused working capital management, led to a decrease in working capital to €1,106.4 million as of December 31, 2024 (previous year: €1,387.3 million).

**Key Figures for Working Capital**

in days	2024	2023
<b>Days inventory outstanding</b>		
Inventories   Sales revenue <sup>1</sup>	x 360	84
<b>Days sales outstanding</b>		
Trade receivables   Sales revenue <sup>1</sup>	x 360	34
<b>Days payables outstanding</b>		
Trade payables and contract liabilities   Sales revenue <sup>1</sup>	x 360	64
<b>Net working capital days</b>		
Net working capital <sup>2</sup>   Sales revenue <sup>1</sup>	x 360	54
		84

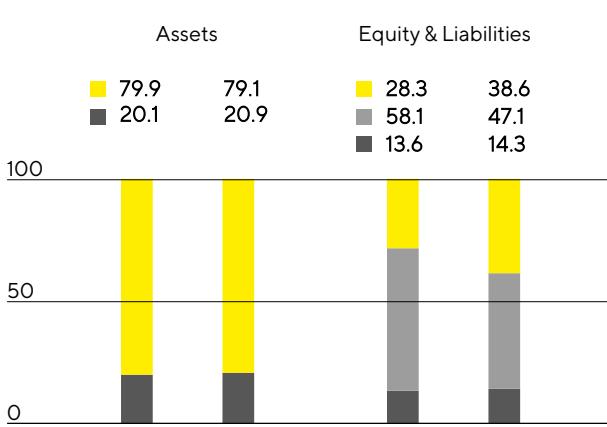
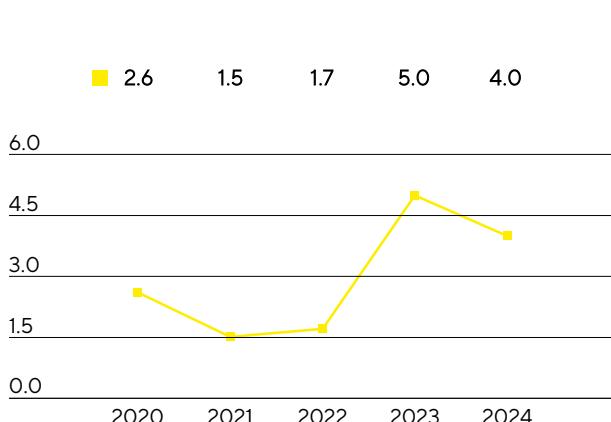
1 Including pro forma sales from acquisitions.

2 Sum of inventories and trade receivables less trade payables and contract liabilities.

Equity increased primarily as a result of equity measures by €1,139.8 million to €3,897.8 million, with the equity ratio<sup>1</sup> rising to 38.6% (previous year: 28.3%).

The Group's non-current liabilities declined from €5,657.5 million to €4,760.6 million in the reporting year. This reduction was primarily due to the early repayment of variable-interest promissory note loans, funded by proceeds of the equity placements. Current liabilities increased by €114.6 million to €1,444.6 million, driven in part by an increase in financial liabilities and trade payables.

1 Equity in relation to the balance sheet total.

**Balance Sheet Structure<sup>1</sup>**  
in %**Ratio of Net Debt to Underlying EBITDA<sup>2</sup>**

■ Non-current assets  
■ Current assets

■ Equity  
■ Non-current liabilities  
■ Current liabilities

1 The previous year's figures have been revised due to finalization of the purchase price allocation for Polyplus.

2 Quotient of net debt and underlying EBITDA over the past 12 months, including the pro forma amount contributed by acquisitions for this period.

Gross debt, comprising bonds, promissory note loans ("Schuldscheindarlehen"), bilateral loans and lease liabilities, declined to €4,559.8 million at the end of the 2024 reporting year, after €5,311.4 million in the

previous year. Net debt, defined as gross debt less cash and cash equivalents, fell from €4,932.1million in the previous year to €3,746.4million as of December 31, 2024.

In relation to the debt financing capacity of the Sartorius Group, the ratio of net debt to underlying EBITDA is a key metric. It is calculated as the ratio of net debt to underlying EBITDA over the past 12 months, including the pro forma contributions of acquisitions during this period. As of December 31, 2024, this leverage ratio improved to 4.0 (previous year: 5.0) following the completion of the equity measures and adjustments of certain expansion projects.

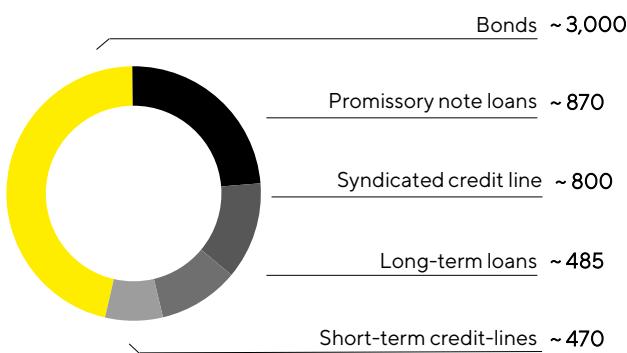
#### Reconciliation

€ in millions	2024	2023
Gross debt	4,559.8	5,311.4
- Cash & cash equivalents	813.4	379.2
Net debt	3,746.4	4,932.1
Underlying EBITDA (12 months)	945.3	962.7
+ Pro forma EBITDA from acquisitions (12 months)	0.0	14.7
Pro forma underlying EBITDA	945.3	977.4
Ratio of net debt to underlying EBITDA	4.0	5.0

## Financing | Treasury

Sartorius meets its operational and strategic financing needs through a combination of operating cash flows and the assumption of short-, medium- and long-term financial liabilities. The objective is to ensure financial flexibility and to reduce the Group's financial risks while optimizing associated financing costs. The main debt financing instruments are shown in the graphic below.

**Main Financing Instruments**  
€ in millions



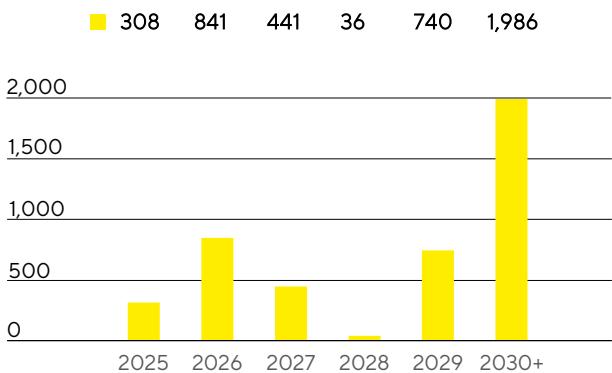
As of December 31, 2024, cash and cash equivalents of €813.4 million and a syndicated credit line of €800 million with a remaining term until May 2029 constitute the main pillars of the Group's financial flexibility. In addition, Sartorius also has various open-ended short-term credit lines totaling around €470 million. At year-end, the total volume of available credit lines amounted to €1,270 million. This ensures that Group companies have sufficient funds to cover their short-term liquidity requirements (see Note 39).

In addition, bonds with a total volume of €3 billion and several promissory note loans ("Schuldscheindarlehen") with a total volume of €870 million are outstanding. There are also several short- and long-term loans totaling around €485 million, partly for the expansion of research and production infrastructure.

All financial liabilities were concluded based on fixed interest rates and are therefore not subject to interest rate risks. The maturity profile of the Group's financing instruments shows a deliberately broad distribution until 2035.

Corporate financing was supplemented in the reporting year through the completion of equity measures with net proceeds of €1.0 billion. These funds were used to repay a number of loans at maturity and prematurely and to strengthen the liquidity position.

The rating agency S&P Global Ratings maintained Sartorius' credit rating as of December 31, 2024, at the investment-grade level of BBB (stable).

**Maturity Profile of the Financing Facilities<sup>1</sup>**  
€ in millions

<sup>1</sup> As of December 31, 2024, major financing instruments.

Key financial risks include exchange rate risks and interest rate risks. Sartorius uses currency hedging transactions to mitigate the effects of exchange rate fluctuations from its global business activities. At year-end, there were foreign exchange contracts with a volume of around €450 million, with a negative market value of €16.0 million (see Note 38). There were no interest rate hedges as of the reporting date (see Notes 39).

# Business Development of Bioprocess Solutions

Gradual improvement of the life science market environment

Significant recovery in demand for consumables in the second half of the year

Moderate increase in sales and earnings

Division sales

**€2,690.2m**

In constant FX: +0.9%

Order intake

**€2,693.1m**

In constant FX: +12.7%

Underlying EBITDA margin

**29.3%**

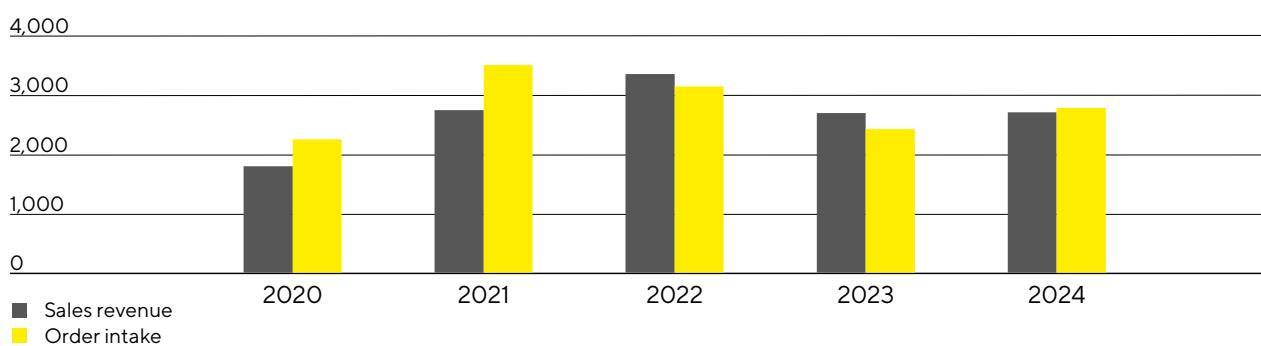
+0.1 percentage points



## Sales Revenue and Order Intake

After the very volatile development in previous years due to the pandemic, the business situation at Sartorius stabilized in 2024 despite a difficult environment throughout the life science industry that lasted longer than expected. In particular, the second half of the year and especially the last quarter showed a significant improvement compared to the first half. Sales revenues were slightly above the previous year's figure at €2,690.2 million (in constant currencies: +0.9%, reported: +0.5%), with acquisitions contributing around 2.5% to sales. The trend in the consumables business was increasingly positive as most customers have reached their target inventory levels, some of which have been revised downwards several times, and are gradually returning to an order level that corresponds to their production activities. Sales of products for advanced therapies also developed above average. By contrast, business with bioprocess equipment was subdued due to the industry-wide continued reluctance to invest, although customers continued to demand innovative systems, for example in the area of process intensification.

**Sales Revenue and Order Intake 2020 to 2024**  
€ in millions



**Sales Revenue and Order Intake**

€ in millions	2024	2023	in % reported	in % cc <sup>1</sup>
Sales revenue	2,690.2	2,678.2	0.5	0.9
Order intake	2,693.1	2,404.1	12.0	12.7

1 cc = in constant currencies.

Regional business performance varied in fiscal 2024. The EMEA region, which accounted for around 41% of the division's sales, showed the strongest momentum with a 6.5% increase in revenue to €1,111.0 million. In the Americas region, revenue fell to €974.1 million (-6.8%), impacted in part by weak demand for equipment. The region's share of sales was around 36%. The Asia|Pacific region, which accounted for around 23% of the division's revenue, performed well despite the continued weakness of the Chinese market. Sales of €605.1 million were 5.3% above the previous year. (All growth rates for the regional development are in constant currencies unless otherwise stated.)

Order intake developed even better than sales revenue, with a double-digit increase of 12.7% in constant currencies to €2,693.1 million (reported: 12.0%).

**Sales by Region**

€ in millions	2024	2023	in % reported	in % cc
EMEA	1,111.0	1,042.2	6.6	6.5
Americas	974.1	1,047.8	-7.0	-6.8
Asia   Pacific	605.1	588.2	2.9	5.3

## Earnings

The underlying EBITDA of the Bioprocess Solutions Division increased by 0.6% to €787.2 million, resulting in a margin of 29.3% (previous year: 29.2%).

**Underlying EBITDA and EBITDA Margin**

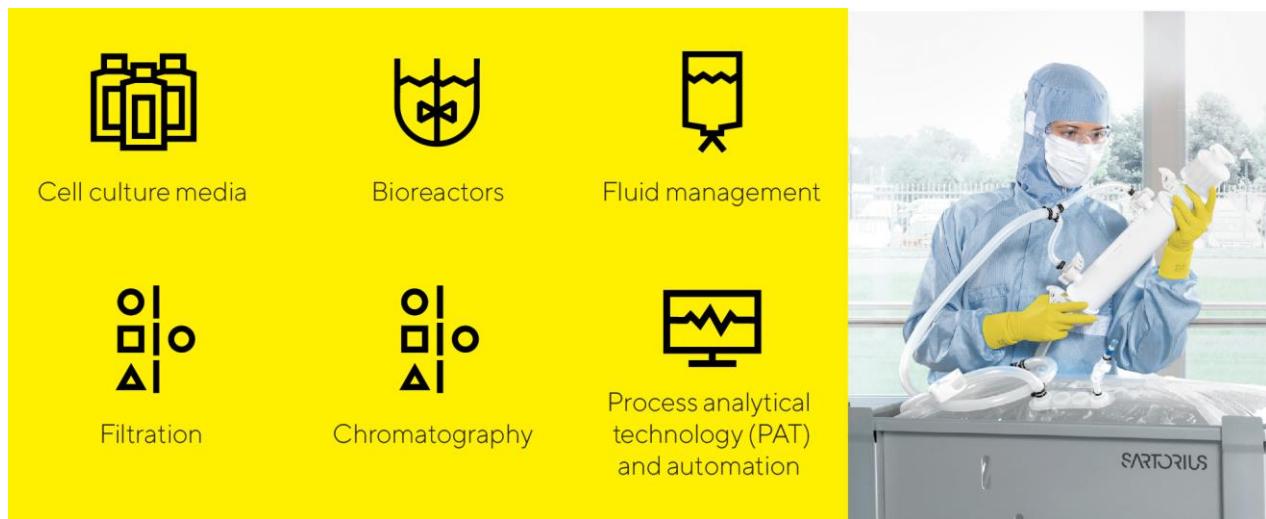
	2024	2023
Underlying EBITDA in millions of €	787.2	782.3
Underlying EBITDA margin in %	29.3	29.2

Extraordinary items amounted to -€110.7 million in the reporting year, compared to -€103.5 million in the previous year. These items primarily resulted from expenses for efficiency measures, for various corporate projects, or activities related to recent acquisitions.

# Products and Sales

## Products

The Bioprocess Solutions Division markets products and services for the entire process chain in biopharmaceutical production and preceding process development. The division's portfolio includes cell lines, cell culture media, reagents, bioreactors, a wide range of products for separation, purification, and concentration, and products and systems for storage and transportation of intermediate and finished biological products. In addition, the division offers data analysis software for modeling and optimizing development and production processes.



In the reporting year, the bioprocess division expanded its offering for the development of cell and gene therapies and other novel therapies and launched several products. These include cell culture media adapted to new regulatory requirements, solutions for the production and purification of viral vectors, and a lipid library for the production of nanoparticles that can be used to safely deliver drugs in the body. In addition, a collaboration was agreed with a recombinant protein manufacturer to offer customers optimized solutions for cell line development and production.

The fluid management portfolio was expanded to include an automated solution for sterile connection of disposable tubing. In addition, a single-use solution for small-scale mixing of liquids was released in 2024, complementing the portfolio of single-use mixers for bioprocesses.

In addition, the division introduced a further developed system for automatically measuring the number of virus particles in samples using fluorescent markers and entered a collaboration with a manufacturer of modular cleanrooms to provide production environments quickly and flexibly.

Another focus was on expanding the portfolio for downstream process intensification and thus for the post-production phase in which a biological product is purified. Together with a biopharmaceutical customer, the division developed a platform for integrated and continuous bioprocesses that is designed for high flexibility while at the same time standardizing and reducing the use of resources through greater efficiency. In the area of filtration, during the reporting year Bioprocess Solutions also broadened its portfolio of scalable single-use centrifuges to include a solution for small volumes in process development.

## Sales Activities

The Bioprocess Solutions Division markets most of its product portfolio directly. Sales activities for key accounts are coordinated and supported by global key account management. In the reporting year, the sales organization was strengthened with a focus on the strategically most relevant products as well as on the market for cell and gene therapies.

Direct interaction with customers at different locations is a key focus. For example, customers visit Sartorius for regular audits and factory acceptance tests of their equipment and systems. In addition, technologies and solutions can be tested in a realistic environment and training provided in their use. Alongside this offering and on-site visits to customers, the sales organization utilizes a variety of digital interaction options. For example, commissioning, product demonstrations and training sessions are carried out using virtual reality (VR) and augmented reality (AR).

Another focus is on continually enhancing sales efficiency, for example, with product and application training or further specialized training for employees.

## Product Development

Development activities at the bioprocess division primarily focus on the areas separation, fluid management, bioreactors and sensors. Additional focal areas are developments in materials and components that include plastics, elastomers, and polymers; cell line development; and critical media components for protein-based, viral, and other advanced therapies. In addition, the division is continuously developing its range of applications for data analysis, particularly process analytical technologies (PAT), automation platforms, and solutions for AI-based process control and simulation.

The aim of product development is to technically integrate internally developed, acquired or partnered products to complement the existing portfolio. Furthermore, the division is working on additional technological innovations to help customers improve their process efficiency and reduce their environmental footprint. The eco-design of products and packaging, based on the principles of circularity, is intended to further minimize the use of resources throughout the life cycle and create circular product solutions.

The largest product development location is Germany, particularly Göttingen. Further important activities take place in France, India, the United States, and the UK, as well as in Sweden, Israel, and Slovenia.

During the reporting year, Sartorius opened a new innovation center for bioprocesses in Marlborough, USA. This facility focuses on collaboration with customers and partners to develop and implement innovative biopharmaceutical manufacturing processes. Starting in 2025, two additional GMP facilities will be operational, enabling customers to extend their process development projects with Sartorius into the early stages of clinical production.

## Production

The Bioprocess Solutions Division has a global production network. The largest production facilities are located in Germany, France, and Puerto Rico. Beyond these locations, the division also manufactures in the UK, Belgium, Switzerland, Tunisia, India, the United States, China, Israel, and Slovenia.

In the reporting year, the division expanded its production capacities at various locations. Further details on these investments can be found in the "Investments" section.

# Business Development of Lab Products & Services

Challenging market environment affects business development

Slight decline in sales and earnings performance

Demand picks up towards the end of the year

Division sales

**€690.5m**

In constant FX: -3.0%

Order intake

**€684.4m**

In constant FX: +4.1%

Underlying EBITDA margin

**22.9%**

-2.2 percentage points

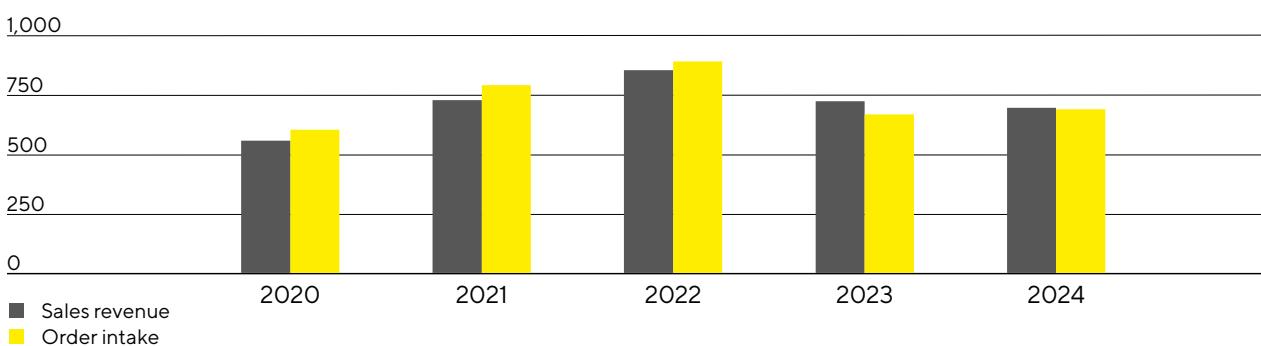


## Sales Revenue and Order Intake

The Lab Products & Services Division, which specializes in life science research and pharmaceutical laboratories, continued to be impacted by soft end markets, particularly in China, and a pronounced reluctance to invest on the customer side. The latter had a pronounced effect on the instrument business and especially on the bioanalytics product area. During the pandemic, this segment had experienced significant growth, especially in the United States, driven by a very favorable funding environment for biotech companies, which subsequently weakened considerably and remained at a comparatively moderate level in 2024. By contrast, business with laboratory consumables picked up again. In the reporting year, sales revenue therefore amounted to €690.5 million, which corresponds to a decline of 3.0% in constant currencies (reported: -3.8%).

### Sales Revenue and Order Intake 2020 to 2024

€ in millions



### Sales Revenue and Order Intake

€ in millions	2024	2023	in % reported	in % cc <sup>1</sup>
Sales revenue	690.5	717.5	-3.8	-3.0
Order intake	684.4	662.8	3.3	4.1

1 cc = in constant currencies.

Sales in the EMEA region, which accounted for around 40% of the division's revenues, rose moderately by 1.7% to €277.9 million. In the Americas region, revenue in 2024 declined by 2.7% year on year to €225.5 million, accounting for 33% of the division's sales. In particular, demand for bioanalytical instruments was weaker after the high growth rates in previous years. The Asia|Pacific region, which accounted for 27% of business in the reporting year, recorded a decline of 9.4% to €187.1 million, primarily due to the ongoing weakness in China. (All growth rates for regional development are in constant currencies unless otherwise stated.)

Order intake showed a positive trend, increasing to €684.4 million during the reporting year (in constant currencies: +4.1%; reported: +3.3%).

**Sales by Region**

€ in millions	2024	2023	in % reported	in % cc
EMEA	277.9	273.7	1.5	1.7
Americas	225.5	232.6	-3.1	-2.7
Asia   Pacific	187.1	211.2	-11.4	-9.4

## Earnings

The underlying EBITDA of the Lab Products & Services Division recorded a decline of 12.3% to €158.1 million due to volume and product mix effects; the corresponding margin was 22.9% ( previous year: 25.1%).

**Underlying EBITDA and EBITDA Margin**

	2024	2023
Underlying EBITDA in millions of €	158.1	180.3
Underlying EBITDA margin in %	22.9	25.1

The Lab Products & Services Division recorded extraordinary items of -€26.2 million in the reporting year relative to -€13.0 million a year ago. These items resulted primarily from expenses for efficiency measures and various corporate projects.

# Products and Sales

## Products

The Lab Products & Services Division focuses with its products on research laboratories in the pharmaceutical and biopharmaceutical industries as well as on academic research institutes.

The field of bioanalytics includes instruments, consumables, reagents and software for drug research and development and for life science research. With innovative systems for cell and protein analysis, for example, the time-consuming development of new active ingredients can be significantly accelerated and the associated costs reduced by automating and digitizing key analysis steps. Bioanalytical methods are also increasingly used in the fast-growing market of advanced therapies.

In addition, the product portfolio of the Lab Products & Services Division includes a broad array of premium laboratory instruments such as laboratory balances and lab water systems, pipettes, and lab consumables such as filters and microbiological test kits. They are used, for example, in the preparation, cleaning or inspection of samples and help to simplify routine tasks and achieve more precise results. This portfolio is tailored to the life science industry and additionally focuses on research and quality control labs in other industries such as the chemical and food industries.

The services offered by the division cover the entire life cycle of bioanalytical and laboratory instruments, from installation and commissioning to validation, calibration, software updates, maintenance, and repair. These services are offered not only for Sartorius instruments, but also to a limited extent for equipment from other manufacturers. The broad range of services allows customers to limit the number of their service providers, thereby reducing complexity and costs.

With application labs in all regions, Lab Products & Services also offers customers the opportunity to test products with their own samples and to receive training.

**BioAnalytics**

Instruments, consumables, and reagents for drug discovery & development and life science research



Protein Analysis   Cell Selection   High-Throughput Cytometry   Live Cell Analysis   Media & Reagents



**Premium lab instruments**

Instruments and consumables for quality-critical work steps in laboratories



Lab Weighing   Lab Filtration   Liquid Handling   Microbial Quality Control   Lab Water



In the reporting year, the division expanded its bioanalytics portfolio for stem cell and organoid research. Organoids are mini-organs grown in the laboratory from human stem cells that mimic the functions of a real organ and can be used to better understand diseases and develop new treatments. A carrier plate for live-cell analysis has been developed that can be used to simultaneously generate and analyze a large number of robust 3D organoid cultures on a very small scale. In addition, the division is working with the start-up TheWell Bioscience to replace animal-based research models with organoids, enabling better predictions in drug research.

In the field of laboratory instruments, a new generation of premium laboratory balance was introduced that offers customers a particularly short stabilization time, a low minimum sample weight and easy cleaning. In May, a newly developed refill system for pipette tips that focuses on reducing plastic and packaging waste received the ACT label for sustainable laboratory products.

## Sales Activities

The lab division primarily distributes its portfolio directly through its own sales force and via its eShop. In addition, some standard instruments and consumables are also offered through specialized laboratory dealers. The focus is on further expanding the direct channels.

In addition to expanding its distribution structures, the division also focuses on the continuous improvement of sales efficiency, in part by creating synergies between the two divisions. This gives the Lab Products & Services Division access to customers of the Bioprocess Solutions Division, which in turn can also open up new sales opportunities.

## Product Development

In the field of bioanalytics, the division has extensive technological expertise, particularly in the analysis, characterization and selection of cells or cell systems, and in protein analysis. A major focus of the division's development work is the advancement of software and hardware and the integration of powerful data analysis applications. The result is a range of new analysis options that helps customers make better use of data, speed up experiments and accelerate drug development.

In addition to regulatory compliance, the most important requirements for laboratory instruments and materials are sustainable product design that enables efficient processes, improved process and data traceability, and ease of use in everyday laboratory work. Accordingly, these are the focus of product development, complemented by aspects such as data management, connectivity and process automation.

The division's largest development sites are in Ann Arbor, Michigan, USA, for bioanalytics, and at the Group headquarters in Göttingen, Germany, for laboratory instruments and materials. Other centers of excellence are located in the United States, Finland, the UK and China.

## Production

The Lab Products & Services Division operates plants in Germany, China, Finland, the UK, and the USA. For most product groups, development and production take place in the same location. These plants serve as centers of competence and tend to focus on one product group or a small set of product groups. For example, laboratory balances are manufactured in Germany and China, pipettes in Finland, and bioanalytical systems in the USA and China. Microbiological test kits are produced in the UK, and membrane-based lab products in Germany.

The center of excellence at the Ann Arbor site in the USA was completed as planned in 2024. It brought together functions that had previously been housed at different locations, including the manufacturing of devices, consumables, and reagents for cell and protein analysis, as well as customer and repair services and product development.

# Assessment of Economic Position

The business outlook published in January 2024 was based in particular on the assumption that the positive demand momentum seen in the second half of 2023 would continue. Contrary to this expectation, the life science industry presented a mixed picture in the first half of 2024, with no stable positive momentum. In some product groups in the consumables segment, for example, subdued demand persisted longer than expected, which was mainly due to unforeseeable multiple corrections of target inventories on the customer side. Furthermore, customers across the industry continued to hold back on investments in laboratory instruments and bioprocessing equipment, and the Chinese market remained at a low level. In view of the business performance in the first half of the year, which fell short of expectations, the company's management adjusted its growth and earnings forecast for both divisions and the Group in July 2024. In the third quarter, demand picked up again and gained further momentum in the final quarter.

Due to the dynamics described above, Group sales revenue in 2024 was comparable with the previous year at €3,380.7 million (in constant currencies: +0.1%) and in line with the adjusted forecast from July, whereas the original January forecast was not met. The Group's underlying EBITDA margin of 28.0% was within the range published in July and correspondingly below the January forecast.

In the Bioprocess Solutions division, sales revenue increased by 0.9% in constant currencies to €2,690.2 million and achieved an underlying EBITDA margin of 29.3%. The results were thus in line with the forecast issued in July and below the outlook published at the beginning of the year. In particular, the longer-than-expected sustained decline in demand for consumables played a role here.

With a decline in sales revenue of 3.0% in constant currencies to €690.5 million and an underlying EBITDA margin of 22.9%, business development in the laboratory division was also in line with the forecast adjusted at the mid-year point and below the expectations at the start of the year. Business performance was significantly influenced by customers' reluctance to invest in laboratory instruments and the weak market in China.

As planned, the ratio of net debt to underlying EBITDA fell to 4.0 in the reporting year and was therefore in line with the guidance issued in January and July.

At 12.1, the ratio of capital expenditures (Capex) to sales revenue was also below the previous year's level and in line with the January and July forecasts, reflecting adjustments to the timing of certain expansion projects.

## Projected | Actual Comparison for the Year 2024

	Actual	Guidance	Guidance	Guidance	Actual
	2023	January 2024	April 2024	July 2024	2024
<b>Sartorius Group</b>					
Sales growth <sup>1</sup>	-16.6%	Mid to high single-digit percentage range	Mid to high single-digit percentage range	Sales revenue to remain at prior-year level, with a bandwidth of low single-digit negative to low single-digit positive sales development	0.1%
Underlying EBITDA margin in %	28.3%	Slightly more than 30%	Slightly more than 30%	27 to 29%	28.0%
Net debt to underlying EBITDA	5.0	~4 <sup>2</sup>	Slightly above 3 <sup>2</sup>	~4 <sup>2</sup>	4.0
CAPEX ratio	16.5%	~13.0	~13.0	~12%	12.1%
<b>Sartorius Divisions</b>					
Bioprocess Solutions Division					
Sales growth <sup>1</sup>	-17.6%	Mid to high single-digit percentage range	Mid to high single-digit percentage range	Sales revenue to remain at prior-year level, with a bandwidth of low single-digit negative to low single-digit positive sales development	0.9%
Underlying EBITDA margin in %	29.2%	over 31%	over 31%	28 to 30%	29.3%
Lab Products & Services					
Sales growth <sup>1</sup>	-12.7%	Low single-digit percentage range	Low single-digit percentage range	Sales revenue to remain at prior-year level, with a bandwidth of low single-digit negative to low single-digit positive sales development	-3.0%
Underlying EBITDA margin in %	25.1%	Around the prior year's level	Around the prior year's level	22 to 24%	22.9%

1 cc = in constant currencies.

2 Possible acquisitions are not considered.

# Annual Financial Statements of Sartorius AG

Whereas the Sartorius Group financial statements are drawn up according to the International Financial Reporting Standards (IFRS), the annual financial statements for Sartorius AG are prepared by applying the rules and regulations of the German Commercial Code (HGB). In this context, the reported retained profit is used to determine the dividend payment to our shareholders.

The Management Report of Sartorius AG and the Group Management Report for fiscal 2024 are combined. The annual financial statements of Sartorius AG, prepared according to the HGB and the combined management report are published simultaneously in the German Federal Gazette (Bundesanzeiger).

## Business Operations, Corporate Strategy, Corporate Management and Oversight, Overview of Business Development

Sartorius AG performs the functions of the strategic, group-leading management holding entity for the Sartorius Group. We refer in this respect to pages 26 et seq. of the combined management report of Sartorius AG and the Group for explanatory reports on business activities, corporate strategy, corporate management and oversight as well as an overview of business performance.

## Earnings Situation

Sales revenue of Sartorius AG essentially consists of cost transfers to affiliated companies within the Group for management services rendered as well as for the rental of buildings on the Sartorius Campus and in the Sartorius Quarter.

Income from investments of €48.0 million relative to €97.7 million in the previous year concerns dividends paid out for the French subsidiary Sartorius Stedim Biotech S.A.

Due to profit and loss transfer agreements, Sartorius AG received a profit of €13.5 million from Sartorius Corporate Administration GmbH (previous year: €15.8 million). In addition, Sartorius Lab Holding GmbH transferred a loss of €0.8 million (previous year: profit of €45.0 million).

## Net Worth and Financial Position

The balance sheet total of Sartorius AG fell by €317.4 million in the reporting year to €2,321.5 million.

The balance sheet structure of Sartorius AG reflects its function as the management holding entity for the Sartorius Group. Fixed assets consist primarily of financial assets and, in the reporting year, stood at €2,075.7 million (previous year: €2,234.2 million). Accordingly, fixed assets accounted for 89.4% of the balance sheet total (previous year: 84.7%). The equity ratio stood at 26.0%, compared with 16.0% in the previous year.

Sartorius AG uses internal Group loans to ensure the financing of the majority of Group companies. Long-term loans are reported under financial assets as loans to affiliated companies and totaled €1,103.5 million in the fiscal year (previous year: €1,653.5 million).

The changes in liabilities are related to the capital measures carried out by Sartorius AG and Sartorius Stedim Biotech S.A. in February 2024. As a result of these cash inflows, Sartorius AG assumed around €300 million in Group liabilities from Sartorius Stedim Biotech S.A. in the past fiscal year and also repaid around €785 million in financial liabilities internally and externally.

**Balance Sheet of Sartorius AG**  
According to HGB 1, in millions of €

	Dec. 31, 2024	Dec. 31, 2023
<b>Assets</b>		
<b>A. Fixed Assets</b>		
I. Intangible assets	1.8	7.4
II. Property, plant and equipment	123.8	129.0
III. Financial assets	1,950.1	2,097.8
	<b>2,075.7</b>	<b>2,234.2</b>
<b>B. Current Assets</b>		
I. Trade and other receivables	152.4	179.4
II. Cash on hand, deposits in banks	89.3	222.5
	<b>241.7</b>	<b>401.9</b>
<b>C. Prepaid Expenses</b>	<b>4.1</b>	<b>2.8</b>
	<b>2,321.5</b>	<b>2,638.9</b>
 <b>Equity and Liabilities</b>	 <b>Dec. 31, 2024</b>	 <b>Dec. 31, 2023</b>
<b>A. Equity</b>		
I. Subscribed capital	74.9	74.9
Nominal value of treasury shares	-5.9	-6.5
<b>Issued capital</b>	<b>69.0</b>	<b>68.4</b>
II. Capital reserves	260.9	59.6
III. Earnings reserves	10.9	10.9
IV. Retained profits incl. net profit for the period	263.4	283.0
	<b>604.2</b>	<b>421.9</b>
<b>B. Provisions</b>	<b>34.1</b>	<b>34.2</b>
<b>C. Liabilities</b>	<b>1,671.3</b>	<b>2,182.8</b>
<b>D. Deferred Income</b>	<b>11.9</b>	<b>0.0</b>
	<b>2,321.5</b>	<b>2,638.9</b>

1HGB = German Commercial Code

## Statement of Profit and Loss of Sartorius AG

Based on the total cost accounting method according to Section 275, Subsection 2, of HGB<sup>1</sup>

In millions of €	2024	2023
1. Sales revenue	17.9	17.5
2. Other operating income	1.8	7.3
3. Employee benefits expense	-6.6	-6.7
4. Depreciation and amortization	-10.4	-10.4
5. Other operating expenses	-46.3	-27.8
6. Income from investments	48.0	97.7
7. Income from long term loans	48.5	47.1
8. Profit received under a profit and loss transfer agreement	13.6	60.8
9. Loss accepted under a profit and loss transfer agreement	-0.8	0.0
10. Interest and similar income	13.5	31.8
11. Write downs on financial assets and short-term investments	0.0	-20.0
12. Interest and similar expenses	-47.8	-80.3
13. Income tax expense	0.0	-2.0
<b>14. Profit after tax</b>	<b>31.4</b>	<b>115.0</b>
15. Other taxes	-0.2	-0.9
<b>16. Net profit for the period</b>	<b>31.2</b>	<b>114.1</b>
17. Profit brought forward	232.2	168.9
<b>18. Retained profits incl. net profit for the period</b>	<b>263.4</b>	<b>283.0</b>

1 HGB = German Commercial Code

## Proposal for Appropriation of Profit

The Executive Board and the Supervisory Board propose to the Annual General Meeting that the retained earnings of Sartorius AG reported as of December 31, 2024, in the amount of €263,445,327.26 be appropriated as follows:

in €	
Payment of a dividend of €0.73 per ordinary share	24,988,577.44
Payment of a dividend of €0.74 per preference share	25,757,378.32
Unappropriated profit carried forward	212,699,371.50
	<b>263,445,327.26</b>

## Research and Development

Detailed information on the research and development activities of the Sartorius Group and its divisions is provided on pages 34, 60 and 65.

## Employees

As a holding company, Sartorius AG does not employ any staff to be disclosed pursuant to Section 285, No. 7, HGB.

## Risks and Opportunities

The opportunities and risks affecting the business development of Sartorius AG as the management holding entity are essentially equivalent to those of the Sartorius Group. Sartorius AG shares in the risks to which its investments and subsidiaries are exposed in proportion to the extent of its investment. For all identifiable risks to Sartorius AG that could have a negative impact on its net assets, financial position and results of operations, countermeasures were taken and/or balance sheet provisions formed in the reporting year, insofar as this was reasonable and possible.

A detailed Opportunity and Risk Report for the Sartorius Group is provided on pages 73 to 86 and a description of the internal control and risk management system on page 87.

## Forecast Report

Earnings trends for Sartorius AG depend substantially on the performance of its subsidiaries and, as such, on the Sartorius Group.

Based on the similar level of dividends expected from Sartorius Stedim Biotech S.A. in particular, the individual financial statements of Sartorius AG are expected to show an annual profit of a comparable amount.

Statements on the expected business performance of the Sartorius Group can be found on pages 87 to 91.

# Opportunity and Risk Report

## Principles

Every business activity entails opportunities and risks that have to be managed. The skill with which this is done is a decisive success factor in determining the development of a company's shareholder value.

The point of risk management is not to always eliminate every risk possible; rather, Sartorius' approach is to consciously take risks as part of its business activities in order to successfully exploit opportunities. In this endeavor, it is important to keep risks contained within acceptable limits and to monitor and manage them systematically on an ongoing basis. Accordingly, guidelines ensure that risk considerations are taken into account in decision-making processes from the outset.

At Sartorius, identification and management of opportunities and risks is a cross-functional component of Group management. In this respect, the risk management organization is in line with the global functional organization in both the Bioprocess Solutions and Lab Products & Services Divisions, and also in the supporting functions. The respective functional managers in the Group companies are responsible for opportunity and risk management. Central Risk Management is also located in the Finance Department and is responsible for ensuring regular reporting and the further development of the risk management system as a whole.

## Managing Opportunities

Opportunity management centers on the analysis of target markets and sector environments, as well as the assessment of trends, both of which give strong indications as to future business opportunities. One of the key roles of the relevant managers is to identify potential for development, which initially takes place at a local rather than the central level. The market-facing functions in particular, such as strategic marketing and product management in each of the two divisions, play a leading role in this respect. These areas are supported by the central Business Development unit, in monitoring the market, analyzing data, and implementing strategic projects.

As a partner to biopharmaceutical research and industry, Sartorius operates in future-oriented and high-growth sectors. The significant opportunities generated by the various market and technology trends are described in detail in the sections entitled "Outlook for the Industry-Specific Environment" and "Industry-Specific Environment" on pages 36 and 88, respectively.

The company's own assessment and that of market observers places Sartorius among the global market leaders in many product segments. On the basis of quality products, high brand awareness and established customer relationships, there are good opportunities to stabilize and further expand this leading market position. The corresponding divisional strategies and the growth opportunities and initiatives based on them are outlined in the sections "Bioprocess Solutions" on page 30 and "Lab Products & Services" on page 31.

## Managing Risks

### Organization

Overall responsibility for an effective risk management system lies with the Executive Board. Coordinating and developing this system and collating risk reporting are the responsibilities of the Finance Department, while

the respective functional areas are responsible for identifying and reporting individual risks and assessing and, if necessary, implementing countermeasures.

The Supervisory Board of Sartorius AG monitors the effectiveness of the risk management system, with the preparatory work being performed by the Audit Committee of this Board. As part of their statutory audit mandate for the annual financial statements and consolidated financial statements, the independent auditors assess whether the early warning system in place is capable of promptly identifying risks that could jeopardize the future of the company. Finally, the Internal Audit Department regularly reviews the effectiveness of the risk management system. The key results of these audits are discussed at meetings of the Executive Board, Supervisory Board, and Audit Committee. Any adjustments to the risk management system are then implemented by Central Risk Management.

## Insurance

To the extent possible and financially reasonable, Sartorius has taken out insurance policies to cover a large number of risks. Among other risks, these insurance policies cover risks relating to product liability, property damage, business interruption, cybersecurity, and transportation and financial loss, and provide comprehensive coverage for legal costs. An independent department, working in conjunction with an external insurance broker, regularly reviews and adjusts the type and scope of the insurance cover.

When choosing insurers, the company places particular emphasis on the creditworthiness of the contractual partners and on achieving maximum diversification in order to minimize the associated risks.

## Risk Management System and Risk Reporting

The risk management system of the Sartorius Group is documented in a Risk Management Handbook that applies throughout the Group and includes definitions of the framework, the structural organization, processes, risk reporting, and monitoring and control of the effectiveness of the risk management system. This Handbook is based on the ISO 31000 "Risk management – Guidelines" standard and the COSO standard (COSO = Committee of Sponsoring Organizations of the Treadway Commission). In addition, various other sources containing specifications for dealing with risks are such as the articles of association and rules of procedure of the Group companies and other guidelines. The Group's dynamic performance over the past few years in particular, as well as increasing regulatory and customer requirements, necessitate the ongoing refinement of these guidelines and specifications. In recent years, a particular focus has been placed on risks in connection with sustainability issues. Among other things, Central Risk Management helped carry out the materiality assessment that forms a key basis for the Group's sustainability reporting.

The reporting process in the risk categories described below establishes the rules for the ongoing review and reporting of information on the status of risks. If any specific risks are discernible, these are documented according to their assessment, probability of occurrence, and measures to be taken to eliminate such risks or to mitigate their impact. In addition, as soon as these risks reach defined size criteria, they are reported to Central Risk Management via special risk management software. As a matter of policy, assessment of risks is governed by the remaining net risk, i.e., taking any risk-mitigating measures into account. Central Risk Management aggregates the risk reports and regularly reports on the Group's risk situation to the Executive Board and the Audit Committee of the Supervisory Board. This reporting also includes a comparison of the risk portfolio with the Group's risk-bearing capacity as determined on the basis of rolling liquidity planning. An urgent reporting procedure is in place to ensure that the Executive Board of Sartorius AG receives all the necessary information without delay in the event of newly emerging major risks to the Group's net assets, financial position, and/or results of operations.

To provide a logical structure for the individual risks, Sartorius has defined four main risk categories: external risks, operating risks, financial risks, and compliance risks. Each of these main categories is divided into several subcategories, which are discussed in the following sections.

Sartorius has created a risk matrix that categorizes the probability of occurrence and potential impact on net profit into specific classes as follows:

<b>Probability of Occurrence</b>	
Remote	< 10%
Possible	10% - 50%
Probable	50% - 75%
Very likely	> 75%

<b>Significance</b>	
In millions of €	Impact on Earnings
Insignificant	< 10
Moderate	10 - 50
Significant	50 - 100
Critical	> 100

These two elements are combined to form the following matrix, which indicates the importance of the individual risks for the Group:

> 75%	Low	Medium	High	High
50% - 75%	Low	Medium	Medium	High
10% - 50%	Low	Medium	Medium	Medium
< 10%	Low	Low	Medium	Medium
Probability of occurrence   impact	< €10 million	€10 - €50 million	€50 - €100 million	> €100 million

## External Risks

Recent fiscal years have been characterized by significantly increased volatility in customer demand compared to previous periods. After achieving average annual growth of around 15% for many years, Sartorius achieved exceptionally high growth rates averaging around 40% per year in the period from 2020 to 2022. This was due in particular to the development and production of coronavirus vaccines, therapeutics and test kits as well as a significant increase in inventory levels on the part of customers. 2023 and 2024 were marked by a temporary decline in sales due to the discontinuation of coronavirus-related special business as well as a reduction in customer inventories and a subsequent normalization of business development. In view of the circumstances described above, the Group's business model proved to be generally robust.

When Russia first attacked Ukraine, Sartorius immediately suspended all business activities in Russia that were not related to humanitarian medical products. Sales revenue generated in Russia (approx. 2% of the Group's total in 2021) declined significantly as a result. Halfway through this past fiscal year, the Group decided to completely discontinue its very few remaining business activities by the year end.

The Group has taken a variety of measures to counter the indirect effects of the war in Ukraine, such as increased inflation, disrupted supply chains, and potential gas and energy shortages. Price increases have

been agreed with customers to offset the rise in procurement costs. With regard to suppliers with energy-intensive production processes, safety stocks were temporarily increased. As the war is ongoing and it is impossible to foresee how the conflict will develop or what its indirect effects will be, there is still uncertainty surrounding this situation.

Sartorius operates a production facility for cell culture media in Beit Haemek in northern Israel. While most of the hostilities immediately after the Hamas attack were concentrated in the area surrounding the Gaza Strip, the conflict has increasingly spread to the northern border region. Local production, transportation and logistics have so far been maintained. A further escalation of the conflict in Israel or the wider region could lead to temporary production stoppages. To strengthen resilience and safeguard the reliability of deliveries, the Group has been working since the start of the escalation to build up backup capacity for products that are currently manufactured only at this location. The overall business volume of products manufactured in Israel is noncritical for the Group (< 1% of the Group's total sales revenue).

Alongside the conflicts mentioned above, other events such as natural disasters may impact the Group's business activities. The largest sites in Germany and France do not face any major risks in this regard, while the production plants in Yauco, Puerto Rico and in Fremont, California, are exposed to the risks of severe hurricanes or earthquakes and could be impacted accordingly. A wide range of products for the U.S. market are produced at the Puerto Rico production plant in particular, meaning that large-scale damage here could have considerable impact on consolidated earnings. To mitigate the associated risks, Sartorius applies the highest possible safety standards when constructing buildings and explicitly takes potential risk scenarios into account when defining strategies with regard to warehousing and the international production network.

Since the Group companies operate globally and have international interdependencies, punitive tariffs and trade conflicts can have negative effects on the Group's business activities. Due to the possible political changes in the USA as a result of the Republican Party's election victory, the risk of punitive tariffs on deliveries from Europe and other regions, has increased further. The Group is examining various risk reduction measures in this regard. Although a large proportion of the products sold in the USA are already produced there, the likely impact of increased tariffs on the Group could still be significant.

Owing to the concentration of its business activities in the life science sector, the effect on Sartorius of general economic developments is lower than average. The Lab Products & Services Division is susceptible to economic factors in certain areas that can pose a risk to its growth. This Division's increasing focus on the biopharma sector, however, significantly reduces these risks.

Overall, the significance of geopolitical and global economic risks for the Group's business activities has increased significantly in recent years, contributing to a corresponding volatility in business results. The Group monitors developments in this regard and, where possible, initiates risk mitigation measures at an early stage.

## Operating Risks and Opportunities

Value creation at Sartorius extends from procurement and production through to distribution. Disruptions within this process can have consequential effects, including canceled or delayed deliveries. The Group's supply chain management system monitors and controls all of the processes along the value chain so that the risks in this context are largely minimized. On the other hand, the Group's high level of internationalization, for example, unlocks a number of opportunities. The individual risks and opportunities within the value chain are described in detail below.

## Procurement Risks and Opportunities

Sartorius procures a wide range of raw materials, parts, components and services from its suppliers and is therefore exposed to risks in the form of unexpected supply bottlenecks and/or price increases. In recent years, the global economic environment has led to price increases in almost all areas. Price effects on the procurement and customer sides have largely balanced each other out, meaning that inflation has not had a significant negative impact on profitability. At present, price increases in most countries are back at a more moderate level. In the fiscal year 2024, Sartorius carried out an initiative to significantly reduce procurement costs, and this made a significant contribution to securing profitability targets.

In the area of supplier management, powerful tools and robust processes have been implemented in recent years to manage risks and ensure supply continuity. Important measures to reduce potential supply bottlenecks include maintaining safety stock levels and identifying alternative materials or suppliers. From a Group perspective, there are no material dependencies on individual suppliers. In addition, the Group regularly conducts supplier audits and carefully monitors the delivery status and inventory levels of critical raw materials.

Sartorius actively manages procurement risks due to a possible shortage of raw materials or components on the market. By concluding binding purchase agreements with suppliers and/or seeking alternatives within the supplier network, Sartorius can reduce the corresponding effects and largely secure continuous supply. Since 2023, the Group has observed a normalization of global supply chains in many areas, following the supply shortages for raw materials and components that had resulted from the coronavirus pandemic and the war in Ukraine.

In addition, Sartorius evaluates its supplier base in accordance with legal requirements – for example under Germany's Supply Chain Due Diligence Act – and with regard to compliance with internal and external sustainability standards. In the event of deviations, the process provides for a variety of measures that are coordinated with the suppliers in question.

## Production Risks and Opportunities

Sartorius manufactures a significant share of its products in-house with a high degree of vertical integration, for example filters and laboratory balances. For other products, such as bioreactors, the Group works with suppliers, which means that some of the production risks can be shifted to external third parties. Where Sartorius manufactures products itself, the Group also bears the associated risks of capacity bottlenecks or overcapacity, production downtimes, excessive reject rates, and high levels of tied-up working capital, as well as dependency on individual manufacturing sites.

These risks can be limited through careful production capacity planning, the use of versatile machines and semi-automated individual workstations in conjunction with flexible working time models, and continuous monitoring of production processes. Moreover, Sartorius' global manufacturing network enables the Group to partially compensate for any capacity bottlenecks that may occur by relocating production, and to limit dependencies on individual sites. High volatility in demand, such as that seen since the beginning of the coronavirus pandemic, may nevertheless lead to over- or underutilization of production capacity with corresponding positive or negative impacts on productivity.

Highly flammable or explosive substances are used in some production areas. Improper handling of these materials can result in significant injuries to people or damage to property and interruptions to operations. The Group has taken all necessary organizational and structural measures at the affected sites to mitigate this risk as much as possible.

The Group sees its investments in global infrastructure and production equipment as creating an opportunity by ensuring a high degree of flexibility in production and thereby enabling it to meet the requirements of customers and regulators with regard to operational continuity management concepts. In addition, this approach ensures that international production sites can concentrate on specific manufacturing technologies and leverage regional cost advantages. Continuous improvements in manufacturing, such as the simplification of processes, as well as increased automation and digitalization, also help to further increase efficiency.

## Sales and Distribution Risks and Opportunities

The Group uses a variety of channels to sell and distribute products around the world. Possible risks include an unexpected change in the demand structure, for example due to consolidation in the markets served by Sartorius, increasing price pressure, and non-compliance with supply agreements made with customers. Credit risks could also arise from customer defaults.

The financing environment for smaller biotech companies has deteriorated since the end of the pandemic, leading to lower demand from this customer group in both divisions. The first signs of recovery in this regard emerged in the past fiscal year. The decline in demand caused by the reductions in inventory levels previously raised by customers looks to have largely run its course in 2024 and should therefore no longer have a significant impact on the future sector performance. The Group regards the fundamental growth drivers as intact and expects profitable growth again in the coming years (see the sections entitled "Outlook for the Industry-Specific Environment" and "Industry-Specific Environment" on pages 36 and 88 and the Forecast Report in the next section, p. 87).

Sartorius uses targeted market analyses to try to identify trends in demand in individual submarkets at an early stage so that it can react accordingly. The Group's exposure to the risk of growing price pressure is reduced by technical innovations and the fact that a large number of its products are used in validated production processes in the biopharmaceutical industry. Distribution logistics have been optimized in recent years through the establishment and use of central warehouses, thus limiting the corresponding risks.

In the past fiscal year, continued weak demand in China had a negative impact on business development in both Divisions, with the Laboratory Division being more affected in relative terms. The reasons for this development lie primarily in the ongoing weakness of the market in general and are therefore beyond the Group's control. Nevertheless, given its long-standing presence at several production and distribution sites in China, Sartorius believes that it is well positioned to participate in future positive developments.

Geopolitical crises often lead to trade restrictions or sanctions for certain products in individual countries or regions. A tightening of sanctions in the current conflicts or the adoption of further restrictions, for example due to new crises, may therefore also lead to more extensive restrictions on the Group's sales opportunities.

Due to the increasing breadth of the Group's product portfolio in both the bioprocess and laboratory segments, sales opportunities will arise if additional products can be placed with existing customers. Sartorius also has opportunities resulting from its generally long-term business relationships and global presence. Finally, the product range is continuously being expanded through acquisitions. This has recently strengthened the portfolio for customers in the rapidly growing field of novel therapies, including cell and gene therapies. The market for new modalities addressed by many of the recently acquired technologies (cell culture media, growth factors, albumin, transfection reagents), offers opportunities for the future development of the Group with expected growth rates in the double-digit percentage range.

Sartorius' most important customers come from the pharmaceutical and biotech industries and, in some cases, from the chemical industry and public-sector research and educational institutions. These are mostly

relatively large, long-established companies with strong credit ratings and correspondingly low default risks. As most of the Group's business areas have a highly diversified customer structure, dependence on individual key accounts is rather low overall.

## Competitive Risks and Opportunities

Sartorius has a strong competitive position in its core technologies and competes with mainly larger rivals that share its status as a globally operating company. As the Group serves a large number of customers from highly regulated sectors, such as the pharmaceutical and food industries, and since the technological barriers to market entry are fairly high, Sartorius regards the probability of new competitors emerging in the short term as relatively low.

The fact that many of the Group's products are used in validated processes, especially those in the biopharmaceutical industry, reduces the risk of losing significant market share within a short time frame. Conversely, the hurdles faced by Sartorius in winning customers from competitors in this industry are also higher.

Changes in the competitive environment, such as further market consolidation or new competitors, for example in China, could give rise to further risks in the medium term. Sartorius has continuously made acquisitions in recent years, thereby further strengthening its market position and creating additional potential for synergies. In addition, the Group is systematically working on innovations with the aim of achieving or securing corresponding competitive advantages and offering technologies with maximum potential for differentiation.

## Quality Risks and Opportunities

Customers use Sartorius products in a wide range of critical production processes, including the manufacture of vaccines, medicines, medical devices, foods, and chemicals, and in research and development laboratories. Risks in this context primarily involve the failure to meet defined quality criteria, affecting the performance of the supplied products and leading to losses on the part of customers, for which Sartorius may be held liable in the form of compensation. Particularly where the manufacture of vaccines or medications is concerned, the damage caused to customers can be significant even if only small production volumes are lost.

Sartorius ensures that all products meet the highest quality standards and stringent regulatory requirements through extensive quality controls and the use of modern manufacturing techniques, including in classified clean room environments where necessary. These manufacturing methods and processes are subject to constant review as part of improvement processes and are constantly optimized as requirements evolve. Quality controls are carried out both within the manufacturing processes and as part of test procedures on the end products. This ensures that critical or essential product characteristics are continuously achieved. A rigorous product approval process also ensures that only products that meet the agreed specifications are shipped.

The effectiveness of the existing quality systems is confirmed by the successful completion of regular customer audits, as well as by certification to ISO 9001 and, where applicable, to ISO 13485 and/or good manufacturing practice (GMP) requirements. Independently of this, product liability risks are insured to a significant extent.

Sartorius is continuously expanding its product portfolio with new technologies and applications, not only through its own developments but also through alliances with partners. A strict qualification process has been

established to ensure that partners meet the required quality standards. Where necessary, the Group also helps its partners improve their quality systems.

A traceability system guarantees that complete batches can be identified immediately and recalled if necessary. This minimizes the consequences if a defect or nonconforming component is discovered in a product. A complaints management system is used to process and systematically document customer feedback in a timely manner, ensuring that Sartorius efficiently analyzes reported cases and initiates the necessary measures.

In the sectors in which the Group is active, a trend towards ever higher quality standards can be observed, not least as a result of increasing requirements from the relevant authorities in terms of patient protection and product safety. There is a risk that new regulations may be overlooked or be difficult to implement. However, this also unlocks opportunities for Sartorius by putting up further barriers to entry for potential market players. It also creates an incentive to develop further technological innovations. Through its work on committees and memberships of industry associations and standards committees, Sartorius is in a position to help shape new guidelines or to identify these emerging requirements at an early stage and prepare for them accordingly. The Group is continuously expanding these activities to ensure that it has a presence in new areas of application and regulation.

## Research and Development Risks and Opportunities

Sartorius devotes a considerable share of its resources to research and development activities. Potential risks in this area may arise from product developments that do not meet market or application requirements or from exceeding planned development times and budgets. The Group mitigates these risks by continuously monitoring trends and performing extensive proof-of-concept activities on the one hand, and through project management, intensive development tracking, and the early involvement of customers in the development process on the other. In particular, Sartorius ensures that functional models and product designs can be promptly reviewed to determine whether they meet customer needs and adapted if necessary. Continuously tracking technology trends and competitive activities, as well as filing patents at an early stage, ensures that the Group has an appropriate technology and marketing position.

Intensive collaboration with partners who are among the global market and opinion leaders in their fields enables Sartorius to develop particularly innovative products. In the areas of membrane and plastics technology, sensor technology and pharmaceutical bioprocess engineering, as well as analytical technologies for laboratory applications, Sartorius specialists enjoy a leading position worldwide in terms of expertise. There is an opportunity here to utilize this technological expertise to further improve the Group's market position and sales potential. By consolidating various innovative activities in an independent Corporate Research function, the Group is able to identify interesting developments at universities, start-ups and customers and secure relevant IP positions at an early stage.

## Acquisition Risks and Opportunities

Acquisitions create a wealth of opportunities, such as sales growth, the expansion of the product portfolio and the development of new markets. At the same time, the purchase and sale of companies or parts of companies entail a number of typical risks, such as incorrect valuation assumptions, insufficient usage of anticipated synergy effects, and unsuccessful integration.

The Group takes a number of measures to mitigate these risks. These include performing a due diligence review with regard to the relevant areas and a comprehensive analysis of the corresponding market. Furthermore, external consultants and experts are integrated into the purchase or sales processes as required.

Sartorius pays particular attention to structuring transaction agreements in a way that is appropriate to the risks involved, especially by incorporating clauses assuring certain characteristics, including warranty or guarantee provisions, and agreeing purchase price adjustment mechanisms and liability clauses. Appropriate insurance policies are also taken out when necessary.

Immediately after an acquisition has taken place, an integration phase is initiated in which any potential risks can likewise be identified as early as possible and avoided or minimized by taking the appropriate countermeasures.

In recent years, Sartorius has made significant acquisitions, particularly in the areas of cell and gene therapy and biotechnologically processed tissue products (advanced therapies). As a result, the Group considers itself well positioned in these dynamically growing business areas. Nevertheless, investments in innovative and highly valued companies are associated with risks. If the business area targeted (e.g. cell and gene therapies) does not develop as expected or the acquisitions are not integrated appropriately, this could have a corresponding impact on the Group's economic position.

## Personnel Risks and Opportunities

As an innovative technology group, Sartorius employs a large number of highly qualified employees. In this context, there is a risk that it will not be able to recruit suitable employees in the future or that it will lose existing top performers. To mitigate this risk, processes have been established to identify and develop talented employees and to plan for succession. Volatile business developments and a rapidly changing environment require a high degree of flexibility and the ability to implement organizational changes efficiently and effectively. Here, Sartorius uses a digital HR platform that supports secure and stable processes and enables decisions to be made on the basis of high-quality data.

Sartorius believes that attractive and safe working conditions and a motivational corporate culture are key to attracting and retaining employees. It therefore uses performance-based remuneration models, targeted training opportunities, attractive social benefits and interesting development prospects to retain employees in key positions and talented individuals within the company in the long term. To create an attractive corporate culture, the Group has defined corporate values, developed globally uniform management programs and created a brand identity designed to give all employees a reliable basis for collaboration. The success of these measures is reflected in the below-average rate of staff turnover in recent years.

Sartorius is countering demographic change primarily by training junior employees and promoting continuous learning for every employee, accompanied by appropriate performance development processes. This in turn creates opportunities for the Group, as training its own employees ensures that Sartorius can meet its own demand for qualified personnel.

In ensure a smooth start for new employees and an appropriate transfer of knowledge, the Group has developed and implemented specific onboarding processes for employees and managers.

## IT Risks and Opportunities

The Sartorius Group's business processes are supported by a wide array of specific IT systems and software applications. The technical IT infrastructure and global networking of the sites play a decisive role in the operation and optimization of business processes.

However, the growing dependency on these systems also entails risks. Cyber attacks pose a significant threat that can lead to considerable restrictions and even failures of business processes. In the worst-case scenario,

attacks of this kind could lead to uncontrolled data loss, data tampering and the downtime or failure of applications, systems and facilities.

To minimize these risks, the Group continuously invests in new and reliable technologies and ensures the secure operation of applications, systems and facilities. In 2023, certification to ISO 27001 and the associated creation of a management system for information security marked another important step in ensuring the secure operation of the global IT infrastructure and application landscape.

Sartorius works with certified IT security partners to develop strategic solutions for IT security and efficiency and regularly tests the security of systems and equipment.

Adjustments to the security strategy based on dynamic developments in the risks and threats are continuously integrated and implemented in the system and application landscape. These measures offer reliable protection and make it possible to identify potential threats at an early stage and respond to them quickly and appropriately.

Sartorius involves employees in its security strategy both by regularly providing them with basic training and easy-to-implement but effective strategies for staying safe when using information technology and by encouraging them to report suspicious activities directly to the IT Department for further investigation.

## Financial Risks and Opportunities

Due to the global orientation of the Sartorius Group, its business activities are associated with financial risks. The most significant of these are exchange rate risks, interest rate risks, liquidity risks, and tax risks. Conversely, financial risks, most notably exchange rate risks and interest rate risks, are offset by corresponding opportunities.

### Exchange Rate Risks and Opportunities

As a consequence of its global business activities, Sartorius is exposed to risks arising from fluctuations in foreign exchange rates. Since more than half of the Group's consolidated sales revenue is generated in foreign currencies and, in turn, approximately two-thirds of this total revenue in foreign currencies is in U.S. dollars or in currencies pegged to the U.S. dollar, Sartorius is positively or negatively impacted by currency effects when translating balance sheet items or elements of the income statement. Other currencies relevant to the Sartorius Group are the British pound, the Singapore dollar, the South Korean won, the Japanese yen, the Chinese renminbi, and the Swiss franc.

The Group's global production network enables Sartorius to offset the majority of sales revenues generated in foreign currencies within the Group against costs that are also incurred in foreign currencies. For example, many of the products for the North American market are manufactured locally and therefore have no currency-related cost advantage or disadvantage compared to U.S. competitors.

To estimate and manage the remaining risk, the risk position is calculated on an ongoing basis using a cash-flow-at-risk model on the basis of the net currency exposure expected with sufficient probability over the next 12 months and taking into account hedging transactions already concluded. On this basis, a decision is made as to whether further derivative financial instruments, in particular spot, forward, and swap transactions, should be used to manage the maximum risk of loss. Further details on currency hedging can be found in the notes to the consolidated financial statements in section 37.

## Interest Rate Risks and Opportunities

In fiscal year 2024, the Group carried out capital measures in the form of a placement of treasury preference shares held by Sartorius AG and the issue of new shares in Sartorius Stedim Biotech S.A. (see section 21 and 22 in the notes to the consolidated financial statements). The net proceeds totaling approximately €1 billion were used to repay variable interest loans and further reduce interest rate risks. As at the reporting date of December 31, 2024, more than 90% of the financial liabilities were subject to a fixed interest rate agreement. The remaining portion of the financing instruments outstanding as at the reporting date is subject to variable interest rates on the basis of a short-term money market rate. Sartorius constantly monitors interest rate trends and the Group's interest rate exposure and arranges for hedging transactions for individual loans where this is considered necessary and financially advisable. The Group did not hold any interest rate derivatives as of December 31, 2024 (see also section 38 in the notes to the consolidated financial statements).

## Liquidity Risks and Opportunities

Sartorius operates an active central liquidity management system in order to minimize the liquidity risks in individual Group companies on the one hand and to optimize the Group's net interest income on the other. Various long-term and short-term financing instruments are used for this purpose. With regard to the maturity of loans, Sartorius generally adopts a risk-averse approach.

In September 2023, the Sartorius Group issued long-term, unsecured fixed-interest bonds with a total volume of €3 billion. The bonds had maturities of between 3 and 12 years and interest rates ranging from 4.375% to 4.875%. The funds were used in particular to refinance the bridge financing taken out for the Polyplus acquisition and also for general corporate financing.

A syndicated credit line of €800 million, which is available for long-term utilization and repayment, and several smaller bilateral credit lines at individual Group companies, are used to secure short-term liquidity. Furthermore, cash pooling agreements between selected Group companies are primarily used to manage liquidity across the Group, ensuring that available liquidity is used efficiently.

There are currently no financing agreements that require the Group to comply with financial covenants, which would lead to early repayment in the event of non-compliance.

## Tax risks

Sartorius and its subsidiaries operate worldwide and are therefore subject to a variety of national tax laws and regulations. Changes in tax laws, jurisprudence or interpretation on the part of the fiscal authorities or courts in these countries can result in additional tax expenses and payments and thus also have an impact on the corresponding tax items in the balance sheet and income statement.

The local finance organizations, supported by the Group Tax Department and external consultants in the respective countries, continuously monitor and analyze the tax environment in order to control the resulting risks. Cross-border intragroup transactions are also managed and advised by the Group Tax Department.

In 2021, the OECD published detailed rules on implementing the reform of the international tax system, which are intended to ensure that multinationals are subject to a minimum tax rate of 15%. Sartorius expects that the minimum tax legislation in the various national contexts will only have a very minor impact on the Group, as the current tax regulations in almost all countries in which the Group is economically active already meet the relevant OECD requirements.

# Compliance Risks

## Regulatory Risks

As a partner to the biopharmaceutical and healthcare industries, Sartorius is also affected by regulatory changes in these sectors. The main risk in this context is the possibility of regulatory authorities, such as the U.S. Food & Drug Administration (FDA), the European Medicines Agency (EMA), and other national and international bodies, taking a more restrictive approach to the approval of new drugs or medical devices. Given the breadth of the Group's product portfolio, a growing number of relevant regulations must be observed. These include regulatory requirements, such as those of the Environmental Protection Agency (EPA) and the Department of Agriculture (USDA) in the USA and the equivalent authorities in other countries. Sartorius ensures that the relevant requirements are implemented through clear responsibilities and processes. Global initiatives to reduce or even ban the use of certain chemicals (e.g., PFAS) can have a significant impact on many of the Group's products, their applications, and the availability of critical raw materials.

Inadequate compliance with the applicable regulations on the part of Sartorius' customers could delay approval processes or even reduce the number of newly approved drugs, thereby also worsening the Group's future prospects in the medium term. With regard to its own products, the Group is also subject to extensive approval, registration, and reporting obligations in numerous countries. Non-compliance with the sometimes complex requirements could result in sales or import bans and fines. The functions responsible for regulatory affairs within Sartorius monitor the affected markets and implement measures if changes to processes or products are necessary.

As part of new product developments or revisions, the Group is working on replacing raw materials or materials that could be affected by stricter regulations or bans in the future, where technically possible. These innovative products could then create a competitive advantage and therefore offer opportunities for business development.

## Environmental Risks from the Production Process

Sartorius uses a wide range of raw materials and supplies in its manufacturing process, including chemicals, plastics, biologicals, metals, electronic components and packaging. Some production processes generate hazardous waste that must be recycled and disposed of in accordance with rules and regulations. In this context, there is a risk that the Group will not comply with the necessary legal requirements in this area. Environmental damage could have legal or financial consequences and harm Sartorius' reputation. To further increase the Group's agility in fulfilling the legal regulations and industry expectations, platforms for managing environmental, health, and safety data, must be continuously improved.

Responsibility for compliance with all applicable regulations is generally decentralized. The Environment, Health, and Safety Department provides support and conducts audits. To manage environmental issues and mitigate risks, Sartorius has established environmental management systems (according to ISO 14001:2015) for both divisions. Most of the Group's large production sites, including several in Germany, France, India, Puerto Rico, and China, are certified to ISO 14001:2015. Sartorius sites have appropriate processes in place to ensure compliance with legal and internal requirements and to introduce sustainable technical innovations to improve environmental aspects in production processes.

## Risks from Legal Disputes

Litigation risks for Sartorius can arise from pending or imminent legal disputes or from administrative proceedings. Judicial or extrajudicial disputes are handled by the company's own attorneys and legal experts, who engage external lawyers as needed.

At present, there are no pending or identifiable legal disputes or court cases that have not been recognized in the balance sheet, whose occurrence is at least considered possible and that could have a significant negative impact on consolidated earnings.

## Assessment of the Overall Risk Situation and Risk Outlook

In the table below, the probability of occurrence of the risks presented has been assessed for each of the classes named and their relevance for the Group as a whole has also been classified.

Risk Category	Probability of Occurrence	Significance	Total Impact	Total Impact (Previous Year)
External risks	Possible	Significant	Medium	Medium
Operating risks				
Procurement risks	Possible	Significant	Medium	Medium
Production risks	Possible	Significant	Medium	Medium
Sales and distribution risks	Possible	Significant	Medium	Medium
Competitive risks	Possible	Moderate	Medium	Medium
Quality risks	Remote	Significant	Medium	Medium
Research and development risks	Possible	Significant	Medium	Medium
Acquisition risks	Possible	Significant	Medium	Medium
Personnel risks	Possible	Significant	Medium	Medium
IT risks	Possible	Significant	Medium	Medium
Financial risks				
Exchange rate risks	Probable	Moderate	Medium	Medium
Interest rate risks	Probable	Moderate	Medium	Medium
Liquidity risks	Remote	Moderate	Low	Low
Tax risks	Possible	Moderate	Medium	Medium
Compliance risks				
Regulatory risks	Possible	Significant	Medium	Medium
Environmental risks from the production process	Remote	Moderate	Low	Low
Litigation risks	Possible	Moderate	Medium	Medium

To the extent possible and reasonable, countermeasures were taken in the reporting year for identifiable risks within the Sartorius Group that could have a negative impact on the net assets, financial position and results of operations and/or provisions were made in the balance sheet if there was a corresponding probability of occurrence.

Following a detailed analysis of the overall risk situation, no risks that could jeopardize the company as a going concern are currently discernable or foreseeable for the future. The overall risk situation remained largely stable in the past fiscal year, while the direct and indirect risks from ongoing and potentially emerging geopolitical and global economic crises remain relatively high.