

2.3 Industry-Specific Conditions

Sartorius Stedim Biotech serves customers mainly in the biopharmaceutical industry, which makes its business particularly sensitive to the development of this industry.

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.

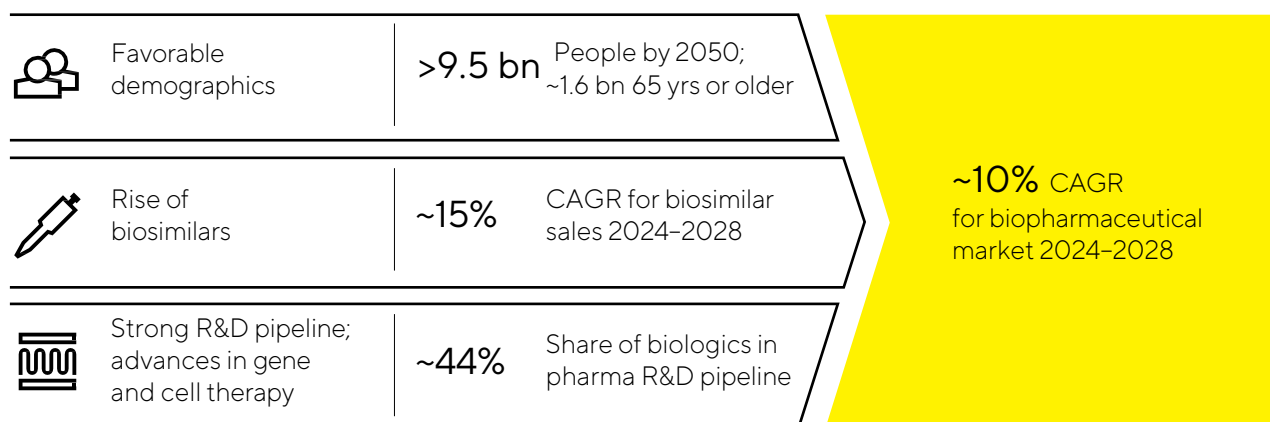
The bioprocessing market, which includes products for the manufacture of biopharmaceuticals, stabilized in 2024 after the pandemic-related very volatile development in previous years. Following significant declines in 2023, the leading manufacturers of bioprocessing technology recorded revenues at around 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 dampened by the ongoing general market weakness.

The growth of the biopharmaceutical market fundamentally depends more on medium- to 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 aging world population, as well as 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 is 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 biopharmaceutical 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 biopharmaceutical 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 Environment

The competitive environment of Sartorius Stedim Biotech 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, Sartorius Stedim Biotech 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 principal competitors of Sartorius Stedim Biotech 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.

Sources: Sartorius Stedim Biotech internal market research; BioPlan: 21th 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

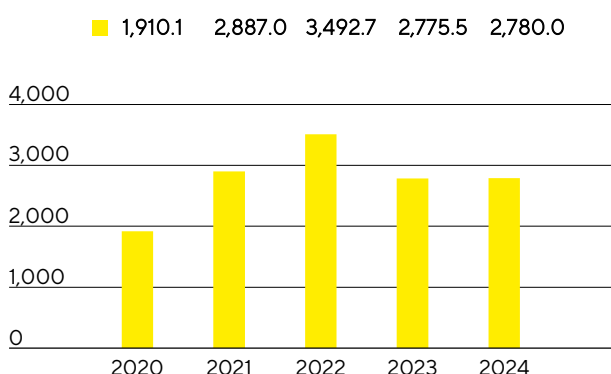
2.4 Group Business Development

Sales Revenue and Order Intake

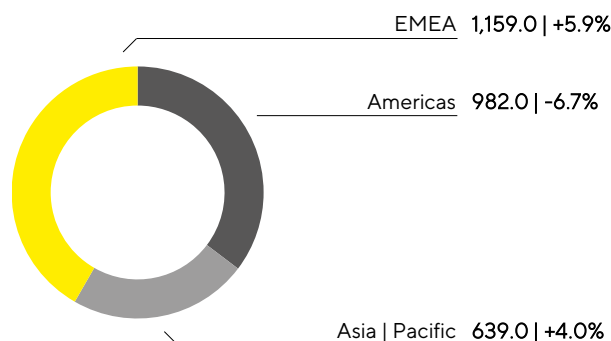
After the very volatile development of previous years due to the pandemic, the business situation at Sartorius Stedim Biotech stabilized in 2024 despite a difficult environment in the entire life science industry that lasted longer than expected. In particular, the second half of the year and especially the last quarter showed a significant improvement compared to the first half. The trend in the consumables business was increasingly positive, as most customers have meanwhile 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 revenue from products for advanced therapies also continued to grow at an above-average rate. In contrast, business with bioprocessing equipment remained muted, although customers continued to demand innovative systems, for example in the area of process intensification. Also, business in China was weak. Group sales revenue increased by 0.6% in constant currencies¹ to €2,780.0 million, reaching the prior-year level (organic²: -0.7%; reported: +0.2%). Acquisitions contributed 2.4% to sales.

Order intake³ developed even better than sales revenue, with a double-digit increase of 12.9% in constant currencies (reported: 12.3%) to €2,781.6 million.

Sales Revenue 2020 to 2024
€ in millions



Sales Revenue and Growth¹ by Region⁴
€ 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 Organic: Organic growth figures exclude the impact from changes in exchange rates and changes in the scope of consolidation.

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

4 According to customer location.

Regional business performance varied in fiscal 2024. The EMEA region, which accounted for around 42% of total Group revenue, showed the strongest momentum, with revenue rising by 5.9% to €1,159.0million. In the Americas region, revenue fell to €982.0million (–6.7%) as a result of the muted investment activities of customers. The region accounted for a share of around 35% of total Group revenue. Despite the ongoing weakness of the Chinese market, the Asia|Pacific region grew by 4.0% to €639.0million, thereby accounting for 23% of total Group revenue.

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

Further information on the development of sales revenue by region can be found in the table on page 250 of the Notes.

Sales Revenue and Order Intake

€ in millions	2024	2023	Δ in % reported	Δ in % const. FX
Sales revenue	2,780.0	2,775.5	0.2	0.6
Order intake	2,781.6	2,476.1	12.3	12.9

Costs and Earnings

In the reporting year, cost of sales was €1,573.3million, slightly above the previous year's level (+2.1%). 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 56.6% compared to 55.5% in the previous year.

Selling and distribution costs rose to €479.8million (previous year: €448.9million), while the ratio of these costs to sales revenue increased year-on-year to 17.3% (previous year: 16.2%). Research and development expenses increased by 11.3% to €144.1million 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 (ratio of R&D expenses to sales revenue) was 5.2% (previous year: 4.7%). General administrative expenses remained largely constant at €168.7million (+1.0%); the administrative expense ratio (ratio of administrative expense to sales revenue) amounted to 6.1% in 2024 (previous year: 6.0%). 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 –€43.6million in 2024 after –€39.1million in the previous year and includes net income of €5.0million (previous year: net expenses of €6.8million) from valuation effects and the realization of currency hedges.

This resulted in a decline in earnings before interest and taxes (EBIT) of 17.6% to €370.6million compared to the previous year; the corresponding margin was 13.3% (previous year: 16.2%). This development reflects the higher amortization resulting from the full-year consolidation of Polyplus as well as the increase in extraordinary items to –€106.7million (previous year: –€99.1million). 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 -€151.3million in 2024, compared to -€47.6million in the previous year. The previous year's result was influenced by non-cash-effective income of €71.5million, 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 €1.6million. After adjustment for this factor, net financing costs increased to -€152.9million (previous year: -€119.0million), which is mainly due to higher interest payments compared to the previous year.

In the reporting year, tax expenses amounted to €40.7million (previous year: €89.2million). In relation to the reported earnings before taxes, the tax rate was 18.6% (previous year: 22.2%).

Net result fell by 42.9% to €178.5million (previous year: €312.7million), and the net result attributable to shareholders of Sartorius Stedim Biotech S.A. declined by 43.6% to €175.1million (previous year: €310.3million).

Statement of Profit or Loss

€ in millions	2024	2023	Δ in %
Sales revenue	2,780.0	2,775.5	0.2
Cost of sales	-1,573.3	-1,541.5	-2.1
Gross profit on sales	1,206.7	1,234.0	-2.2
Selling and distribution costs	-479.8	-448.9	-6.9
Research and development costs	-144.1	-129.5	-11.3
General administrative expenses	-168.7	-167.1	-1.0
Other operating income and expenses	-43.6	-39.1	-11.4
Earnings before interest and taxes (EBIT)	370.6	449.5	-17.6
Financial income	45.4	94.4	-51.9
Financial expenses	-196.7	-141.9	-38.6
Financial result	-151.3	-47.6	n.m.
Profit before tax	219.2	401.9	-45.5
Income taxes	-40.7	-89.2	54.3
Net result	178.5	312.7	-42.9
Attributable to:			
Equity holders of SSB S.A.	175.1	310.3	-43.6
Non-controlling interest	3.4	2.4	41.4

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

Earnings

The Sartorius Stedim Biotech Group uses EBITDA - earnings before interest, taxes, depreciation, and amortization - as its key profitability indicator. To provide a complete and transparent picture of the Group's profitability, also in an international comparison, earnings are adjusted for extraordinary items (underlying EBITDA). For more information about definitions, please refer to the Glossary on page 344.

Reconciliation Between EBIT and Underlying EBITDA

€ in millions	2024	2023
EBIT	370.6	449.5
Extraordinary items	106.7	99.1
Depreciation and amortization	301.7	236.8
Underlying EBITDA	779.0	785.4

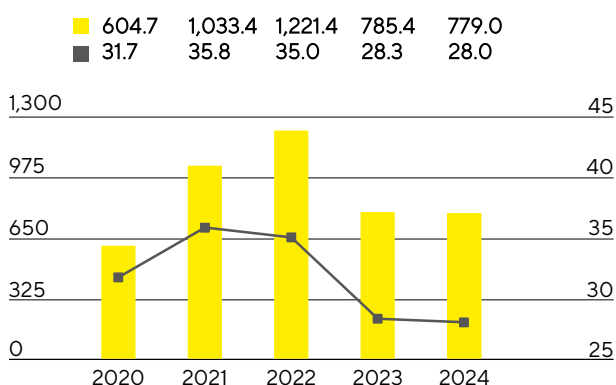
The previous year's figures have been revised due to finalization of the purchase price allocation for Polyplus.

Extraordinary Items

€ in millions	2024	2023
Efficiency measures	-96.3	-74.2
M&A projects Integration costs	-7.8	-21.1
Other	-2.6	-3.8
Group	-106.7	-99.1

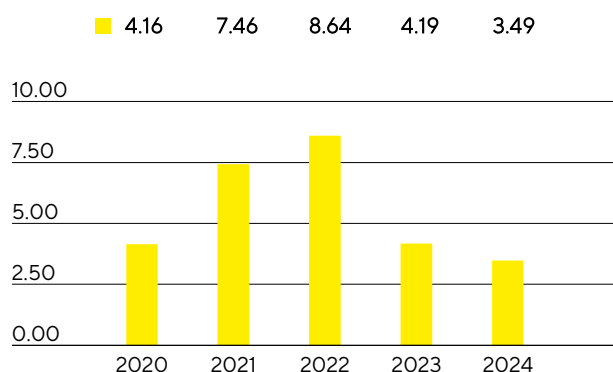
At €779.0million, underlying EBITDA in the reporting year came in slightly below the prior year's level of €785.4million. The resulting margin was 28.0% (previous year: 28.3%) and thus remained at a high level. The dampening effect of the planned reduction of own inventories and the associated lower capacity utilization was offset by positive contributions from the efficiency program.

Underlying EBITDA¹ and Margin



■ Underlying EBITDA in millions of €
 ■ Underlying EBITDA margin in %

Underlying Earnings per Share² in €



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

² Profit for the period after non-controlling interest, adjusted for extraordinary items and amortization, as well as based on the normalized financial result and the normalized tax rate.

The underlying net result after non-controlling interest for the Group declined from €385.9 million in 2023 to €337.5 million in fiscal 2024. This figure forms the basis for profit appropriation and is calculated by adjusting for extraordinary items, excluding amortization of €116.7 million (previous year: €90.3 million), and is based on a normalized financial result and normalized tax rate (see Glossary). Underlying earnings per share decreased by 16.7% from €4.19 a year earlier to €3.49.

€ in millions	2024	2023 ¹
EBIT (operating result)	370.6	449.5
Extraordinary items	106.7	99.1
Amortization IFRS 3	116.7	90.3
Normalized financial result²	-133.2	-114.1
Normalized income tax (26%) ³	-119.8	-136.4
Underlying net result	340.9	388.3
Non-controlling interest	-3.4	-2.4
Underlying net result after non-controlling interest	337.5	385.9
Underlying earnings per share (in €)	3.49	4.19

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

2 Financial result excluding fair value adjustments of hedging instruments and currency effects relating to financing activities and change in valuation of earn-out liability.

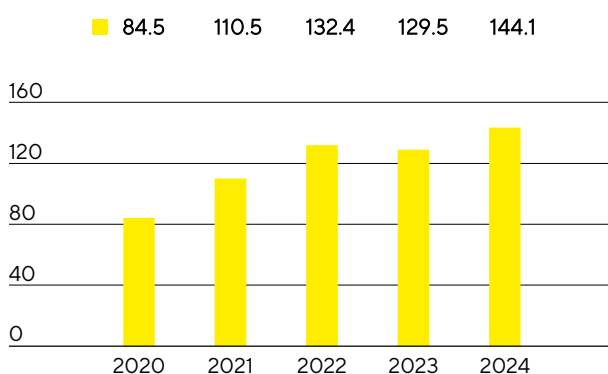
3 Normalized income tax based on the underlying profit before taxes and amortization.

See Glossary on page 344 for the definitions of the totals listed above.

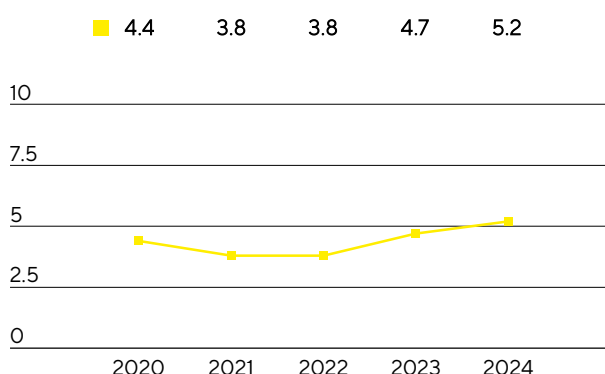
Research and Development

Sartorius Stedim Biotech expands its existing product groups through continuous innovations and further developments, while also enhancing its product portfolio by integrating new technologies and through cooperations. In 2024, the Group spent €144.1 million for research and development (R&D), corresponding to an increase of 11.3% compared to the previous year's investment of €129.5 million. The ratio of R&D expenses to sales revenues was 5.2% (previous year: 4.7%). The gross R&D ratio of 8.0% was above the prior-year ratio of 7.4%; this ratio is even more meaningful for the assessment of innovation-related expenses and includes capitalized development costs of €79.6 million (previous year: €75.4 million) that are disclosed in the statement of financial position.

Research and Development Costs
€ in millions



Research and Development Ratio
in % of sales revenue



To protect know-how, Sartorius Stedim Biotech pursues a targeted intellectual and industrial property rights policy. The company systematically monitors compliance with these rights and reviews from a cost-benefit viewpoint whether it is necessary to continue to maintain individual rights.

The number of applications for intellectual property rights filed in 2024 totaled 158 compared with 216 in the previous year. As a result of the applications submitted in the past years, the company was issued 351 patents and trademarks (previous year: 307). As of the balance sheet date, there was a total of 5,398 patents and trademarks in the portfolio (previous year: 4,913).

	2024	2023
Number of patent and trademark applications	158	216
Registered patents and trademarks	351	307

Capital Expenditures

In the reporting year, Sartorius Stedim Biotech continued its multiyear investment program, which, in addition to expanding research and production capacities, is aimed at further diversifying the production network and make it more flexible. The pace of implementation of individual measures was adjusted in line with the development of demand and the overall time frame was extended. At €339.8million, capital expenditures in 2024 were significantly below the previous year's figure of €473.6million, and the corresponding ratio of capital expenditures (Capex) to sales revenue decreased to 12.2% (previous year: 17.1%).

The production expansion for sterile disposable bags together with the build-up of an extended warehouse at the Aubagne site in France was among the larger projects in the reporting year.

In Goettingen, Germany, the expansion of membrane and filter manufacturing capacity continued, and additional laboratory space for product development was put into operation.

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, the new location, situated in the heart of a biopharma park, is planned to include a technology center for customer consulting and product demonstrations, as well as laboratory space.

Sartorius Stedim Biotech primarily finances its investment program through operational cash flows and available cash.

Capital Expenditures

in millions of € unless otherwise specified	2024	2023
Sales revenue	2,780.0	2,775.5
Capital expenditures	339.8	473.6
Capital expenditures as % of sales revenue	12.2	17.1

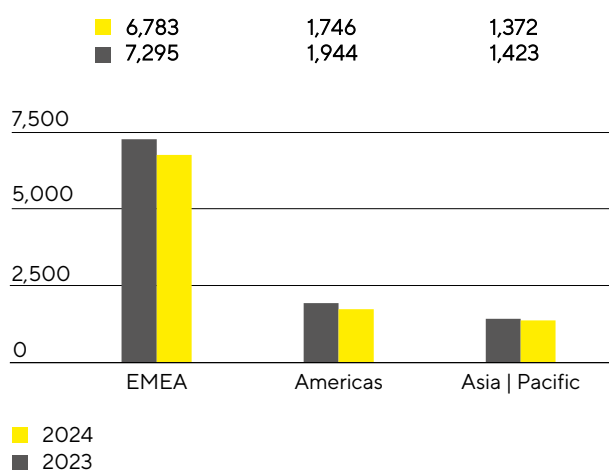
Employees

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

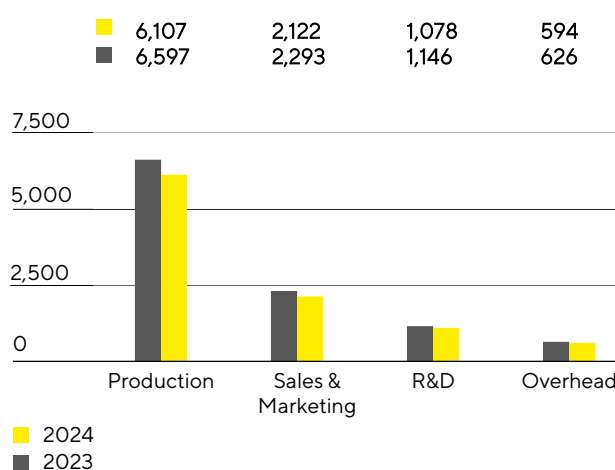
The following employee figures include all employees of the Sartorius Stedim Biotech, except for vocational trainees, interns, permanently absent employees, and employees in partial retirement. Employee figures are shown as headcount and not as full-time equivalents.

[ESRS 2 SBM-1.40 a) iii.] As of December 31, 2024, Sartorius Stedim Biotech had a total of 9,901 employees in 29 countries worldwide. This was 761 employees or 7.1% less than on December 31, 2023. The reduction resulted primarily from the expiry of fixed-term employment contracts and regular attrition.

Employees by Region



Employees by Function



[ESRS 2 SBM-1.40 a) iii.] The number of employees in the EMEA region fell by 7.0% in 2024 versus December 2023, taking the figure to 6,783. In France, Sartorius Stedim Biotech had 1,409 employees at the end of the reporting year, which corresponds to 14.2% of the total workforce.

In the Americas, Sartorius Stedim Biotech had 1,746 employees as of December 31, 2024, representing a decrease of 10.2%. The number of employees in the Asia | Pacific region fell by 3.6% to 1,372.

At the end of 2024, approximately 62% of all Sartorius Stedim Biotech employees worked in production. Headcount decreased by 7.4% year over year to 6,107.

At the end of the year, 2,122 people were employed in marketing and sales, representing a decrease of 7.5% and a share of around 21% of the total workforce.

Almost 11% of all employees worked in R&D. This corresponded to a year-on-year decrease of 5.9%, bringing the total number of employees to 1,078.

As of the reporting date, 594 people worked in administrative positions. This corresponds to a decrease of 5.1% compared with the same date of the previous year and to 6% of all Sartorius Stedim Biotech employees.

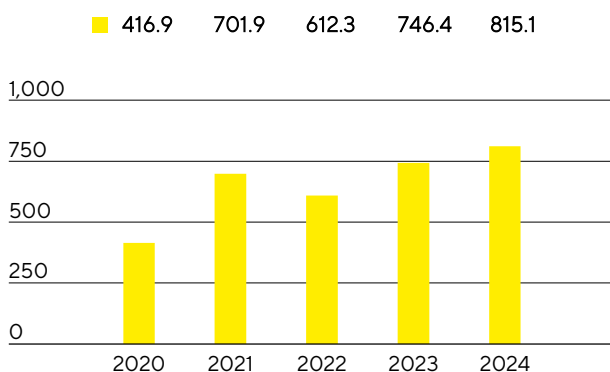
Further information on employees can be found in the Sustainability Statement starting on page 81.

2.5 Net Worth and Financial Position

Cash Flow

Cash flow from operating activities rose by 9.2% to €815.1million in 2024 (previous year: €746.4million). In addition to the development of earnings, this reflects the particular focus on working capital¹ optimisation.

Net Cash Flow from Operating Activities
€ in millions



Based on fundamentally intact growth drivers in the end markets and its medium-term growth targets, Sartorius Stedim Biotech continued its multiyear investment program, although the timing of certain expansion projects has been partially adjusted to take into account the respective demand situation. Cash outflows from investing activities decreased as expected by 29.4% to €340.0million (previous year: -€481.8million). As no acquisitions were made in 2024, the cash flow from investment activities and acquisitions was also -€340.0million, whereas the previous year's figure of -€2,722.7million was significantly impacted by acquisition-related expenses in connection with the purchase of Polyplus.

As a result of the successful capital increase in February 2024, cash flow from financing activities was €84.9million compared to €1,986.1million in the previous year. This also included dividend payments for the 2023 financial year in the amount of €68.0million (previous year: €133.9million). The majority of the proceeds from the capital increase of €1.2billion (see Notes, section 22) were used to repay loans with the parent company Sartorius AG and its affiliate Sartorius Finance B.V.

Cash Flow Statement

€ in millions	2024	2023
Cash flow from operating activities	815.1	746.4
- thereof change in net working capital	214.2	201.0
Cash flow from investing activities and acquisitions	-340.0	-2,722.7
Cash flow from financing activities	84.9	1,986.1
Cash and cash equivalents	678.9	116.6
Gross debt	2,869.5	3,681.8
Net debt	2,190.6	3,565.2

¹ Sum of inventories and trade receivables.

Consolidated Statement of Financial Position

The balance sheet total of the Sartorius Stedim Biotech Group increased by €526.4 million to €8,256.4 million at the end of fiscal 2024. The increase is largely due to the rise in non-current assets by €200.5 million to €6,515.4 million, mainly as a result of the increase in property, plant, and equipment due to the continuation of the multiyear investment program. At €1,741.0 million, current assets were also above the previous year's figure of €1,415.1 million, primarily driven by the increase in cash and cash equivalents as a result of the successful capital increase carried out at the beginning of February 2024, which generated net proceeds of €1.2 billion. In contrast, a significant reduction in inventories driven by focused working capital management led to a decrease in working capital to €950.8 million as of December 31, 2024 (previous year: €1,176.1 million).

Key Working Capital Figures

in days		2024	2023
Days inventories outstanding			
Inventories sales revenue ¹	x 360	89	113
Days sales outstanding			
Trade receivables sales revenue ¹	x 360	34	38
Days payables outstanding			
Trade payables and contract liabilities sales revenue ¹	x 360	68	64
Net working capital days			
Net working capital ² sales revenue ¹	x 360	55	87

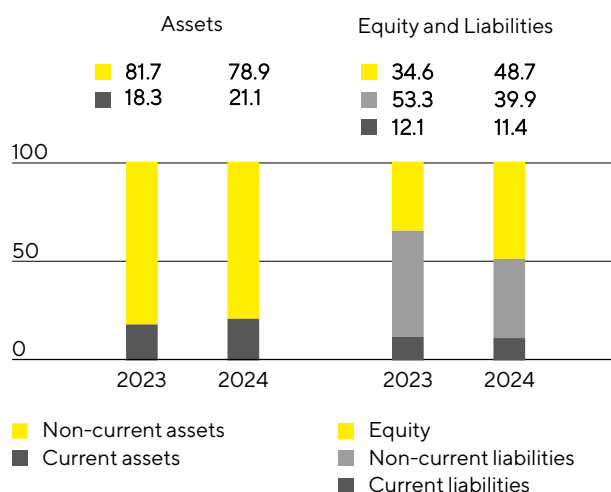
¹ Including pro forma sales from acquisitions in 2023.

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

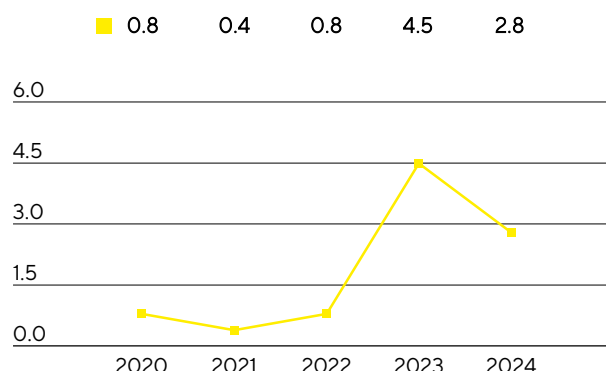
Particularly as a result of the aforementioned capital increase, equity grew by €1,350.0 million to €4,023.8 million as of year-end. The equity ratio, defined as the quotient of equity to the balance sheet total, rose to 48.7% (previous year: 34.6%).

The Group's non-current liabilities declined from €4,119.0 million to €3,293.8 million in the reporting year, mainly attributable to the prepayment of loans from the proceeds of the equity measure. Current liabilities increased slightly by €1.5 million to €938.8 million.

Balance Sheet Structure¹ in %



Ratio of Net Debt² to Underlying EBITDA³



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

² The net debt excludes the liability for the remaining purchase price for acquisitions; 2024: €79.6 million, 2023: €80.6 million, 2022: €245.1 million, 2021: €518.7 million, 2020: €127.8 million.

³ EBITDA includes underlying pro forma EBITDA contributed by acquisitions for this period.

Gross debt, mainly consisting of loans from the parent company Sartorius AG and its affiliate Sartorius Finance B.V., and lease liabilities, declined to €2,869.5 million as of December 31, 2024, compared to €3,681.8 million at the end of 2023. Net debt, defined as gross debt less cash and cash equivalents, was €2,190.6 million, compared to €3,565.2 million a year ago. This reduction was mainly driven by the capital increase and the associated repayment of loans as well as an increase in cash and cash equivalents.

In relation to the debt financing capacity of Sartorius Stedim Biotech, 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 2.8 (previous year: 4.5), following the capital increase and adjustments to the timing of certain expansion projects.

Calculation of Net Debt and Ratio of Net Debt to Underlying EBITDA

€ in millions	2024	2023
Non-current		
Loans and borrowings	2,684.4	3,509.7
Lease liabilities	120.6	93.1
Current		
Loans and borrowings	39.5	57.7
Lease liabilities	25.0	21.4
Gross debt	2,869.5	3,681.8
Cash and cash equivalents	678.9	116.6
Net debt	2,190.6	3,565.2
Underlying EBITDA (12 months)	779.0	785.4
+ Pro forma EBITDA (12 months)	0.0	14.7
Pro forma Underlying EBITDA (12 months)	779.0	800.0
Ratio of net debt to underlying EBITDA	2.8	4.5

Financing|Treasury

Sartorius Stedim Biotech 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 (see Note 37 for details).

As of December 31, 2024, the company's financial flexibility is primarily supported by cash and cash equivalents totalling €678.9 million, along with a credit line of €260 million provided by the parent company Sartorius AG, of which €0.2 million have been utilized. The Group had access to short-term bilateral credit lines provided by banks until further notice at variable interest rates. These facilities totalled approximately €111 million and were not used to a material extent. Together, these resources ensure that Group entities have sufficient funds to cover any short-term financing requirements (see Note 41 for details).

Long-term funding instruments are mainly provided via loans by the parent company Sartorius AG and its affiliate Sartorius Finance B.V., an entity wholly owned and controlled by Sartorius AG. As at the reporting date, the outstanding loan agreements totaled €2.7 billion, all at fixed-interest rates, with a wide range of maturities extending up to 2035 (see Note 32 for details).

Corporate financing was supplemented in the reporting year through the completion of a capital increase with net proceeds of €1.2 billion. These funds were used to prepay several loans provided by Sartorius AG and its affiliate Sartorius Finance B.V. and to strengthen the liquidity position (see Note 22 for details).

Key financial risks include foreign exchange risks and interest rate risks. The company uses currency hedging transactions to mitigate effects of exchange rate fluctuations from its global business activities (see Note 39 for details). At year-end, there were foreign exchange contracts with a volume of around €419.8 million, with a negative market value of €15.5 million. There were no interest rate hedges as of the reporting date (see Note 40 for details).

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, the subdued demand persisted longer than expected, which was mainly due to the unforeseeable multiple corrections of target inventories on the customer side. Furthermore, customers across the industry continued to hold back on investments in 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 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 slightly above the previous year's level, with an increase in constant currencies by 0.6% to €2,780.0 million (reported: +0.2%), and in line with the adjusted forecast from July, whereas the original January forecast was not met. The corresponding underlying EBITDA margin of 28.0% was within the range published in July and correspondingly below the January forecast.

As planned, the ratio of net debt to underlying EBITDA fell to 2.8 in the reporting year and was therefore in line with the guidance issued in January and July.

At 12.2%, the ratio of capital expenditures 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
Sartorius Stedim Biotech Group					
				Sales revenue to remain at prior-year level, with a bandwidth of low single-digit negative to low single-digit positive sales development	
Sales growth ¹	-18.7%	Mid to high single-digit percentage range	Mid to high single-digit percentage range		0.6%
Underlying EBITDA margin in %	28.3%	Above 30%	Above 30%	27 to 29%	28.0%
Net debt to underlying EBITDA	4.5	~3.5 ²	slightly below 2.5 ²	2.5 ² to 3.0 ²	2.8
Capital expenditures as % of sales revenue	17.1%	~13.0%	~13.0%	~12.0%	12.2%

¹ In constant currencies.

² Possible acquisitions are not considered.

The July forecast for the Group was fully confirmed in the unaudited financial report the figures for the first nine months to the end of September 2024.