Consolidated Financial Statements and Notes

04

Statement of Profit or Loss and Other Comprehensive Income

€ in K	Notes	2021 12 months	2020 12 months
Sales revenue	[9]	2,886,977	1,910,081
Cost of sales	[10]	−1,333,974	−906,759
Gross profit on sales		1,553,003	1,003,323
Selling and distribution costs	[10]	−405,647	−296,047
Research and development costs	[10]	−110,491	−84,451
General administrative expenses	[10]	−126,117	−95,491
Other operating income and expenses	[11]	−45,327	−55,619
Earnings before interest and taxes (EBIT)		865,421	471,714
Financial income	[12]	22,293	27,014
Financial expenses	[12]	−240,994	−38,034
Financial result		−218,701	−11,020
Profit before tax		646,720	460,694
Income taxes	[13]	−232,411	−122,095
Net profit for the period		414,309	338,598
Attributable to:			
Equity holders of Sartorius Stedim Biotech		414,413	335,932
Non-controlling interest	[22]	−104	2,666
Earnings per share (€)	[15]	4.50	3.64
Diluted earnings per share (€)	[15]	4.50	3.64

The figures for the 2020 reporting period were restated due to the finalization of the purchase price allocations for the acquisitions of BIA Separations and WaterSep BioSeparations (see Note 8).

Other Comprehensive Income

€ in K	Notes	2021 12 months	2020 12 months
Net profit for the period		414,309	338,598
Cash flow hedges	[38]	−17,533	9,195
of which effective portion of changes in fair value		−12,614	2,684
of which reclassified to profit or loss		−4,919	6,511
Income tax on cash flow hedges	[19]	5,260	−2,759
Foreign currency translation differences		53,820	−35,265
Items that are or may be reclassified subsequently to profit or loss		41,547	−28,829
Remeasurements of the net defined benefit liabilities	[23]	2,232	−3,016
Income tax on remeasurements of the net defined benefits liabilities	[19]	−914	918
Items that will not be reclassified to profit or loss		1,318	−2,098
Other comprehensive income after tax		42,865	−30,927
Total comprehensive income		457,174	307,671
Attributable to:			
Equity holders of Sartorius Stedim Biotech		455,807	305,460
Non-controlling interest		1,367	2,211

The figures for the 2020 reporting period were restated due to the finalization of the purchase price allocations for the acquisitions of BIA Separations and WaterSep BioSeparations (see Note 8).

Statement of Financial Position

€ in K	Notes	Dec. 31, 2021	Dec. 31, 2020
Non-current assets			
Goodwill	[16]	820,702	725,148
Other intangible assets	[16]	684,417	571,882
Property, plant and equipment	[17][18]	928,413	644,272
Financial assets	[35]	14,769	13,497
Other assets		655	509
Deferred tax assets	[19]	46,513	27,481
		2,495,469	1,982,789
Current assets			
Inventories	[20]	782,954	471,034
Trade receivables	[29]	356,005	256,894
Other financial assets	[30]	15,006	20,983
Current tax assets		14,740	6,055
Other assets		63,298	59,217
Cash and cash equivalents	[28]	223,626	59,762
		1,455,629	873,945
Total assets		3,951,098	2,856,733
Equity			
Equity attributable to SSB S.A. shareholders		1,655,866	1,438,124
Issued capital	[21]	18,436	18,436
Capital reserves		231,526	231,526
Retained earnings (including net profit)		1,405,904	1,188,162
Non-controlling interest	[22]	77,361	22,876
		1,733,228	1,461,000
Non-current liabilities			
Pension provisions	[23]	43,670	47,393
Other provisions	[24]	7,714	6,488
Loans and borrowings	[31]	521,072	515,657
Lease liabilities	[18]	64,000	47,463
Other financial liabilities	[32]	418,466	125,816
Deferred tax liabilities	[19]	125,830	85,076
		1,180,752	827,893
Current liabilities			
Provisions	[24]	30,949	20,746
Trade payables	[33]	471,155	306,972
Loans and borrowings	[31]	25,505	13,112
Lease liabilities	[18]	14,939	10,875
Other financial liabilities	[34]	147,274	29,241
Employee benefits	[25]	97,159	59,899
Current tax liabilities		165,026	71,524
Other liabilities		85,111	55,472
		1,037,119	567,840
Total equity and liabilities		3,951,098	2,856,733

The figures for the 2020 reporting period were restated due to the finalization of the purchase price allocations for the acquisitions of BIA Separations and WaterSep BioSeparations (see Note 8).

Statement of Cash Flows

€ in K	Notes	2021 12 months	2020 12 months
Profit before tax		646,720	460,694
Financial result	[12]	218,701	11,020
Depreciation | amortization of fixed assets	[16][17][18]	141,556	101,687
Gains from the disposal of fixed assets		0	127
Change in provisions	[23][24]	6,716	3,447
Change in receivables and other assets	[29][30]	–87,330	–73,889
Change in inventories	[20]	–275,402	–116,617
Change in liabilities (excl. loans and borrowings)	[25][32][33][34]	210,261	143,463
Income taxes paid	[13]	–166,643	–113,980
Other non-cash items		1,393	926
Cash flow from operating activities		695,971	416,878
Capital expenditures	[16][17]	–323,987	–159,192
Other payments		431	8,694
Cash flow from investing activities		–323,556	–150,499
Payments for acquisitions of consolidated subsidiaries and other business operations; net of cash acquired	[8]	–141,671	–470,617
Cash flow from investing activities and acquisitions		–465,226	–621,116
Interest received	[12]	5,949	5,271
Interest paid and other financial charges	[12]	–8,258	–8,064
Dividends paid to:			
- Shareholders of Sartorius Stedim Biotech S.A.	[21]	–62,683	–31,341
- Non-controlling interest		–1,117	–792
Changes in non-controlling interest	[22]	–134	–30,473
Loans and borrowings repaid	[6][31]	–79,707	–35,322
Loans and borrowings raised	[6][31]	74,239	334,788
Cash flow from financing activities		–71,711	234,066
Net increase | decrease in cash and cash equivalents		159,033	29,829
Cash and cash equivalents at the beginning of the period		59,762	28,166
Currency translation effects on cash and cash equivalents		4,831	1,767
Cash and cash equivalents at the end of the period		223,626	59,762

The figures for the 2020 reporting period were restated due to the finalization of the purchase price allocations for the acquisitions of BIA Separations and WaterSep BioSeparations (see Note 8).

The Notes to the Consolidated Financial Statements are an integral part of these statements.

Statement of Changes in Equity

€ in K	Issued capital	Capital reserves	Hedging reserves	Pension reserves	Retained earnings	Foreign currency translation reserves	Group equity	Non-controlling interest	Total equity
Balance at Jan. 1, 2020	18,436	231,526	1,154	−16,482	899,396	24,689	1,158,719	30,164	1,188,883
Net profit for the period	0	0	0	0	335,932	0	335,932	2,666	338,598
Cash flow hedges	0	0	9,195	0	0	0	9,195	0	9,195
Remeasurements of the net defined benefit liabilities	0	0	0	−3,016	0	0	−3,016	0	−3,016
Foreign currency translation differences	0	0	0	0	0	−34,810	−34,810	−455	−35,265
Deferred taxes	0	0	−2,759	918	0	0	−1,841	0	−1,841
Other comprehensive income for the period	0	0	6,436	−2,098	0	−34,810	−30,472	−455	−30,927
Total comprehensive income	0	0	6,436	−2,098	335,932	−34,810	305,460	2,211	307,671
Dividends					−31,341		−31,341	−792	−32,133
Purchase price liability Israel					19,800		19,800	0	19,800
Changes in non-controlling interest					−14,732		−14,732	−8,603	−23,334
Other changes					218		218	−104	114
Balance at Dec. 31, 2020	18,436	231,526	7,590	−18,580	1,209,274	−10,121	1,438,124	22,875	1,461,000
Net profit for the period	0	0	0	0	414,413	0	414,413	−104	414,309
Cash flow hedges	0	0	−17,533	0	0	0	−17,533	0	−17,533
Remeasurements of the net defined benefit liabilities	0	0	0	2,232	0	0	2,232	0	2,232
Foreign currency translation differences	0	0	0	0	0	52,349	52,349	1,471	53,820
Deferred taxes	0	0	5,260	−914	0	0	4,346	0	4,346
Other comprehensive income for the period	0	0	−12,273	1,318	0	52,349	41,394	1,471	42,865
Total comprehensive income	0	0	−12,273	1,318	414,413	52,349	455,807	1,367	457,174
Dividends					−62,683		−62,683	−1,117	−63,800
Purchase price liability (CellGenix/BI Israel)					−176,517		−176,517	0	−176,517
Changes in non-controlling interest					0		0	54,414	54,415
Other changes					1,135		1,135	−178	957
Balance at December 31, 2021	18,436	231,526	−4,683	−17,262	1,385,622	42,228	1,655,867	77,361	1,733,228

The figures for the 2020 reporting period were restated due to the finalization of the purchase price allocations for the acquisitions of BIA Separations and WaterSep BioSeparations (see Note 8).

Notes to the Financial Statements

1. General Information

Sartorius Stedim Biotech is a leading international partner of the biopharmaceutical industry. As a total solutions provider, the Group helps its customers to manufacture biotech medications safely, rapidly and economically. With its own manufacturing and R&D sites in Europe, North America and Asia and an international network of sales companies, Sartorius Stedim Biotech has a global reach.

Headquartered in Aubagne, France, Sartorius Stedim Biotech S.A. is listed on the Euronext Paris (ISIN code: FR0013154002).

Sartorius Stedim Biotech S.A.'s ultimate parent company is Sartorius AG that is headquartered in Goettingen, Germany, and is listed at several German stock exchanges (ISIN codes: DE0007165607 for ordinary shares; DE0007165631 for preference shares).

In compliance with the European Regulation 1606/2002 of July 19, 2002, which requires listed companies to use International Accounting Standards, the consolidated financial statements of the Sartorius Stedim Biotech Group for the year ended December 31, 2021, are compliant with the IFRS and IFRIC Standards and Interpretations of the IASB as adopted by the European Union, which are available at the following website:

https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting_fr

The consolidated financial statements are prepared in euros. Unless otherwise specified, all amounts are disclosed in thousands of euros (abbreviated as € in K). In some cases, the sums of the figures given in this report may not precisely equal the stated totals and percentages may not be exact due to rounding. In several Notes, the comparative information reported for the prior 2020 reporting period were restated as necessary to reflect the finalization of the purchase price allocations for the acquisitons of WaterSep BioSeparations and BIA Separations in 2020 (see Note 8 for details).

These consolidated financial statements were approved by the Board of Directors on February 9, 2022 and will be submitted for approval by the Annual General Shareholders' Meeting on March 29, 2022.

2. Effects of New Financial Reporting Standards

The following new accounting rules were applicable for the first time to the present consolidated financial statements of the Group but did not have a material effect on these financial statements:

- Amendments to IFRS 9, Financial Instruments; IAS 39, Financial Instruments: Recognition and Measurement; IFRS 7, Financial Instruments: Disclosures; IFRS 4, Insurance Contracts; and IFRS 16, Leases, Interest Rate Benchmark Reform (Phase 2)

The amendments concern modifications of financial assets, financial liabilities and lease liabilities as well as hedge accounting and disclosure requirements according to IFRS 7, which relate to the impact of the IBOR reform. The Group is not materially impacted by the IBOR reform.

- Amendments to IFRS 4, Insurance Contracts – deferral of IFRS 9

The amendments are relevant to insurance companies that do not yet apply IFRS 9. Therefore, they did not impact the Group's consolidated financial statements.

- Amendment to IFRS 16, Leases, regarding Covid-19-related rent concessions after June 30, 2021

The amendment extends the application period of the exemption from assessing whether a Covid-19-related debt concession needs to be considered by a lessee as a lease modification under IFRS 16. As a result, the relief is applicable to lease payments that were originally due by June 30, 2022. The rent concession therefore does not need to be accounted for as a lease modification. This is a voluntary early application without any impact on the Group's consolidated financial statements.

The following standards, interpretations and amendments were not yet applied to the consolidated financial statements of the reporting year as they had not yet been adopted by the EU, or their application was not mandatory for 2021:

Standard | Interpretation	Title	Applicable for financial years from[1]	Endorsement by the EU Commission
IFRS 14	Regulatory Deferral Accounts	January 1, 2016	No
Amendments to IFRS 3, IAS 16 and IAS 37 and amendments to IFRS 1, IFRS 9, IAS 41, and IFRS 16	Minor changes and Annual Improvements to IFRSs 2018-2020 Cycle (issued in May 2020)	January 1, 2022	Yes
Amendments to IFRS 8	Definition of Accounting Estimates	January 1, 2023	No
Amendments to IAS 1 and IFRS Practice Statement 2	Disclosure of Accounting Policies	January 1, 2023	No
Amendments to IAS 1	Classification of Liabilities as Current or Non-Current	January 1, 2023	No
Amendments to IAS 12	Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction	January 1, 2023	No
IFRS 17	Insurance Contracts	January 1, 2023	Yes
Amendments to IFRS 17	Initial Application of IFRS 17 and IFRS 9 – Comparative Information	January 1, 2023	No
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture	n/a	No

1 These are required to be applied once they are endorsed by the EU Commission. The dates mentioned above are those required by the Standards themselves (IASB effective dates).

To date, the Group does not expect the changes to have a material impact on its consolidated financial statements.

3. Significant Accounting Policies

Significant accounting policies are described in the Notes in which the respective positions of the consolidated financial statements are further explained if they related to specific items. Significant general accounting policies are described below.

Basis of Preparation

The consolidated financial statements of the Group are based on the principle of the historical cost of acquisition, construction, or production, with the exception of the items carried at fair value, such as derivative financial instruments.

Foreign Currency Transactions

The presentation currency of the consolidated financial statements of the Sartorius Stedim Biotech Group is the euro (financial statements presented in thousands of euros). In the financial statements of each company, transactions denominated in foreign currencies have been translated into the functional currency of the subsidiary at the exchange rate applicable on the date of the transaction. Monetary assets and liabilities denominated in a foreign currency have been translated at the exchange rate on the balance sheet date. Exchange rate gains and losses have been recognized in profit or loss for the period.

Translation of Financial Statements Prepared in Foreign Currencies

Subsidiaries' financial statements prepared in foreign currencies are translated pursuant to IAS 21, The Effects of Changes in Foreign Exchange Rates, in accordance with the concept of a functional currency. Foreign subsidiaries are regarded as independent subdivisions of the Sartorius Stedim Biotech Group. The assets (including goodwill) and liabilities of the entities that have a functional currency different from the presentation currency are translated at the exchange rate prevailing at the balance sheet date. The incomes, expenses, and cash flows of these entities are translated using the average rate for the year to the extent that this rate represents an approximate value of exchange rates used as of the date of the transaction in the absence of significant fluctuations. Resulting translation differences are recognized in other comprehensive income.

For long-term loans for which settlement is neither planned nor likely in the foreseeable future, the Group applies the principle of "net investment in a foreign operation." Exchange differences resulting from these loans are recognized in other comprehensive income in accordance with IAS 21.32.

The exchange rates for major currencies against the euro were considered as follows:

	Year-end exchange rates		Average exchange rates	
For €1	2021	2020	2021	2020
USD	1.13245	1.22785	1.18270	1.14196
GBP	0.83902	0.89808	0.85972	0.88951
JPY	130.36000	126.52000	129.87475	121.80849
CHF	1.03336	1.08198	1.08106	1.07042
SGD	1.52820	1.62260	1.58913	1.57408
KRW	1347.69000	1334.08000	1353.74171	1345.63574
CNY	7.18870	8.03140	7.62740	7.87300

4. Use of Judgments and Estimates

During the preparation of consolidated financial statements, management uses estimates and assumptions based on its best knowledge of the current and future situation. However, actual results may differ from these estimates. These estimates and assumptions are revised on a regular basis, and the impact of changes in estimates is recognized prospectively.

In addition, Group management exercises its judgment in defining the accounting treatment of specific transactions when the existing Standards and Interpretations do not specifically treat the accounting problems concerned.

Significant judgments and estimates are especially relevant to the business combinations that are described in Note 8 including the contingent consideration liabilities, the values of which are volatile due to their measurement at fair value at each reporting date.

Other significant judgments and estimates are described in the Notes which provide explanations on the positions of the consolidated financial statements if they relate to specific items. The general assumptions and estimates primarily concern the following topics:

Covid-19 Pandemic Crisis

In 2021, the Group again achieved substantial revenue growth and observed strong demand across all product categories in line with the assumption that our industry and our customers have not been seriously impacted by the Covid-19 pandemic crisis. Furthermore, despite partially strained supply chains and relatively long delivery times, the Group did not experience significant difficulties on the supply side so that business continuity has been ensured. For the 2021 reporting period, it can therefore be concluded that the Group has benefitted to some extent from the crisis as many of our customers produced coronavirus vaccines and Covid-19 therapeutics and continued to build up production capacities for this purpose. Therefore, no material adjustments were made to the relevant accounting estimates in the reporting period. Management has observed, however, that the general uncertainty remains at a high level as a result of the Covid-19 pandemic crisis. For further information about the impact of the Covid-19 pandemic on the global economy, the biopharma industry, and the Group, please refer to the Group Management Report for 2021.

Impairment of Assets

The carrying amounts of property, plant and equipment and of intangible assets, including goodwill, are subject to impairment testing if there is an indication of impairment and at least once a year for intangible assets that have an indefinite useful life or are not yet available for use in accordance with IAS 36, Impairment of Assets. When an asset is tested, the recoverable amount of the asset is estimated. The recoverable amount of an asset or a cash-generating unit (CGU) is the higher of its fair value – less costs of disposal of the asset or CGU – and its value in use. If the individual asset’s recoverable amount cannot be estimated, the recoverable amount of the asset’s CGU is estimated.

If the estimated recoverable amount of an asset (or a CGU) goes below its carrying amount, this carrying amount is reduced to the recoverable amount (impairment loss allocated in priority to goodwill). If the causes of the asset impairment no longer apply, the carrying amount of the asset (or the CGU) is increased to the newly estimated recoverable amount (except for goodwill). However, the value increase is limited to the value that the asset (or CGU) would have had if no asset impairment loss had been recognized in previous fiscal years.

The calculation of the value in use is generally based on discounted cash flow methods using cash flow projections of up to five years. These projections take into account past experience and represent management's best estimate about future sales revenue and cost developments. Cash flows after the planning period are extrapolated using individual growth rates. Key assumptions on which management has based its determination of the value in use include estimated growth rates, weighted average cost of capital, and tax rates. These estimates can have a material impact on the respective values and, ultimately, the amount of any impairment.

Fair Value Measurement

A number of the Group’s accounting policies and disclosures may require the measurement of fair values, for both financial and non-financial assets and liabilities, including Level 3 fair values (unobservable inputs).

If third-party information, such as broker quotes or pricing services, is used to measure fair values, then management assesses the evidence obtained from the third parties to support the conclusion that these valuations meet the requirements of IFRS, including the level in the fair value hierarchy in which the valuations need to be classified.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. If the inputs used to measure the fair value of an asset or a liability fall into different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety at the same level of the fair value hierarchy as the lowest level input that is significant for the entire measurement.

5. Operating Segments

According to IFRS 8, Operating Segments, the identification of reportable operating segments is based on the "management approach"; i.e., the segments are defined analogously to the internal financial reporting of an entity. Therefore, an area of activity is to be considered an operating segment if its business activities may result in revenues and expenses, its operating results are regularly reviewed by the entity's chief operating decision maker (= the executive members of the Board of Directors) and discrete financial information is available in its internal reporting. Internal control and reporting within Sartorius Stedim Biotech is based on the approach of operating as a "total solutions provider" for its customers. Accordingly, there is only one single segment to be identified for Sartorius Stedim Biotech, driven by the product and customer perspective: Biopharm.

The key performance indicator of the operating segment of the Sartorius Stedim Biotech Group is so-called "underlying EBITDA," as the Board monitors this performance measure at a consolidated level and believes this measure is relevant for an understanding of the Group's financial performance.

EBITDA corresponds to earnings before interest, taxes, depreciation, and amortization; "underlying EBITDA" means EBITDA adjusted for extraordinary items. Extraordinary items are expenses and income in connection with acquisitions, restructuring activities, large Group projects, and gains or losses from the disposal of fixed assets and investments that distort the sustainable profitability of the segment.

Underlying EBITDA is not a defined performance measure in IFRS. The Group's definition of underlying EBITDA may not be comparable to similarly named performance measures and disclosures by other entities.

Segment assets and segment liabilities are not reported on a regular basis to the chief operating decision maker and are therefore not part of the segment report.

			Biopharm			Group
€ in K	2021	2020	Change	2021	2020	Change
Sales revenue	2,886,977	1,910,081	51%	2,886,977	1,910,081	51%
Underlying EBITDA	1,033,411	604,671	71%	1,033,411	604,671	71%
as a % of sales revenue	35.8%	31.7%		35.8%	31.7%	
EBIT	865,421	471,714	83%	865,421	471,714	83%
as a % of sales revenue	30.0%	24.7%		30.0%	24.7%	

Reconciliation of Segment Profit or Loss:

€ in K	2021	2020
Underlying EBITDA of the segment	1,033,411	604,671
Depreciation and amortization	–141,539	–100,297
Extraordinary effects	–26,451	–32,660
EBIT	865,421	471,714
Financial result	–218,701	–11,020
Profit before tax	646,720	460,694

Supplementary Information by Region

To provide additional information required by IFRS 8, the table below presents supplementary information by geographical region. The key figures for non-current assets of the geographical areas refer to the company location, whereas sales revenue is reported according to the customers' location.

The non-current assets are property, plant and equipment as well as intangible assets (including goodwill).

As in the prior reporting period, the amount of sales revenue with a single customer does not exceed 5% of consolidated sales revenue in the reporting period 2021.

	Sales revenue		Non-current assets	
€ in K	2021	2020	2021	2020
EMEA	1,199,273	761,022	2,053,614	1,630,168
Of which Germany	274,394	171,815	821,473	448,884
Of which France	95,734	70,941	396,215	388,413
Americas	945,998	670,185	319,356	265,225
Of which USA	895,289	636,770	319,356	265,225
Asia | Pacific	741,707	478,874	60,562	45,909
Of which China	303,606	180,308	25,149	14,243
Of which South Korea	140,007	116,732	14,503	13,580
Group	2,886,977	1,910,081	2,433,532	1,941,302

6. Statement of Cash Flows

The statement of cash flows shows the impact of cash inflows and outflows on the cash and cash equivalents of the Group. Cash flows are classified by operating, investing, and financing activities according to IAS 7 (Statement of Cash Flows).

In this context, cash equivalents are assets that can be converted into cash within a short maturity, generally less than three months. The amount considered in the statement of cash flows is equal to the amount of cash and cash equivalents in the statement of financial position.

The following table summarizes the development of the liabilities arising from financing activities during the reporting period:

€ in K	Balance at Dec. 31, 2019	Cash flows	Currency effects	Other non-cash changes	Balance at Dec. 31, 2020
Loans and borrowings	83,544	310,680	−25	134,568	528,768
Lease liabilities	55,056	−11,213	−1,836	16,330	58,337
Liability for acquisition of non-controlling interests	61,010	0	0	−19,504	41,506
Contingent considerations from acquisitions	0	0	−10	712	702
Total financial liabilities from financing activities	199,610	299,467	−1,870	132,105	629,313

€ in K	Balance at Dec. 31, 2020	Cash flows	Currency effects	Other non-cash changes	Balance at Dec. 31, 2021
Loans and borrowings	528,768	8,116	106	9,587	546,577
Lease liabilities	58,337	–13,585	2,890	31,298	78,940
Liability for acquisition of non-controlling interests	41,506	0	0	176,517	218,023
Contingent considerations from acquisitions	702	0	136	3,760	4,598
Total financial liabilities from financing activities	629,313	–5,469	3,131	221,162	848,137

7. Scope of Consolidation

The consolidated financial statements of the Sartorius Stedim Biotech Group include the annual financial statements of all companies, which are controlled directly or indirectly by Sartorius Stedim Biotech S.A. Under IFRS 10, Consolidated Financial Statements, the Sartorius Stedim Biotech Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Such entities are included in the consolidated financial statements from the time when Sartorius Stedim Biotech S.A. or its subsidiaries obtain such control until the date on which control ceases. Subsidiaries are included on the basis of their annual financial statements for the same reporting period as the parent company, using uniform Group recognition and measurement methods. All intragroup assets and liabilities, equity, income, expenses, and cash flows relating to transactions between members of the Group are eliminated on consolidation.

The 2021 financial statements of the following entities:

- Metreon Bioproducts GmbH, Freiburg, Germany
- CellGenix Inc., Wilmington, Delaware, USA
- Beit Haemek Import and Marketing Agricultural Cooperative Society Ltd., Israel

were not included in the scope of consolidation because their figures were of minor importance for assessing the financial position of the Group. The sales revenue and total assets of the non-consolidated companies were below 1% of the Group figures.

The following entities were included in the scope of consolidation for the first time in the reporting period:

- Sartorius CellGenix GmbH, Freiburg, Germany
- Xell AG, Bielefeld, Germany
- Sartorius Korea Operations LLC, Seoul, South Korea

The shares in CellGenix GmbH were acquired on July 1, 2021. The entity was renamed to Sartorius CellGenix GmbH in the reporting period. Xell AG was acquired on July 28, 2021. See Note 8 for details on these acquisitions.

Sartorius South Korea Operations LLC was established in 2021 and has been strengthening the Group's production network with a site in South Korea.

The Group does not apply the equity method to its investments in Distribo GmbH, Germany (ownership interest of the Group: 26%), or to Sartorius Israel Ltd., Israel (51%), for materiality reasons. Sartorius Israel Ltd. is an associate of the Group as the Group neither controls nor jointly controls this entity due to contractual agreements.

The financial statements of the following companies are included in the Group financial statements. All of these entities are fully consolidated. The ownership percentage equals the share of voting rights:

	Ownership in %
EMEA	
Sartorius Stedim Biotech S.A., Aubagne, France	Parent company
Sartorius Stedim Belgium N.V., Brussels, Belgium	100
Sartorius Stedim Nordic Oy, Helsinki, Finland	100
Xell AG, Bielefeld, Germany	100
Sartorius CellGenix GmbH, Freiburg, Germany	51
Sartorius Stedim Biotech GmbH, Göttingen, Germany	100
Sartorius Stedim Plastics GmbH, Göttingen, Germany	100
Sartorius Stedim North America Holding GmbH, Göttingen, Germany	100
Sartorius Stedim Systems GmbH, Guxhagen, Germany	100
Sartorius Stedim Cellca GmbH, Ulm, Germany	100
Sartorius Stedim UK Ltd., Epsom, UK	100
Sartorius Stedim BioOutsource Ltd., Glasgow, UK	100
Sartorius Stedim Lab Ltd., Stonehouse, UK	100
Sartorius Stedim Chromatography Systems Ltd., Royston, UK	100
TAP Biosystems Group Ltd., Royston, UK	100
The Automation Partnership Cambridge Ltd., Royston, UK	100
Sartorius Stedim FMT S.A.S., Aubagne, France	100
Sartorius Stedim France S.A.S., Aubagne, France	100
Sartorius Stedim Chromatography Resins S.A.S., Cergy, France	100
Sartorius Stedim Aseptics S.A.S., Lourdes, France	100
Sartorius Stedim Ireland Ltd., Dublin, Ireland	100
Biological Industries Israel Beit Haemek Ltd., Kibbutz Beit Haemek, Israel	70
Sartorius Stedim Italy S.r.l., Florence, Italy	100
Sartorius Stedim Netherlands B.V., Amersfoort, Netherlands	100
Sartorius Stedim Austria GmbH, Vienna, Austria	100
Sartorius Stedim Poland sp. z.o.o., Kostrzyn, Poland	100
LLC Sartorius Stedim RUS, St. Petersburg, Russia	100
Sartorius Stedim Data Analytics AB, Umeå, Sweden	100
Sartorius Stedim Switzerland AG, Tagelswangen, Switzerland	100
BIA Separations Podjetje za separacijske tehnologije d.o.o., Ajdovščina, Slovenia	100
Sartorius Stedim Spain S.A., Madrid, Spain	100
Sartorius Stedim Hungaria Kft., Budapest, Hungary	100
Sartorius Stedim Bioprocess S.A.R.L., M'Hamdia, Tunisia	100

Americas	
Sartorius Stedim Filters Inc., Yauco, Puerto Rico	100
Sartorius Stedim North America Inc., Dover, Delaware, USA	100
WaterSep BioSeparations LLC, Boston, Massachusetts, USA	100

Asia | Pacific	
Sartorius Stedim Australia Pty. Ltd., Dandenong South, Victoria, Australia	100
Sartorius Stedim Biotech (Beijing) Co. Ltd., Beijing, China	100
Sartorius Stedim (Shanghai) Trading Co. Ltd., Shanghai, China	100
Sartorius Stedim India Pvt. Ltd., Bangalore, India	100
Sartorius Stedim Japan K.K., Tokyo, Japan	100
Sartorius Korea Biotech Co. Ltd., Seoul, South Korea	69
Sartorius Korea Operations LLC, Seoul, South Korea	100
Sartorius Stedim Malaysia Sdn. Bhd., Kuala Lumpur, Malaysia	100
Sartorius Stedim Singapore Pte. Ltd., Singapore, Singapore	100
Sartorius Stedim Taiwan Inc., New Taipei City, Taiwan	100

8. Business Combinations

Business combinations are accounted for by applying the acquisition method. The accounting for business combinations requires that the consideration transferred, as well as the assets acquired and liabilities assumed, be measured at their respective fair values on the acquisition date.

The application of the acquisition method requires estimates and assumptions to be made, especially concerning the fair values of the consideration transferred; the intangible assets acquired; property, plant and equipment; the liabilities assumed at the acquisition date; and the useful lives of the assets. These measurements are based to a large extent on anticipated cash flows. If actual cash flows vary from those used in calculating fair values, this may materially affect the Group’s future results of operations.

For significant acquisitions, the purchase price allocation is carried out with assistance from independent third-party valuation specialists. The valuations are based on the information available at the acquisition date.

Acquisition of BIA Separations in 2020

On November 2, 2020, the Group acquired 100% of the shares in the Slovenian purification specialist BIA Separations Podjetje za separacijske tehnologije d.o.o. (“BIA Separations”). BIA Separation employed about 120 employees at its headquarters in Ajdovščina, Slovenia, as of the acquisition date.

The company develops and manufactures market-leading products for the purification and analysis of large biomolecules, such as viruses, plasmids, and mRNA, which are used in cell and gene therapies and other advanced therapies. It is therefore complementary to the existing product portfolio of the Group. BIA’s technology for manufacturing-scale purification is already used in the production of the first commercialized advanced therapeutics. The company also has a strong presence with such novel drug candidates in the clinical pipeline. This leads to the assumption of a corresponding potential for future growth, the timing of which is subject to an elevated level of uncertainty in light of the ongoing Covid-19 pandemic that already existed on the acquisition date, as well as of the risks that are typically inherent to the development of drugs.

Determination of the acquisition-date fair values of the assets acquired and liabilities assumed, as well as of the consideration transferred, was completed in 2021. The following table presents preliminary and final valuations:

	Preliminary purchase price allocation € in K	Final purchase price allocation € in K
Intangible assets	308,014	237,709
Property, plant and equipment	13,834	13,834
Inventories	3,317	2,646
Trade receivables	1,696	1,696
Other assets	679	679
Cash and cash equivalents	2,176	2,176
Deferred taxes - net	-58,100	-44,614
Provisions	-2,744	-2,744
Loans and borrowings	-1,841	-1,841
Other liabilities	-5,489	-5,489
Net assets acquired	261,542	204,052
Purchase price	366,891	366,972
Contingent consideration	285,530	90,369
Goodwill	390,879	253,289

The main assets included in other intangible assets are BIA Separations technology for manufacturing-scale purification (€225.4 million) and customer relations (€12.2 million).

The consideration transferred includes a payment of €234.2 million in cash and 405,887 shares in the Group's parent company Sartorius Stedim Biotech S.A., which were transferred at the acquisition date by the ultimate parent of the Group, Sartorius AG, to the former owners of BIA Separations. The fair value of these shares was measured at €132.7 million as of the acquisition date. In addition, the Group and the former owners of BIA Separations have further agreed on three tranches of earn-out payments based on the sales performance of BIA Separations over the next five fiscal years. Depending on this sales performance, the sellers are entitled to receive additional shares in Sartorius Stedim Biotech S.A. This additional contingent consideration agreement is classified as a financial liability and measured at fair value through profit or loss at each reporting date. At the acquisition date, the contingent consideration component was finally valued at an amount of €90.4 million. This estimate reflects the expected future sales performance and the assumed number of shares to be transferred as well as the present value of the expected future share prices at the expected settlement dates. The lower end of the bandwidth of possible outcomes of the contingent consideration is zero, while the upper limit cannot be quantified due to settlement in shares.

As of the reporting date on December 31, 2021, the fair value of the contingent consideration liability was measured at €288.2 million. The change since December 31, 2020 (amount based on the final purchase price allocation: €80.6 million) mainly reflects the development of the share price of Sartorius Stedim Biotech S.A. and the strong development of sales revenues in 2021. Furthermore, the discount rates applied to calculate the present value of the future obligation were adjusted to reflect the market rates at December 31, 2021. The difference of about €207.7 million between the valuation as of December 31, 2020, and the reporting date was recognized in the financial result. The range of possible outcomes of the contingent consideration has changed to the extent of that of the tranche relating to the sales performance achieved in 2021 (fair value at reporting date: €97.9 million), which is only subject to changes in the share price up to settlement of the liability.

The key input parameters for the valuation of the financial liability are the sales revenue expectations for the next few years as well as the share price of Sartorius Stedim Biotech S.A. at the respective valuation date. The valuation results are less sensitive to realistic changes of other valuation parameters, e.g., the discount rates applied. Assuming 10% higher (lower) sales revenues in each of the remaining relevant years of the plan period would result in an increase in the liability to be reported at the reporting date by approximately €32 million (decrease by approximately €28 million). If the share price of Sartorius Stedim Biotech S.A. had been 10% higher (lower) at the reporting date, the liability would have been €29 million higher (€29 million lower). The actual future outcomes may differ from these sensitivities that are determined by changing only the respective key input parameter in isolation.

Expenses of €3.6 million directly attributable to the acquisition were recognized as other expenses in profit or loss. The resulting goodwill represents synergies, such as those arising from BIA Separations' access to the Group's worldwide sales and distribution network, the completion of the Group's product portfolio, and intangible assets that are not recognized separately; e.g., the know-how of the skilled workforce. Goodwill is not tax deductible.

Acquisition of WaterSep BioSeparations LLC in 2020

On December 9, 2020, the Group acquired 100% of the shares in the U.S.-based entity WaterSep BioSeparations LLC. The company employed about 15 employees in Marlborough, Massachusetts, USA, at the acquisition date. WaterSep BioSeparations develops, manufactures, and markets hollow-fiber membrane devices and pre-sterilized assemblies for upstream and downstream biopharmaceutical applications. This acquisition is complementary to our current offering for cell and gene therapy applications, cell harvesting, and various solutions for intensified bioprocessing.

Determination of the acquisition-date fair values of the assets acquired and liabilities assumed, as well as the consideration transferred, was completed in 2021. The following table presents preliminary and final valuations:

	Preliminary purchase price allocation € in K	Final purchase price allocation € in K
Intangible assets	3	8,073
Property, plant and equipment	236	558
Inventories	362	450
Trade receivables	362	362
Other assets	85	85
Cash and cash equivalents	111	111
Other liabilities	-68	-390
Net assets acquired	1,091	9,250
Purchase price	22,518	22,518
Contingent consideration	4,887	702
Goodwill	26,313	13,971

The purchase price amounts to €23.2 million of which €22.5 million was paid in cash. The parties further agreed on an earn-out component, which depends on the future sales revenue in the years of 2021 to 2023 and is due in 2024. This agreement is classified as a financial liability and measured at fair value through profit or loss on each reporting date. The contingent consideration was measured at a fair value of €0.7 million at the acquisition date. On the reporting date of December 31, 2021, the fair value amounted to €2.6 million, resulting from the expectation of higher sales in the remaining earn-out periods. The lower end of the bandwidth of possible outcomes of the contingent consideration is zero; the upper limit is $9 million.

Expenses of €0.7 million directly attributable to the acquisition were recognized as other expenses in profit or loss. The other intangible assets comprise technologies (€6.6 million) and customer relationships (€1.4 million). The resulting goodwill represents synergies, such as those arising from WaterSep BioSeparations' access to the Group's worldwide sales and distribution network, the completion of the Group's product portfolio, and intangible assets that are not recognized separately; e.g., the know-how of the workforce. Goodwill is tax deductible.

Acquisition of CellGenix GmbH

On July 1, 2021, the Group acquired a majority stake (51% of shares and voting rights) in the reagent manufacturer CellGenix GmbH. The company that is based in Freiburg, Germany, and has a sales subsidiary near the biotechnology hub in Boston, Massachusetts, USA, produces and markets cell culture components, such as GMP-grade growth factors, cytokines, and media for manufacturing cell and gene therapy products. Founded in 1994 at the University Medical Center of Freiburg, CellGenix employed some 70 people at the acquisition date.

The purchase price allocation is as follows:

	Final purchase price allocation € in K
Intangible assets	102,230
Property, plant and equipment	15,983
Inventories	12,621
Trade receivables	4,599
Other assets	649
Cash and cash equivalents	16,397
Deferred taxes - net	–34,863
Loans and borrowings	–8,345
Other liabilities	–2,621
Net assets acquired	106,650
Non-controlling interests (49%)	52,259
Purchase price	112,085
Goodwill	57,694

The purchase price for the acquired stake of 51% in CellGenix GmbH amounted to approx. €112.1 million and was paid in cash. The directly attributable acquisition-related costs totaled €0.6 million and were recognized in other expenses. Non-controlling interests were measured at their proportionate share of the net assets.

The parties further agreed on options according to which the acquisition of an additional 25% of the shares is planned in 2023 and of the remaining 24% stake in 2026. The exercise prices depend on the future sales revenue with CellGenix products. For the obligation to purchase the remaining shares, the Group recognized financial liabilities totaling €176.7 million. Subsequent to the acquisition, the liabilities are measured at amortized cost according to the effective interest rate method. Any changes are recognized directly in equity. At the reporting date, the liability was measured at €173.8 million. Assuming 10% higher (lower) sales revenues in each of the remaining relevant years of the plan period would result in an increase in the liability to be reported at the reporting date of approximately €8.3 million (decrease of approximately €9.3 million).

The intangible assets recognized separately are related mainly to technologies (€64.4 million), customer relationships (€33.7 million), and brands (€4.2 million). The resulting goodwill reflects synergies, e.g., those realized by the acquiree's access to the Group's global sales and distribution network and the combination of the acquired business with the Group's existing media manufacturing operations, the expansion of the Group's product offering for biopharmaceutical customers, and intangible assets that are not recognized separately, such as the acquired workforce. Goodwill is not deductible for tax purposes.

Acquisition of Xell AG

On July 28, 2021, the Group acquired 100% of the shares in the German cell culture specialist Xell AG. The company headquartered in Bielefeld, Germany, employed some 35 employees on the acquisition date and is complementary to the Group's product portfolio for biopharmaceutical customers. Xell AG develops, produces and markets media and feed supplements for cell cultures, especially for manufacturing viral vectors that are used in gene therapeutics and vaccines. Beyond these media, the company offers various analytical services for characterizing, screening, and quantifying media components, as well as for optimizing media composition.

The purchase price allocation is as follows:

	Final purchase price allocation € in K
Intangible assets	27,839
Property, plant and equipment	8,063
Inventories	1,077
Trade receivables	529
Other assets	105
Cash and cash equivalents	16
Deferred taxes - net	–9,363
Loans and borrowings	–5,645
Other liabilities	–164
Net assets acquired	22,457
Purchase price	48,072
Contingent consideration	1,877
Goodwill	27,492

The major part of the purchase price of €49.9 million in total was paid in cash (€48.1 million). The parties further agreed on two additional earn-out components, which are due in 2024 and 2026 and depend on the future sales revenues with Xell products in the years 2022 to 2025. This contingent consideration is classified as a financial liability and is measured at fair value through profit or loss at each reporting date. As of the acquisition date, this contingent consideration was measured at €1.9 million. The lower (upper) limit of the bandwith of possible outcomes for this contingent consideration is zero (€25.6 million).

On the reporting date of December 31, 2021, the fair value of the financial liability remained almost unchanged (€2.0 million). Assuming 10% higher (lower) sales revenues in each of the remaining four years of the plan period would result in an increase in the liability to be reported at the reporting date of approximately €1.4 million (decrease of approximately €0.9 million). The bandwith of possible outcomes was unchanged on December 31, 2021.

The directly attributable acquisition-related costs totaled €0.3 million and were recognized in other expenses. The intangible assets recognized separately are related mainly to technologies (€25.2 million), customer relationships (€1.6 million), and brands (€1.0 million). The resulting goodwill reflects synergies, e.g., those realized by the acquiree's access to the Group's global sales and distribution network and the combination of the acquired business with the Group's existing cell culture media competencies and capacities, the expansion of the Group's product offering for biopharmaceutical customers and intangible assets that are not recognized separately, such as the acquired workforce. Goodwill is not deductible for tax purposes.

Effects of the Acquisitions on the Group's Sales Revenue and Net Result in 2021

Since their first-time consolidation, the companies acquired in 2021 contributed sales revenue of €12.5 million (CellGenix GmbH) and €4.2 million (Xell AG). Excluding one-time items from the purchase price allocations, the impact on the Group's net result is immaterial. If the acquisitions closed in the reporting period had both taken place as of January 1, 2021, sales revenue (net profit) of the Group for the reporting period 2021 would have amounted to € 2,902 million (€413 million).

Notes to the Statement of Profit or Loss

9. Sales Revenue

Revenue is recognized according to IFRS 15, Revenue from Contracts with Customers. The revenues from contracts with customers are disaggregated into geographical regions (see Segment Report, Note 5).

The Group produces and sells instruments and consumables for customers in the biopharma segment. The Group satisfies its performance obligations depending on the goods to be transferred and the promised services. Most of the revenues from sales of products is recognized at a point in time when the customer obtains control of the goods. This is typically the case when the significant risks and rewards of ownership of the goods are transferred to the customer. Therefore, the point in time may vary depending on the agreement with the individual customer.

For complex products that require installation at the customer's site, revenue is recognized upon formal customer acceptance. To a low extent, revenue is recognized over time in the customer-specific project business. In these cases, revenue is recognized according to the project progress which is measured based on the percentage of costs to date compared to the total estimated contract costs. The amount of actual costs incurred to date reflects the progress and the transfer of control to the customer appropriately as the Group has a right to reimbursement of cost to date plus an appropriate margin if the project is canceled by the customer without cause.

Revenue from services is generally recognized when the services are performed or have been performed. When the services are performed continuously over a period of time, the Group recognizes the related revenue over time. In this case, revenue is generally recognized pro rata in relation to the total contract period. Product sales are typically accompanied by the legally required warranty. Any material extended warranties are accounted for as separate performance obligations.

According to the general payment terms, customer payments are due in the short term, typically within 30 days. To some extent, the Group obtains advance payments, e.g., to avoid credit risks. Therefore, the Group regularly has contract liabilities (payments received on account of orders). In addition, the Group recognizes contract liabilities in connection with service contracts (deferred revenues) when customers pay in advance.

There are no material effects from contracts with significant financing components. The Group uses the practical expedient regarding the existence of a significant financing component. This means that a financing component is taken into consideration only when the length of time between the transfer of goods or services and the receipt of consideration is expected to exceed one year and the effect is material.

As of December 31, 2021, the Group had refund liabilities of €17,428 K arising from incentive agreements with customers (2020: €8,011 K). The aggregate amount of the transaction price allocated to the performance obligations that were unsatisfied (or partially unsatisfied) at the end of the reporting period (orders on hand) amounted to €1,915 million (2020: €1,137 million). The Group expects that most of these unsatisfied performance obligations will be satisfied in 2022.

There were no extraordinary changes in the carrying amounts of the contract liabilities and contract assets in the reporting period. Revenue in the amount of €115,858 K was recognized in the reporting period that was included in contract liabilities at the beginning of the reporting period (2020: €68,458 K).

The balances of trade receivables and contract assets are presented in Note 29. For details on the impairment losses on trade receivables and contract assets recognized in the reporting period, see Note 41. The following table presents the balances of the Group's contract liabilities.

	Line item in statement of financial position	Carrying amount as of December 31, 2021	Carrying amount as of December 31, 2020
		€ in K	€ in K
Deferred revenue	Other liabilities	39,764	24,516
Payments received on account of orders	Trade payables	219,794	132,239
Contract liabilities (total)		259,558	156,755

10. Functional Costs

The statement of profit or loss is presented according to the "cost of sales format," i.e., expenses are allocated to the relevant functions of production; sales and marketing; research and development; and general administration. Expenses relating to cross-functional initiatives or projects are assigned to the respective functional costs based on an appropriate allocation principle.

The item "Cost of sales" includes the cost of products sold and the cost of merchandise sold. In addition to directly attributable expenses, such as raw materials and supplies, employee benefits expense, and energy expenses, cost of sales also includes overhead, which can be allocated to the manufacturing area, and the corresponding depreciation and amortization.

The selling and distribution costs pertain to, in particular, the costs of the sales and marketing functions, distribution, and market research.

Research and development costs comprise the costs of research and product and process development unless they are recognized as assets.

The item "General administrative expenses" mainly includes employee benefits expense and the cost of materials of the general administrative area.

All profit and loss items that cannot be allocated to one of the functional areas mentioned are recognized as other income and expenses. This item essentially includes effects from translation of transactions in foreign currencies, sale of fixed assets, allowances on trade receivables and reorganization, and other non-recurring expenses.

Income from grants related to income is recognized as other income when there is reasonable assurance that the conditions associated with the grants are complied with and the grants will be received. They are recognized systematically as income over the period in which the related costs are recorded.

Operating expenses by nature are presented in the Profit or Loss Statement by Nature in Note 14.

The material expenses and personnel costs are as follows:

Raw Materials and Supplies

€ in K	2021 12 months	2020 12 months
Purchases consumed	548,327	375,095
Cost of purchased services	153,319	97,189
Total	701,646	472,284

Personnel Costs

€ in K	2021 12 months	2020 12 months
Wages and salaries	536,656	392,838
Social security	115,542	84,047
Expenses for retirement benefits and pensions	12,317	9,435
Total	664,515	486,320

11. Other Operating Income and Expenses

€ in K	2021 12 months	2020 12 months
Currency translation gains	37,788	22,734
Income from the decrease in allowances for bad debts	3,928	2,353
Income from release of provisions and liabilities	1,752	784
Income from grants	1,390	2,021
Other income	2,582	2,014
Other operating income	47,440	29,905
Currency translation losses	−28,897	−21,805
Extraordinary expenses	−26,451	−32,660
Allowances for bad debts	−3,760	−5,391
Other expenses	−33,659	−25,669
Other operating expenses	−92,767	−85,525
Total other operating income and expenses	−45,327	−55,619

The item reported as income from grants comprises grants for expenses, essentially related to research and development projects. The currency translation gains | losses in 2021 include an amount of €−4.9 million (2020: €6.5 million) for the reclassification of items from equity to profit or loss (see Note 38).

Extraordinary items amounted to €−26.5 million (net) (previous year: €−32.7 million). Extraordinary expenses essentially cover integration and acquisition-related items as well as one-time expenses for strategic Group projects.

12. Financial Result

€ in K	2021 12 months	2020 12 months
Interest and similar income	276	509
- of which from affiliated companies	206	317
Income from derivative financial instruments	5,086	1,078
Other financial income	16,931	25,428
Financial income	22,293	27,014
Interest and similar expenses	−10,193	−6,509
- of which from affiliated companies	−5,649	−2,832
Expenses for derivative financial instruments	−4,818	0
Interest expense for pensions	−205	−310
Valuation earn-outs	−212,288	0
Other financial expenses	−13,490	−31,216
Financial expenses	−240,994	−38,034
Total	−218,701	−11,020

The other financial income (expenses) include mainly foreign exchange gains (losses) in connection with bank deposits and loans and liabilities denominated in foreign currencies. The item "Valuation earn-outs" refers mainly to the remeasurement of the contingent consideration in connection with the acquisition of BIA Separations (2020 restated: "Other financial income" of €9.8 million; 2020 reported: "Other financial income" of €31.6 million), see Note 8. Furthermore, in 2021, this item includes the valuation effects on the liabilities in connection with the acquisitions of WaterSep Bioseparations LLC, Xell AG, and the AllPure phantom units (see Notes 8, 32, and 34 for details).

The interest expenses to affiliated companies are in connection with the loan granted by the Group's ultimate parent Sartorius AG (see also Note 44).

13. Income Taxes

€ in K	2021 12 months	2020 12 months
Current income taxes	−251,080	−140,092
Deferred taxes	18,669	17,997
Total	−232,411	−122,095

Current income taxes are determined based on the respective local taxable income of the period and local tax rules. In addition, current income taxes include adjustments for uncertain tax payments or tax refunds for periods not yet assessed. Changes in deferred tax assets and liabilities are included in the line deferred taxes except for changes recognized in other comprehensive income or equity.

The following table explains the difference between the expected tax expense and the income tax expenses reported for the particular fiscal year. The expected tax expense is calculated by applying a weighted average rate to the Group’s consolidated profit before tax.

€ in K	2021 12 months	2020 12 months
Expected tax rate	22.8%	25.3%
Expected tax expense	–147,251	–116,661
Permanent differences	–71,988	–8,350
Tax-free income and other tax exemptions	4,988	12,673
Unrecognized tax losses and deductible temporary differences	–479	–266
Taxes for previous years	–14,825	–8,616
Withholding taxes and other income taxes with different tax base	–2,368	–1,413
Other	–489	538
Total	–232,412	–122,095
Effective tax rate	–35.9%	–26.5%

14. Profit or Loss Statement by Nature

€ in K	2021 12 months	2020 12 months
Sales revenue	2,886,977	1,910,081
Purchases consumed	–548,327	–375,095
Cost of purchased services	–153,319	–97,189
Personnel costs	–664,515	–486,320
Amortization and depreciation	–141,556	–101,687
Other operating costs	–513,840	–378,076
Subtotal	–2,021,556	–1,438,367
Operating profit (EBIT)	865,421	471,714
Financial income I expenses	–218,701	–11,020
Income tax	–232,411	–122,095
Non-controlling interest	104	–2,666
Net profit after non-controlling interest	414,413	335,932

15. Earnings per Share

According to IAS 33, basic earnings per share (basic EPS) are calculated on the basis of the weighted average number of ordinary shares during the period.

	2021	2020
Net profit after tax (€ in K)	414,309	338,598
Group net profit after tax (€ in K)	414,413	335,932
Earnings per share (€)	4.50	3.64
Diluted earnings per share (€)	4.50	3.64
Number of shares (statutory level)	92,180,190	92,180,190
Treasury shares	−3,361	−1,093
Weighted average number of shares used in earnings per share calculation	92,176,829	92,179,097
Weighted average number of shares used in diluted earnings per share calculation	92,176,829	92,179,097

Notes to the Individual Balance Sheet Items

16. Goodwill and Other Intangible Assets

Goodwill

€ in K	Goodwill
Gross book values at Jan. 1, 2020	418,328
Currency translation	–5,591
Business combinations	312,411
Gross book values at Dec. 31, 2020	725,148
Impairment losses at Jan. 1, 2020	0
Currency translation	0
Impairment losses	0
Impairment losses at Dec. 31, 2020	0
Net book values at Dec. 31, 2020	725,149

€ in K	Goodwill
Gross book values at Jan. 1, 2021	725,148
Currency translation	10,287
Business combinations	85,267
Gross book values at Dec. 31, 2021	820,702
Impairment losses at Jan. 1, 2021	0
Currency translation	0
Impairment losses	0
Impairment losses at Dec. 31, 2021	0
Net book values at Dec. 31, 2021	820,702

The item reported as "Goodwill" in the amount of €820,702 K is the difference between the consideration transferred and the fair value of the net assets acquired in business combinations. According to IAS 36, goodwill acquired in a business combination may not be amortized, but rather, must be tested for impairment annually and whenever there is any indication of an impairment. The increase recorded in 2021 concerns the acquisitions of CellGenix GmbH and Xell AG (see Note 8). The additions in the prior period resulted from the acquisitions of BIA Separations, WaterSep BioSeparations (see Note 8) and that of the Life Science assets from Danaher.

For impairment testing, goodwill must be allocated to each of the acquirer's cash-generating units (CGUs) that are expected to benefit from the synergies of the combination. The CGU represents the lowest level within the entity at which goodwill is monitored for internal management purposes and may not be larger than a segment. The Sartorius Stedim Biotech Group follows the strategy of being a total solutions provider for its customers. Because of the various interdependencies within the business, the lowest level at which goodwill is monitored is that of the biopharma segment. Therefore, the goodwill acquired is allocated to this segment.

As in 2020, the impairment test conducted for 2021 measures the recoverable amount on the basis of the value in use of the particular cash-generating unit (Biopharm segment). The cash flow forecasts consider previous experience and are generally based on Group management's forecasts for a period of four years. These calculations are based on a terminal growth rate of 2.5% for the years after 2025. This rate is derived from market expectations, which forecast significant growth rates for the targeted biopharmaceutical market.

The major growth drivers for the Sartorius Stedim Biotech Group will be the aging, and increase in, population and improved access to drugs in emerging markets as well as the ongoing paradigm shift from reusable products to single-use products utilized in biomanufacturing by the biopharmaceutical industry.

The discount rates applied correspond to the weighted average cost of capital; they were recognized as follows:

	2021		2020	
	Before tax	After tax	Before tax	After tax
Biopharma segment	7.8%	6.3%	7.7%	6.3%

In 2021, our impairment test did not result in the recognition of impairment losses. In this context, various sensitivity analyses based on realistic variations of the assumptions disclosed above did not result in an impairment either. The following variations would theoretically represent the "break-even point":

	2021	2020
Discount rates	29.4%	30.2%
Terminal growth rate	−86.3%	−84.6%
Cash flows	−90.0%	−90.0%

Intangible Assets

€ in K	Patents, licenses and similar rights	Brand name	Customer relationships	Capitalized development costs	Payments on account	Total
Gross book values at Jan. 1, 2020	111,966	14,171	141,067	134,244	0	401,449
Currency translation	−5,319	−19	−4,351	−1,169	0	−10,859
Business combinations	316,713	581	66,473	0	0	383,767
Acquisitions	1,796	0	938	29,660	0	32,395
Disposals	−2	0	0	0	0	−2
Transfers	43	0	0	532	0	575
Gross book values at Dec. 31, 2020	425,197	14,733	204,127	163,267	0	807,324
Amortization and impairment losses at Jan. 1, 2020	−47,237	−399	−94,866	−50,459	0	−192,960
Currency translation	805	8	1,198	249	0	2,260
Amortization and impairment losses	−15,899	−238	−13,601	−15,002	0	−44,740
Disposals	2	0	0	0	0	2
Transfers	−3	0	0	0	0	−3
Amortization and impairment losses at Dec. 31, 2020	−62,333	−628	−107,269	−65,213	0	−235,442
Net book values at Dec. 31, 2020	362,865	14,105	96,858	98,055	0	571,882

€ in K	Patents, licenses and similar rights	Brand name	Customer relationships	Capitalized development costs	Payments on account	Total
Gross book values at Jan. 1, 2021	425,197	14,733	204,127	163,267	0	807,324
Currency translation	8,232	280	6,299	1,694	6	16,510
Business combinations	89,628	5,201	35,240	0	0	130,069
Acquisitions	2,153	0	0	37,023	213	39,389
Disposals	-61	0	0	0	0	-61
Transfers	18	-432	432	0	0	18
Gross book values at Dec. 31, 2021	525,166	19,781	246,098	201,984	219	993,249
Amortization and impairment losses at Jan. 1, 2021	-62,333	-628	-107,269	-65,213	0	-235,442
Currency translation	-2,119	-47	-2,024	-610	0	-4,800
Amortization and impairment losses	-34,569	-550	-18,253	-15,239	0	-68,612
Disposals	25	0	0	0	0	25
Transfers	-3	0	0	0	0	-3
Amortization and impairment losses at Dec. 31, 2021	-98,998	-1,225	-127,547	-81,062	0	-308,832
Net book values at Dec. 31, 2021	426,168	18,556	118,551	120,922	219	684,417

Intangible assets acquired are recorded at cost less accumulated, regular amortization that is calculated according to the straight-line method and any impairment loss. The useful life of an intangible asset is the period during which the Group expects to use the asset.

Amortization of intangible assets is generally based on the following estimated useful lives:

Software	2 to 10 years
Capitalized R&D expenses	4 to 6 years
Customer relations and technologies	3 to 20 years
Brand name	2 years to indefinite

Costs incurred within the scope of the development of new products and methods were capitalized as internally-generated intangible assets if the criteria in IAS 38.57 were met. The capitalization of internally-generated intangible assets includes a significant level of judgment; e.g., the assessment of the feasibility of a development project, the expected market prospects, and the determination of useful lives.

The capitalized development costs essentially cover the costs that were allocated to the staff involved in R&D, raw materials and supplies, external services, and directly attributable overheads. Intangible assets generated internally are amortized on a straight-line basis over their useful lives, which generally do not exceed six years. In 2021, the development costs of €37,023 K were recognized as assets (€29,660 K in 2020).

If an internally generated intangible asset cannot be recognized, the development costs are expensed in the period in which they are incurred. Costs for research activities are reported as expenses in the period in which they are incurred.

The Stedim brand name acquired in 2007 and integrated into the parent company's name (Sartorius Stedim Biotech S.A.) is considered to have an indefinite useful life and is therefore not amortized. There is no foreseeable limit to the period over which the brand name is expected to generate net cash inflows for the Group. The brand name is tested annually for impairment at the level of the "biopharma segment" cash-generating unit (CGU).

Amortization of intangible assets is allocated to the corresponding functions in the statement of profit or loss. For capitalized development costs, amortization is reported under "cost of sales."

As in fiscal 2020, no material impairments were recognized in 2021.

17. Property, Plant and Equipment

€ in K	Land, buildings and improvements	Technical machinery and equipment	Factory and office equipment and other equipment	Payments on account and construction in progress	Total
Gross book values at Jan. 1, 2020	328,517	212,039	114,800	80,044	735,400
Currency translation	–8,767	–6,609	–1,758	–4,245	–21,379
Business combinations	5,645	5,034	624	8,982	20,285
Acquisitions	20,306	20,736	16,350	76,380	133,771
Disposals	–544	–1,985	–3,162	564	–5,127
Transfers	6,493	20,577	8,274	–36,052	–708
Gross book values at Dec. 31, 2020	351,649	249,792	135,129	125,674	862,243
Depreciation at Jan. 1, 2020	–69,883	–104,830	–63,422	–165	–238,301
Currency translation	1,306	2,515	1,147	3	4,971
Depreciation	–13,691	–17,775	–12,980	0	–44,446
Disposals	424	1,620	2,687	0	4,731
Transfers	–296	–12	294	164	149
Depreciation at Dec. 31, 2020	–82,141	–118,481	–72,274	1	–272,895
Net book values at Dec. 31, 2020	269,508	131,310	62,855	125,675	589,347
Net book values at Dec. 31, 2020 of right-of-use assets	49,515	1,172	4,237	0	54,923
Total property, plant and equipment at Dec. 31, 2020	319,023	132,482	67,092	125,675	644,272

	Land, buildings and improvements	Technical machinery and equipment	Factory and office equipment and other equipment	Payments on account and construction in progress	Total
Gross book values at Jan. 1, 2021	351,649	249,792	135,129	125,674	862,243
Currency translation	10,797	7,811	2,023	4,908	25,539
Business combinations	13,010	5,555	1,007	72	19,644
Acquisitions	22,458	40,350	21,520	201,158	285,486
Disposals	–483	–3,893	–4,381	–12	–8,770
Transfers	28,766	13,008	1,839	–43,630	–18
Gross book values at Dec. 31, 2021	426,197	312,622	157,136	288,170	1,184,125
Depreciation at Jan. 1, 2021	–82,141	–118,481	–72,274	1	–272,895
Currency translation	–1,654	–2,991	–1,489	0	–6,133
Depreciation	–17,845	–24,960	–14,983	0	–57,789
Disposals	443	2,841	4,131	0	7,415
Transfers	69	82	–149	0	3
Depreciation at Dec. 31, 2021	–101,128	–143,508	–84,764	1	–329,399
Net book values at Dec. 31, 2021	325,069	169,114	72,372	288,171	854,726
Net book values at Dec. 31, 2021 of right-of-use assets	67,513	1,799	4,375	0	73,687
Total property, plant and equipment at Dec. 31, 2021	392,582	170,913	76,747	288,171	928,413

The "Property, plant and equipment" item in the statement of financial position includes right-of-use assets according to IFRS 16 (see Note 18). Property, plant and equipment is recorded at cost and depreciated over the estimated useful life using the straight-line method. Property, plant and equipment is subject to impairment tests whenever there are indicators of impairment.

Depreciation of non-current assets is based on the following periods of useful life:

Buildings	15 to 50 years
Machinery	5 to 15 years
Factory and office equipment	3 to 13 years

Depreciation is presented in the statement of profit or loss according to how the assets are used, in the cost of sales, selling and distribution costs, research and development costs, general administrative expenses, and other operating expenses.

Borrowing costs are expensed as incurred unless they are directly attributable to the acquisition, construction, or production of a qualifying asset and are therefore part of the cost of that asset.

Grants related to assets are deducted from the cost of the related asset.

As in fiscal 2020, no significant impairment losses were recognized on property, plant and equipment in 2021.

18. Leases

Lease accounting follows IFRS 16, Leases. For the financing structure of the Group, leases are not of high relevance. The main considerations in relation to leases are therefore generally of a practical nature, for example, regarding the management of IT hardware or fleet management. Accordingly, leases of IT hardware and cars represent the majority of the Group's lease contracts. The lease term of such leases is generally fixed and extends typically over 3 to 5 years. However, those leases of the Group in which the lessor is a related party that is an entity controlled by the ultimate parent, Sartorius AG, are generally of a short-term nature, providing both contract parties with operational flexibility. Furthermore, at some sites, the Group has long-term leases of buildings. The lease contracts may contain extension options, which are included in the lease term according to IFRS 16 when the Group is reasonably certain that the option will be exercised. The Group does not act as a lessor to a material extent.

Under IFRS 16, leases are generally recognized on the lessee's statement of financial position. A lessee recognizes a right-of-use asset representing its right to use a lease asset, as well as a lease liability, which represents its obligation to make lease payments. The Group makes use of the exemptions for short-term leases and leases of low-value assets and recognizes the corresponding lease payments as an expense generally on a straight-line basis over the specific lease term. Accordingly, no right-of-use assets and no lease liabilities are recognized for these leases. Furthermore, no right-of-use assets and no liabilities are recognized for leases between Group entities. The Group does not apply the Standard to leases of intangible assets.

In the statement of financial position, the Group presents the right-of-use assets according to the nature of the underlying lease assets within "Property, plant and equipment." The right-of-use assets are recognized at cost less accumulated depreciation and any impairment losses. The cost of the right-of-use assets comprises the present value of the future lease payments, any payments paid upon or before commencement of the lease, any initial direct costs, and costs for dismantling or removing the lease asset. The right-of-use assets are typically depreciated over the lease term. If the transfer of legal ownership of the lease asset is planned at the end of the lease term, the right-of-use asset is depreciated over the economic useful life of the lease asset. In the statement of profit or loss, depreciation is recognized within functional costs.

The lease liabilities are presented separately on the face of the statement of financial position. Lease liabilities are initially recognized at an amount equal to the present value of the future lease payments. The lease payments generally do not include any payments in relation to non-lease components. In general, the incremental borrowing rate of the Group is used for discounting. Subsequently, the carrying amount of the lease liabilities is increased by interest expenses and reduced by lease payments. Interest expenses are reported in the financial result and, to the extent they are paid, in the financing section of the cash flow statement.

As of December 31, 2021, lease liabilities stood at €78.9 million (2020: €58.3 million). The maturities of the future lease payments are presented in Note 40. The table below shows the composition of the right-of-use assets included in "Property, plant and equipment" as of the reporting date and as of the preceding reporting date and the main changes during the period.

€ in K	Land, buildings and improvements	Technical machinery and equipment	Factory and office equipment and other equipment	Total
Gross book values at Jan. 1, 2020	59,287	2,823	5,845	67,955
Currency translation	–2,224	–31	–92	–2,347
Business combinations	938	0	0	938
Additions	13,051	64	2,467	15,582
Disposals	–562	–12	–317	–890
Transfers	0	0	–31	–31
Gross book values at Dec. 31, 2020	70,490	2,844	7,872	81,206
Depreciation at Jan. 1, 2020	–12,505	–864	–1,722	–15,091
Currency translation	532	17	43	592
Depreciation	–9,557	–824	–2,120	–12,501
Disposals	555	0	145	700
Transfers	0	0	18	17
Depreciation at Dec. 31, 2020	–20,975	–1,672	–3,636	–26,283
Net book values at Dec. 31, 2020	49,515	1,172	4,237	54,923

€ in K	Land, buildings and improvements	Technical machinery and equipment	Factory and office equipment and other equipment	Total
Gross book values at Jan. 1, 2021	70,490	2,844	7,872	81,206
Currency translation	3,635	40	252	3,927
Business combinations	3,344	1,001	57	4,402
Additions	24,234	340	2,632	27,206
Disposals	–3,932	–49	–552	–4,533
Transfers	0	0	0	0
Gross book values at Dec. 31, 2021	97,771	4,176	10,261	112,207
Depreciation at Jan. 1, 2021	–20,975	–1,672	–3,636	–26,283
Currency translation	–1,152	–33	–119	–1,304
Depreciation	–11,990	–703	–2,462	–15,156
Disposals	3,860	32	330	4,222
Transfers	0	0	0	0
Depreciation at Dec. 31, 2021	–30,258	–2,376	–5,886	–38,521
Net book values at Dec. 31, 2021	67,513	1,799	4,375	73,687

The table below shows the interest expenses presented in the financial result, the total cash outflows for existing leases, and the expenses recognized for short-term leases and leases of low value assets in the reporting period and the comparative period. No material expenses were recognized for variable lease payments in the reporting period.

€ in K	2021 12 months	2020 12 months
Interest expenses for leases	2,416	2,180
Expenses for leases of low value assets	1,639	1,477
Expenses for short-term leases	1,859	1,652
Repayment of lease liabilities	13,585	11,213
Total cash outflow for leases	19,499	16,522

19. Deferred Taxes

	Deferred tax assets		Deferred tax liabilities		
€ in K	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Of which recognized in profit or loss
Intangible assets	349	0	127,514	89,611	2,672
Tangible assets	0	0	8,901	6,009	–775
Inventory	25,649	15,180	5,110	0	8,521
Receivables and other current assets	7,760	1,701	83	0	3,183
Provisions	9,513	12,516	0	0	–2,224
Liabilities	22,869	9,545	0	0	10,232
Carry forward of taxable losses	352	984	0	0	–641
Tax on undistributed earnings of subsidiaries	0	0	4,200	1,900	–2,300
Gross amount	66,492	39,926	145,808	97,521	18,669
Offset	–19,978	–12,445	–19,978	–12,445	0
Net amount	46,513	27,481	125,830	85,076	18,669

Deferred tax assets or liabilities are determined based on temporary differences between the carrying amounts and the tax base of assets and liabilities (except in special cases provided for by IAS 12), including loss carryforwards and tax credits. Measurement is based on the tax rates expected to be effective in the period in which an asset is realized, a liability is settled, or tax losses are utilized. For this purpose, the tax rates and tax rules are used that have been enacted or substantively enacted at the reporting date.

The change in deferred tax assets and liabilities is reflected in the item "Income taxes" in the statement of profit or loss, except for those elements that are recognized in other comprehensive income and for effects from business combinations.

Deferred tax assets are required to be recognized for all deductible temporary differences and unused tax losses to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences and unused tax losses can be utilized. As future developments are uncertain and partly beyond management's control, assumptions are necessary to estimate future taxable profits as well as the period in which deferred tax assets will be recovered. Estimates are revised in the period in which there is sufficient evidence to revise the assumption. If there is no evidence that all or a portion of a deductible temporary difference or a tax loss can be realized, the corresponding amount is not recognized as an asset.

The Group operates in many tax jurisdictions. Therefore, the tax positions presented in the financial statements must be determined taking into account the respective local tax laws and the relevant views of tax adiministrations. Due to their complexity, these items may be subject to a different interpretation by taxpayers, on the one hand, and local tax authorities, on the other. The amount of uncertain tax positions is based on the best possible estimate of the expected tax payment.

Deferred Tax Assets

On the reporting date, the Group had unused tax loss amounts carried forward of €7.1 million to be deducted from future taxable profits (€10.6 million in 2020). A deferred tax asset was reported on losses amounting to €1.7 million (€1.4 million in 2020). Deferred tax assets of €0.3 million (€1.4 million) are related to companies that reported losses in the year under review or in the previous reporting period.

Deferred Tax Liabilities

The deferred tax liabilities in connection with intangible assets refer to assets acquired in business combinations and, consequently, are mainly related to customer relationships and technologies.

The Group did not record deferred tax liabilities on approx. €35 million (€29 million) in cumulative undistributed earnings of subsidiaries because these earnings are intended to be reinvested in these operations.

The income taxes recognized in other comprehensive income are disclosed in the table below:

€ in K	2021	2020
Cash flow hedges	5,260	–2,759
Remeasurements of the net defined benefit obligations	–914	918
Currency translation	–510	–142
Total	3,836	–1,983

The change in deferred tax assets and liabilities can be reconciled as follows:

€ in K	Deferred tax assets	Deferred tax liabilities
Balance at Jan. 1, 2020	17,342	45,065
Change in the scope of consolidation	0	45,846
Recognized in profit or loss	10,253	–7,743
Recognized in other comprehensive income	–115	1,909
Balance at Dec. 31, 2020	27,481	85,076

€ in K	Deferred tax assets	Deferred tax liabilities
Balance at January 1, 2021	27,481	85,076
Change in the scope of consolidation	98	44,324
Recognized in profit or loss	12,178	–6,491
Recognized in other comprehensive income	6,756	2,920
Balance at December 31, 2021	46,513	125,830

20. Inventories

€ in K	Dec. 31, 2021	Dec. 31, 2020
Raw materials and supplies	263,750	124,152
Work in progress	191,861	143,911
Finished goods and merchandise	309,298	196,325
Payments on account	18,045	6,646
Total	782,954	471,034

€ in K	Dec. 31, 2021	Dec. 31, 2020
Gross amount of inventories	840,208	497,893
Write-downs	–57,254	–26,858
Net amount of inventories	782,954	471,034

Raw materials and supplies, including merchandise, are reported under "Inventories" at average cost. In principle, finished goods and work in progress are reported at the cost of conversion. This cost includes direct costs that can be allocated to these materials and the appropriate portion of production and materials handling overheads, general administrative expenses, and non-current assets at normal depreciation and | or amortization rates, based on the normal production capacity, provided that these expenses are caused by production.

Inventories must be measured at the lower of cost and the net realizable value. The net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary for marketing, sales, and distribution. Where inventory risks exist, such as the risk of reduced shelf life as a result of storage periods or limited usability, inventories are marked down accordingly.

21. Issued Capital

Sartorius Stedim Biotech S.A.'s share capital consists of 92,180,190 shares with a par value of €0.20 per share.

As of December 31, 2020, and December 31, 2021, there were no dilutive instruments. Shares registered in the name of the same owner for at least four years benefit from a double voting right.

	Dec. 31, 2021	Dec. 31, 2020
Number of shares at the beginning of the period	92,180,190	92,180,190
Number of shares at the end of the period	92,180,190	92,180,190
Nominal value per share (in €)	0.20	0.20
Issued capital amount (€ in K)	18,436	18,436

Dividends

The Board of Directors will submit a proposal to the Annual General Shareholders' Meeting for payment of a dividend for the year ended December 31, 2021, as follows: payment of a net dividend of €1.26 per share (2020: €0.68), i.e., a total distribution of €116,142,805.00 (excluding treasury shares; 2020: €62,681,786.00).

22. Non-Controlling Interest

The non-controlling interests of €77,361 K recognized in the statement of financial position are related to the subsidiaries Sartorius Korea Biotech, Biological Industries, and Sartorius CellGenix. For details about the acquisition of Sartorius CellGenix see Note 8. The Group's interest in Sartorius Korea Biotech is 69%; the remaining 31% is subject to an exercisable call option. The purchase price for this non-controlling interest is variable and depends on the future performance of this entity.

€ in K	Dec. 31, 2021	Dec. 31, 2020
Sartorius Korea Biotech Co. Ltd.		
Sales revenue	134,342	111,566
Net result	7,097	7,659
Total assets	83,096	69,894
Attributed profit or loss	2,200	2,374

€ in K	Dec. 31, 2021	Dec. 31, 2020
Biological Industries		
Sales revenue	36,401	30,089
Net result	5,077	855
Total assets	80,107	71,619
Attributed profit or loss	1,433	292

There are no significant restrictions on the Group’s ability to access or use the assets or settle the liabilities of the above entity.

23. Pension and Employee Benefits Provisions

Defined Contribution Plans

Most of the Sartorius Stedim Biotech Group companies make payments under defined contributions plans, primarily related to government-run pension plans. In 2021, the total expense recognized for the defined contribution plans amounted to €38,427 K (2020: €22,613 K).

Defined Benefit Plans

Pension provisions and similar obligations are recognized in the consolidated financial statements of Sartorius Stedim Biotech Group in accordance with actuarial principles. IAS 19, Employee Benefits, stipulates the projected unit credit method as the method of measurement. In addition to known pensions and life expectancies, this expected cash value method takes into account future salary and pension increases.

The assumed discount rates reflect the interest rates payable on the reporting date for high-quality corporate bonds with matching maturities and denominated in the relevant currencies (mainly in euros). If such corporate bonds are not available with matching long-term maturities or are insufficiently available, their matching interest rates are determined by extrapolation.

Due to changing market and economic conditions, the underlying key assumptions may differ from actual developments and may lead to significant changes in pension and other post-employment benefit obligations. A sensitivity analysis is provided below.

The remeasurements of defined benefit liabilities (assets) are presented in other comprehensive income according to IAS 19. The actuarial losses, which were transferred to the pension reserves, essentially resulted from a change in the discount rate and totaled €2,232 K (€–3,016 K in 2020).

An amount of €27,764 K is related in particular to pension provisions for retirement pension plans in Germany. These provisions totaled €30,204 K in 2020 and were primarily related to direct commitments under defined benefit pension plans. Under these commitments, the employees earn benefits for each year of service rendered to the company. The benefits earned depend on the salary level and the age of the respective employees. These pension benefits are generally not funded with assets.

Measurement of the post-employment benefit obligations is based on the following actuarial assumptions:

For Germany:

in %	Dec. 31, 2021	Dec. 31, 2020
Discount rate	0.90	0.45
Future salary increases	3.00	3.00
Future pension increases	2.00	2.00

With regard to the assumptions for mortality and disability, the tables "Richttafeln (RT) 2018 G" by Klaus Heubeck were applied.

For France:

in %	Dec. 31, 2021	Dec. 31, 2020
Discount rate	0.90	0.50
Future salary increases	2.00	2.00
Future pension increases	2.00	2.00

The amounts reported in the statement of profit or loss and other comprehensive income consist of the following:

€ in K	2021	2020
Current service cost	–2,905	–2,264
Past service cost	1,182	720
Net interest expenses	–184	–296
Components of defined benefit costs recognized in profit or loss	–1,908	–1,840
Return on plan assets (excl. interest)	46	58
Remeasurements	2,186	–3,074
Components of defined benefit costs recognized in other comprehensive income	2,232	–3,016
Total	324	–4,856

In the statement of profit or loss, the current service cost is disclosed according to the assignment of employees to the respective functions.

The amount included in the consolidated statement of financial position arising from the Group's obligation with respect to defined benefit plans is as follows:

€ in K	Dec. 31, 2021	Dec. 31, 2020
Present value of the obligations	64,899	63,822
Fair value of the plan assets	–21,230	–16,429
Net liability	43,670	47,393

The present value of the defined benefit obligation developed as follows:

€ in K	2021	2020
Present value of the obligations as of Jan. 1	63,822	57,861
Current service cost	2,905	2,264
Past service cost	–1,182	–720
Interest cost	343	413
Remeasurements	–2,277	3,079
Foreign currency translation differences	797	–129
Retirement benefits paid in the reporting year	–1,271	–1,883
Employee contributions	546	449
Contributions by plan participants	2,504	1,949
Other changes	–1,289	538
Present value of the obligations as of Dec. 31	64,899	63,822

The remeasurements of the defined benefit liabilities (assets) can be allocated as follows:

€ in K	2021	2020
Experience adjustments	1,888	1,477
Changes in demographic assumptions	–1,036	171
Changes in financial assumptions	–3,130	1,430
Total	–2,277	3,079

Plan Assets

€ in K	2021	2020
Plan assets as of Jan. 1	16,429	13,739
Interest income	159	118
Return on plan assets (excl. interest)	46	58
Remeasurements	–91	5
Group contribution & payments	–1,068	–1,718
Foreign currency translation differences	587	–105
Employee contributions	546	449
Employer contributions	2,117	1,935
Contributions by plan participants	2,504	1,949
Plan assets as of Dec. 31	21,230	16,429

Composition of Plan Assets

The plan assets primarily refer to insurance contracts in Switzerland; no major equity or debt investments are included. Sartorius Korea Biotech deposited €6.9 million (€5.7 million in 2020) as cash and cash equivalents in local banks.

Sensitivity Analysis

An increase|decrease of the actuarial assumptions would have the following impacts on the defined benefit obligations (a positive sign (+) means an increase in the obligation):

2020:

€ in K		
Demographic assumptions		
Life expectancy	+1 year	–1 year
Effect	2,629	–2,562
Financial assumptions		
Discount rate	+100 bps	–100 bps
Effect	–8,124	9,370
Future salary increases	+50 bps	–50 bps
Effect	2,685	–2,303
Future pension increases	+25 bps	–25 bps
Effect	2,425	–2,314

2021:

€ in K		
Demographic assumptions		
Life expectancy	+1 year	–1 year
Effect	2,713	–2,650
Financial assumptions		
Discount rate	+100 bps	–100 bps
Effect	–7,584	8,477
Future salary increases	+50 bps	–50 bps
Effect	2,536	–2,374
Future pension increases	+25 bps	–25 bps
Effect	2,522	–2,417

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that changes in assumptions occur in isolation of one another. Furthermore, the present value of the defined benefit obligation was calculated using the same method that was applied in calculating the defined benefit obligation liability recognized in the statement of financial position (projected unit credit method).

Maturity Analysis

The undiscounted cash flows from defined benefit obligations can be allocated to maturities as follows:

€ in K	Dec. 31, 2021	Dec. 31, 2020
< 1 year	2,469	2,559
1 – 5 years	11,112	9,686
6 - 10 years	19,382	16,588
>10 years	109,965	88,789
Total	142,928	117,621

The weighted average duration of the defined benefit obligations is 16.0 years (2020: 17.2 years).

24. Other Provisions

A provision is recognized when a present legal or constructive obligation to third parties arising from past events has been incurred, an outflow of resources is probable and the amount of the obligation can be reasonably estimated. The amount recognized as a provision represents the best estimate of the obligation as of the reporting date.

To determine the amount of obligations, certain estimates and assumptions need to be applied, including the determination of the probability and of the amount of future outflows of resources. Typically, significant estimates are involved in the determination of provisions related to onerous contracts, warranty costs, asset retirement obligations and legal proceedings.

Other Non-Current Provisions

€ in K	Payments to employees on early retirement plan	Other	Total
Balance at Jan. 1, 2020	1,865	1,475	3,340
Change in the scope of consolidation	0	2,744	2,744
Currency translation	0	–17	–17
Consumption	–938	–89	–1,027
Reversals	0	–179	–179
Additions	1,232	396	1,628
Balance at Dec. 31, 2020	2,159	4,329	6,488

€ in K	Payments to employees on early retirement plan	Other	Total
Balance at Jan. 1, 2021	2,159	4,329	6,488
Currency translation	0	2	2
Consumption	–979	–246	–1,225
Reversals	0	–18	–18
Additions	1,882	585	2,467
Balance at Dec. 31, 2021	3,062	4,652	7,714

The non-current provisions mainly comprise provisions for partial retirement and employee anniversary bonuses (included in the item "Other"). These obligations arise predominantly at German Group companies. The partial retirement plans allow employees to work part-time for 3-5 years before their actual retirement.

Under IAS 19, these obligations are treated as severance payments to be earned in future periods and are therefore recognized in profit or loss over the respective period of service. Actuarial gains and losses, as well as past service costs, on these obligations are recognized as income or expense.

Non-current provisions are reported at their present value on the reporting date. For 2021, the discount rate for employees on the early retirement plan is -0.2% (2020: -0.3%).

Current Provisions

During fiscal 2020 and 2021, current provisions changed as follows:

€ in K	Warranties	Other	Total
Balance at Jan. 1, 2020	5,277	5,335	10,612
Change in the scope of consolidation	474	1,400	1,874
Currency translation	–90	–19	–109
Consumption	–239	–576	–815
Release	–1,251	–1,166	–2,417
Additions	4,495	7,107	11,601
Balance at Dec. 31, 2020	8,665	12,081	20,746

€ in K	Warranties	Other	Total
Balance at Jan. 1, 2021	8,665	12,081	20,746
Change in the scope of consolidation	110	399	509
Currency translation	167	28	196
Consumption	–989	–1,094	–2,083
Release	–3,879	–3,356	–7,235
Additions	10,093	8,724	18,817
Balance at Dec. 31, 2021	14,167	16,782	30,949

Warranty provisions include expenses for replacement deliveries and repairs. Specific risks are recognized when occurrence is more likely than not. General warranty risks are considered on the basis of past experience. The other provisions contain onerous contracts, uncertain liabilities to employees, and provisions for interest in connection with tax risks.

25. Employee Benefits

The liabilities for employee benefits amount to €97,159 K (2020: €59,899 K) and include accruals for paid vacation and overtime, variable remuneration, and other personnel liabilities.

26. Other Financial Obligations | Contingent Assets and Liabilities

As was the case in previous years, there are no significant contingent liabilities or contingent assets to be reported.

27. Financial Instruments: Significant Accounting Policies

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. The following notes give an overview of the impact of financial instruments on the financial statements of the Sartorius Stedim Biotech Group and provide additional information on items in the statement of financial position that contain financial instruments.

Financial assets of the Group mainly include cash and cash equivalents, trade and loan receivables, and derivative financial instruments with a positive fair value.

Financial liabilities of the Group mostly comprise loans borrowed from Sartorius AG, contingent consideration according to IFRS 3, trade payables, lease liabilities, and derivative financial instruments with a negative fair value. Financial liabilities other than derivative financial instruments and those arising from contingent consideration agreements are measured at amortized cost.

Accounting for financial instruments follows IFRS 9, Financial Instruments. Under IFRS 9, the classification and measurement approach for financial assets reflects both the entity's business model (held-to-collect, held-to-collect-and-sell, other) within the scope of which assets are held and the contractual cash flow characteristics ("SPPI" criterion: solely payments of principal and interest). There were no reclassifications of financial instruments during the reporting period.

With regard to the impairment of financial assets, IFRS 9 includes a so-called expected-loss model. Financial assets are generally regarded as credit-impaired when there are objective indications that cast doubt about the full collection of the cash flows of the respective financial assets. With regard to the financial assets of the Group, the simplified approach which is applied to trade receivables is of particular relevance.

Besides trade receivables, cash and cash equivalents are the most material financial assets on the Group's statement of financial position as of the reporting date, December 31, 2021. No impairment is recognized for these financial assets due to materiality considerations.

As on the last reporting date, no impairment was recognized as of December 31, 2021, for the remaining financial assets measured at amortized cost in terms of the 12-month expected credit losses, given the Group's immaterial historical losses.

Derivatives are measured at fair value determined according to the mark-to-market method in which recognized mathematical methods are used. The fair values are based on the market data available at the time the value of these derivatives is calculated and reflect the estimates of the market conditions at the end of the year. Those instruments that are not designated as hedging instruments and to which no hedge accounting is applied are classified as held for trading. Changes in the fair values of derivative financial instruments are either recognized in profit or loss or, in the case of hedging relationships, in other comprehensive income.

The Group applies the hedge accounting rules of IFRS 9. Sartorius Stedim Biotech uses forward transactions to hedge cash flow risks that result from changes in foreign exchange rates in relation to sales of products and the production activities, and designates only the spot element of the hedging instrument.

28. Cash and Cash Equivalents

The Group considers all highly liquid investments with less than three months' maturity from the date of acquisition to be cash equivalents. This mainly includes deposits in banks. Cash and cash equivalents are measured at cost. For purposes of the consolidated cash flow statement, cash and cash equivalents are defined as above. As of December 31, 2021, cash and cash equivalents amounted to €223,626 K (2020: €59,762 K).

29. Current Trade Receivables | Other Receivables

€ in K	Dec. 31, 2021	Dec. 31, 2020
Trade receivables from third parties	334,921	236,759
Amounts due from customers for contract work [1]	3,956	6,159
Receivables from subsidiaries of the Sartorius AG Group	17,128	13,975
Trade receivables	356,005	256,894

1 Contract assets according to IFRS 15.

The book values of trade receivables and other receivables are representative of their fair value considering the maturity date and the credit risks. The contract assets are recognized in connection with customer-specific construction contracts that meet the requirements for revenue recognition over time according to IFRS 15 (see Note 9). The amount of trade receivables disclosed as of December 31, 2021, was reduced by €140.2 million (2020: €100.3 million) as result of a sale of trade receivables because substantially all risks and rewards in relation to the financial assets sold were transferred to the buyer and the respective receivables were fully derecognized. In particular, credit risks as well as any risks arising from foreign exchange rates were completely transferred to the buyer under the current factoring program. The program is organized by the Treasury Department of the Sartorius AG Group. All participating Sartorius AG Group companies can sell receivables with a combined volume of €100 million and US$ 100 million under this program.

The item "Receivables from subsidiaries of the Sartorius AG Group" refers to other companies of the Sartorius Group (please refer to Note 44). Impairment losses on trade and other receivables are recognized using separate allowance accounts. For details on the determination of the impairment allowances, see Note 41.

30. Other Financial Assets

€ in K	Dec. 31, 2021	Dec. 31, 2020
Derivative financial instruments	1,285	10,127
Other financial assets	13,721	10,856
Current financial assets	15,006	20,983

The amount shown as derivative financial instruments represents the fair value of foreign currency hedging instruments, mainly forward contracts (for details refer to Note 38).

Other financial assets are measured at amortized cost using the effective interest method less any impairment losses. The item "Other financial assets" includes loan receivables from other entities of the Sartorius AG Group in the amount of €971 K (2020: €1,013 K).

31. Loans and Borrowings

€ in K	Balance at Dec. 31, 2021	of which current Dec. 31, 2021	Balance at Dec. 31, 2020	of which current Dec. 31, 2020
Liabilities to banks	22,466	16,814	9,545	9,308
Loans from Sartorius AG	524,090	8,670	515,420	0
Other loans from Sartorius Group companies	21	21	3,804	3,804
Total loans and borrowings	546,577	25,505	528,769	13,112

Sartorius Stedim Biotech Group has signed loan agreements with its parent company Sartorius AG mainly to finance the acquisitions in 2020 and 2021. The interest rates are fixed with a credit margin based on arms'-length principles. In addition, the financing of the Sartorius Stedim Biotech Group is secured by a credit line from its parent Sartorius AG (see Note 40).

The non-current loans and borrowings do not include liabilities to the sellers in connection with acquisitions which are presented in the item "Other non-current liabilities."

32. Other Non-current Liabilities

€ in K	Dec. 31, 2021	Dec. 31, 2020
Contingent considerations from acquisitions	194,932	81,269
Liability for acquisition of non-controlling interests	211,692	35,614
Other liabilities	11,842	8,933
Total	418,466	125,816

The contingent consideration agreements result from the acquisitions of BIA Separations, WaterSep BioSeparations LLC, and Xell AG (see Note 8). As of December 31, 2021, the liabilities in connection with the possible acquisition of the non-controlling interests relate to the options of the holders of these interests in Biological Industries and Sartorius CellGenix GmbH (see Note 8). In the prior reporting period, this item only reflects the non-current portion of the liability in connection with Biological Industries.

33. Trade Payables

€ in K	Dec. 31, 2021	Dec. 31, 2020
Payments received on account of orders [1]	219,794	132,239
Trade payables to third parties	234,322	156,633
Payables to participations	1,099	832
Payables to subsidiaries of the Sartorius AG Group	15,940	17,268
Total	471,155	306,972

1 Contract liabilities according to IFRS 15

34. Other Current Financial Liabilities

€ in K	Dec. 31, 2021	Dec. 31, 2020
Derivative financial instruments	8,429	1
Other liabilities	138,845	29,240
Total	147,274	29,241

Derivative financial instruments refer to the fair values of foreign currency hedging transactions such as forward contracts (mainly related to the U.S.$).

"Other liabilities" as of December 31, 2021, include the current portion of the contingent consideration in connection with the acquisition of BIA Separations (€97.9 million; 2020: €0.0 million) and the current portion of the liabilities in connection with the possible acquisition of the non-controlling interests in Biological Industries (€6.3 million; 2020: €5.9 million).

35. Carrying Amounts and Fair Values of Financial Instruments According to Categories

The following table shows the carrying amounts and fair values of financial assets and liabilities by category of financial instrument according to IFRS 9 as of December 31, 2021, and as of December 31, 2020:

	Category acc. to IFRS 9	Carrying amount Dec. 31, 2021	Fair value Dec. 31, 2021 € in K	Carrying amount Dec. 31, 2020	Fair value Dec. 31, 2020 € in K
Investments in non-consolidated subsidiaries and associates	n/a	7,911	7,911	7,009	7,009
Financial assets	Equity instruments at fair value through profit or loss	49	49	49	49
Financial assets	Debt instruments at fair value through profit or loss	1,037	1,037	1,062	1,062
Financial assets	Measured at amortized cost	5,773	5,773	5,377	5,377
Financial assets (non-current)		14,769	14,769	13,497	13,497
Amounts due from customers for contract work	n/a	3,956	3,956	6,159	6,159
Trade receivables	Measured at fair value through other comprehensive income	147,321	147,321	105,443	105,443
Trade receivables	Measured at amortized cost	204,728	204,728	145,291	145,291
Trade receivables		356,005	356,005	256,894	256,894
Receivables and other assets	Measured at amortized cost	13,721	13,721	10,856	10,856
Derivative financial instruments designated as hedging instruments [1]	n/a	1,285	1,285	10,127	10,127
Other financial assets (current)		15,006	15,006	20,983	20,983
Cash and cash equivalents	Measured at amortized cost	223,626	223,626	59,762	59,762
Loans and borrowings	Financial liabilities at cost	546,577	554,317	528,769	532,939
Trade payables	Financial liabilities at cost	251,361	251,361	174,733	174,733
Trade payables | payments received for orders	n/a	219,794	219,794	132,239	132,239
Trade payables		471,155	471,155	306,972	306,972
Derivative financial instruments designated as hedging instruments [1]	n/a	8,429	8,429	1	1
Other financial liabilities	Financial liabilities at fair value through profit or loss	292,828	292,828	81,269	81,269
Other financial liabilities	Financial liabilities at cost	264,483	264,067	73,787	73,895
Other financial liabilities		565,740	565,324	155,057	155,165

1 The amounts include the non-designated part of the contracts.

The fair values of the financial instruments were determined on the basis of the market information available on the reporting date and are to be allocated to one of the three levels of the fair value hierarchy in accordance with IFRS 13.

Level 1 financial instruments are measured on the basis of prices quoted on active markets for identical assets and liabilities. In Level 2, financial instruments are measured on the basis of input factors that can be derived from observable market data or on the basis of market prices for similar instruments. Level 3 financial instruments are measured on the basis of input factors that cannot be derived from observable market data.

Besides the liabilities arising from contingent consideration agreements (Level 3; see Note 8 for details), the financial instruments to be recognized at fair value on the reporting date are mainly derivatives in the form of forward contracts. They were measured on the basis of their quoted exchange rates and market yield curves (Level 2). Furthermore, the trade receivables which are part of the portfolio of receivables that are "held-to-collect-and-sell" are measured at fair value. Due to the short maturities and low credit risks (see Note 41) the valuation follows the same approach as for trade receivables measured at amortized cost.

The fair values to be disclosed for financial liabilities recognized at amortized cost, especially liabilities to banks, were measured on the basis of the market interest rate, taking the current indicative credit spreads into account (Level 2).

The fair values of the remaining financial assets and liabilities to be disclosed approximate the carrying amounts due to their predominantly short-term maturity. The maximum credit loss risk is reflected by the carrying amounts of the financial assets recognized in the statement of financial position.

The Group recognizes transfers between the levels of the fair value hierarchies at the end of the reporting period during which a change has occurred. In the current reporting period, there were no transfers between the levels.

36. Net Gains and Losses from Financial Instruments

The net gains and losses of the various categories of financial instruments are presented in the following table:

Categories according to IFRS 9 € in K	2021 12 months	2020 12 months
Financial assets measured at amortized cost	13,307	–5,441
Financial assets and liabilities measured at fair value through profit or loss	–207,101	16,221
Financial assets measured at fair value through other comprehensive income	2,046	–5,311
Financial liabilities measured at amortized cost	–6,377	120

The net result from financial assets measured at amortized cost as well as from financial assets measured at fair value through other comprehensive income mainly includes the effects of currency translation and changes in allowances.

The net result from financial assets and liabilities measured at fair value through profit or loss predominantly comprises changes in the fair value of derivative financial instruments as well as interest income and interest expenses for these financial instruments and the changes of the financial liabilities arising from contingent consideration agreements (see also Note 8).

The net result from financial assets measured at fair value through other comprehensive income is related to those receivables that are not solely held to collect contractual cash flows, but that may be sold as part of the factoring program.

The net result from liabilities measured at amortized cost mainly comprises the effects of foreign currency translation.

Total interest income and expenses for financial assets and liabilities that are not measured at fair value through profit or loss were as follows:

€ in K	2021 12 months	2020 12 months
Interest income	989	763
Interest expenses	–9,303	–7,318

37. Capital and Financial Risk Management

Capital Risk Management
In the Sartorius Stedim Biotech Group, capital is managed in order to maximize earnings of those participating in the company by optimizing the ratio of equity to liabilities. Furthermore, we ensure that all Group companies operate under the premise of the going-concern principle.

The financial liabilities detailed above are regarded as managed capital as well as cash and cash equivalents and equity capital.

Goals of Financial Risk Management
The Treasury Department of the Sartorius Stedim Biotech Group is centrally located at Sartorius Corporate Administration GmbH, a subsidiary of Sartorius AG. This centralized Treasury Department performs services for all companies of the Sartorius Group, including the Sartorius Stedim Biotech Group, and coordinates access to national and international financial markets. In addition, the Treasury Department monitors and controls financial risks by internal risk reporting, which analyzes risks according to their degree and scope. Essentially, these risks entail currency, interest rate, and liquidity risks as well as credit risks.

The Sartorius Stedim Biotech Group strives to minimize the impact of currency and interest rate risks using appropriate primary or derivative financial instruments. Hedging transactions and their control are carried out by different staff members. Moreover, the Group's Internal Auditing Department regularly monitors the use of such financial instruments. Derivative financial instruments are traded for hedging purposes only.

38. Management of Exchange Rate Risks and Hedge Accounting

The Group is exposed to currency risks as more than one third of sales revenue is generated in U.S. dollars or currencies linked to the U.S. dollar and, to a lesser extent, in other foreign currencies. At the same time, the Group is able to compensate the major part of the revenues denominated in foreign currencies with costs incurred in the same currencies due its global production network. The share of revenues generated in foreign currencies that exceeds such costs, so-called net exposure, is hedged according to a cash flow at risk (CfaR) model within the limits of a risk budget with derivative financial instruments. The resulting hedge ratios usually range between 0% and 80% for the relevant currencies, respectively. The Group generally follows a rolling hedging strategy of up to 12 months in advance. Also, the hedging measures are reviewed at regular intervals in order to adapt them to currency fluctuations.

For currency hedging, forward contracts are used. Forward contracts secure the right, and simultaneously create the obligation, to sell an established foreign currency amount on the exercise date at a specific exchange rate against the euro, independently of the exchange rate on that date. The profit or loss resulting from the difference between the current and the previously established exchange rate is generally recognized as income or expense in the statement of profit or loss.

At the reporting date, (net) forward contracts had been carried out in an amount of $324 million (2020: $150 million) to hedge against the risk of fluctuation in the EUR|USD exchange rate. This amount covers roughly half of the expected net exposure for the U.S. dollar within the period of 12 months. Furthermore, other foreign currencies were hedged in smaller volumes.

The following table shows the forward transactions as of the reporting date:

Dec. 31, 2020	Currency	Volume in K	Maturity	Fair value € in K
Forward contract	USD	150,000	2021	9,543
	USD	150,000		9,543
Forward contract	JPY	850,000	2021	80
	JPY	850,000		80
Forward contract	CAD	2,000	2021	11
	CAD	2,000		11
Forward contract	GBP	38,000	2021	492
	GBP	38,000		492

Dec. 31, 2021	Currency	Volume in K	Maturity	Fair value € in K
Forward contract	USD	324,100	2022	–7,288
	USD	324,100		–7,288
Forward contract	JPY	1,990,000	2022	91
	JPY	1,990,000		91
Forward contract	CHF	5,000	2022	–26
	CHF	5,000		–26
Forward contract	GBP	81,500	2022	192
	GBP	81,500		192
Forward contract	SEK	120,000	2021	–113
	SEK	120,000		–113

The Group uses a cash flow at risk (CfaR) model to measure foreign currency risk. The basis for the analysis of foreign currency risks are the expected cash inflows and outflows in foreign currencies (so-called net exposures). The total foreign currency risk to which all absolute values of the net exposures are aggregated is as follows at the reporting date for the following 12 months:

€ in millions	Dec. 31, 2021	Dec. 31, 2020
Foreign currency exposure	792	428
thereof short positions	43	56

The risk position of the Group is reflected by the CfaR that remains after considering all hedging activities of the Group. The CfaR approach takes into account the impact of possible currency fluctuations on the cash flows in foreign currencies (against the euro) on the basis of probability distributions. In this context, the covariances of the foreign currencies weighted with the net exposures serve as input factors for the estimation of the portfolio volatility, which is decisive for determining the CfaR. Correlations between the currencies are taken into account in this method as risk is reduced in the risk aggregation.

The possible negative impact on EBITDA is determined for each currency based on actual exchange rates and net exposures with a confidence level of 95% for the next 12 months. The following table presents the possible negative impact for the Group as determined by the CfaR approach for the following 12 months:

€ in millions	Dec. 31, 2021	Dec. 31, 2020
Cash flow at risk	28	16

Hedge Accounting

Derivative financial instruments are measured at the time of acquisition at cost and at fair value on subsequent balance sheet dates. The changes in value of the derivative financial instruments are generally recognized in the statement of profit or loss on the reporting date.

If the derivative financial instruments serve to hedge against cash flow risk arising from exchange rate risks and a qualified hedging relationship exists based on the criteria of IFRS 9, the valuation adjustments of the effective portion of the instrument are recognized in other comprehensive income (cumulative amount in 2021: €–6.7 million; 2020: €10.8 million). Only the spot element of the forward contracts used to hedge the cash flow risks is designated as hedging instrument. The amounts recognized in equity are reclassified to profit or loss in the period in which the hedged transactions affect profit or loss. The changes of the hedging reserves are shown below and in the statement of changes in equity. The non-designated or ineffective portion of the hedging instruments is recognized in the financial result in profit or loss.

The economic relationship between hedging instrument and hedged item and the effectiveness of the hedge relationship is determined based on consistency of the significant contractual features of the transactions ("critical terms match"). In this regard, the Group performs a qualitative assessment. Hedge ineffectiveness may possibly arise when the timing of future transactions deviates from the original assumptions or the credit risk of the counterparties of the hedging instrument changes.

The following table presents the effects of the hedging instruments related to exchange rate risks on the financial position and performance of the Group:

Currency	Carrying amount (asset) as of Dec. 31, 2020	Carrying amount (liability) as of Dec. 31, 2020	Hedge ratio	Change in value of hedging instruments	Change in value of hedged item	Nominal amount	Maturity: 1-6 months	Maturity: 7-12 months	Average exercise price
	€ in K	€ in K		€ in K	€ in K	in K of respective currency	in K of respective currency	in K of respective currency	
USD	10,300	0	100%	10,300	10,300	150,000	95,000	55,000	1.14
CAD	11	0	100%	11	11	2,000	2,000	0	1.55
JPY	83	0	100%	83	83	850,000	850,000	0	124.90
GBP	449	0	100%	449	449	38,000	18,000	20,000	0.91

Currency	Carrying amount (asset) as of Dec. 31, 2021	Carrying amount (liability) as of Dec. 31, 2021	Hedge ratio	Change in value of hedging instruments	Change in value of hedged item	Nominal amount	Maturity: 1-6 months	Maturity: 7-12 months	Average exercise price
	€ in K	€ in K		€ in K	€ in K	in K of respective currency	in K of respective currency	in K of respective currency	
USD	195	-6,921	100%	-6,726	-6,726	324,100	195,700	128,400	1.17
CHF	0	-26	100%	-26	-26	5,000	5,000	0	1.04
JPY	111	-8	100%	103	103	1,990,000	740,000	1,250,000	130.23
GBP	808	-724	100%	84	84	81,500	76,500	5,000	0.86
SEK	0	-125	100%	-125	-125	120,000	49,000	71,000	10.22

Hedging instruments that have a positive fair value are shown in the line item "Financial assets (non-current)" or "Other financial assets (current)" in the statement of financial position. Hedging instruments that have a negative fair value are shown in the line item "Other financial liabilities (non-current)" or "Other financial liabilities (current)" in the statement of financial position.

The amounts that are recognized in the reporting period in connection with the cash flow hedges in other comprehensive income as well as those amounts that were reclassified from other comprehensive income to profit or loss ("Other income and other expense") are presented in the statement of other comprehensive income and the statement of changes in equity.

39. Interest Risk Management

Sartorius Stedim Biotech is mainly financed through its parent company Sartorius AG. The major loans are taken out at fixed interest rates (see Note 31); therefore, the Group is currently not significantly exposed to interest rate risks. To control the interest risk, an appropriate ratio between fixed and variable loans is generally maintained. However, as of December 31, 2021, and the preceding reporting date, there are no loans with variable interest rates. Accordingly, as of December 31, 2021, the Group has no open interest rate derivative contracts to hedge the risk of increasing interest rates.

40. Liquidity Risk Management

The maturity of the financial liabilities excluding derivative financial instruments shows the following pattern:

€ in K	Carrying amount Dec. 31, 2020	Cash flow Dec. 31, 2020	< 1 year	1 – 5 years	> 5 years
Loans and borrowings	528,769	528,784	13,125	515,659	0
Lease liabilities	58,337	75,438	12,975	32,901	29,562
Trade payables	174,733	174,733	174,733	0	0
Other liabilities (excluding derivatives)	155,056	161,150	29,337	87,845	43,968
Financial liabilities	916,895	940,106	230,171	636,405	73,530

€ in K	Carrying amount Dec. 31, 2021	Cash flow Dec. 31, 2021	< 1 year	1 – 5 years	> 5 years
Loans and borrowings	546,577	547,787	26,401	519,004	2,382
Lease liabilities	78,940	96,194	17,398	45,843	32,952
Trade payables	251,361	251,361	251,361	0	0
Other liabilities (excluding derivatives)	557,311	563,074	148,911	303,763	110,400
Financial liabilities	1,434,189	1,458,416	444,071	868,610	145,734

The cash flows shown in the above tables include the undiscounted expected payments in connection with the respective financial liabilities, including the associated interest payments based on the interest rates as of the reporting date.

The loans and borrowings include the loan raised from the parent company Sartorius AG. The other liabilities include the liabilities from the contingent considerations agreements (see Note 8), the liability for the phantom units in AllPure as well as the liabilities in connection with the possible acquisition of the non-controlling interests in Biological Industries and Sartorius CellGenix GmbH.

The following tables illustrate the liquidity analysis for derivative financial instruments based on undiscounted cash flows:

€ in K	Carrying amount Dec. 31, 2020	Cash flow Dec. 31, 2020	< 1 year	1 – 5 years	> 5 years
Gross fulfilment					
Forward contracts	1	1	1	0	0
Payment obligation		1,977	1,977	0	0
Payment claim		–1,977	–1,977	0	0
Derivatives	1	0	0	0	0

€ in K	Carrying amount Dec. 31, 2021	Cash flow Dec. 31, 2021	< 1 year	1 – 5 years	> 5 years
Gross fulfilment					
Forward contracts	8,429	8,417	8,417	0	0
Payment obligation		299,086	299,086		
Payment claim		–290,669	–290,669		
Derivatives	8,429	8,417	8,417	0	0

The Group controls liquidity risks by maintaining credit lines and additional facilities with banks, by continuously tracking the forecasted and actual cash flows, and by managing the maturity profiles of financial assets and liabilities. It is not expected that cash outflows will occur at significantly different times or in significantly different amounts.

The credit line provided by Sartorius AG with a total amount of up to €260 million at variable interest rates had been utilized by an amount of €9 million as of December 31, 2021 (2020: €0 million). In addition, the Group had further short-term bilateral credit lines at variable interest rates at the reporting date; these amounted to €50 million (2020: €41 million) and were used to the extent of €16 million (2020: €7 million).

Local cash funds in certain countries (e.g., China and India) are only available to the Group for cross-border transactions subject to exchange controls.

41. Credit Risk Management

Credit risk is the risk of financial loss to the Group if a counterparty to a financial instrument fails to meet its contractual obligations. Credit risk arises principally from cash and cash equivalents and trade receivables. In addition to that, the Group is exposed to credit risks arising from derivative financial instruments with positive fair values and, to a low extent, from contractual cash flows from debt securities.

Credit risk is controlled centrally for the Group by the Treasury Management unit. For counterparties such as banks and financial institutions, the creditworthiness is continuously monitored to recognize increases in credit risks at an early stage. If no new information is obtained, the Group assumes that the related financial assets still have a low credit risk.

Customers are assigned risk limits that principally depend on business volume, past experience, and the financial position of the customer. Compliance with the limits is regularly reviewed by the management responsible. In some cases, the Group receives advance payments to avoid credit risks. There are no significant concentrations of credit risks from individual customers or regions.

For some trade receivables, the Group may have collateral, such as guarantees that can be used within the contractual agreements in case the counterparty does not meet its contractual payment obligations.

Impairment of Trade Receivables and Contract Assets

The impairment model of IFRS 9, which requires recognition of expected credit losses, is of particular relevance for the Group’s trade receivables and contract assets according to IFRS 15. The Group applies the simplified approach according to IFRS 9 to trade receivables and contract assets. Accordingly, lifetime expected credit losses are recognized for these assets. The starting point of the impairment model is an analysis of the actual historical credit loss rates. These are adjusted, taking into consideration forward-looking information and the effects of current changes in the macroeconomic environment, if significant. Due to the immaterial level of historical credit losses the Group currently determines the expected credit losses for the Group's portfolio of trade receivables as a whole. However, historical loss rates are analyzed regularly in more detail to apply different loss rates to different portfolios, where appropriate. In 2021, no significant change regarding the credit risk of the Group’s portfolio of biopharma customers was observed in line with the notion that the industry was not much affected by the pandemic crisis.

The contract assets are related to projects for typical customers of the Group. Therefore, it is assumed that the loss rates applied to trade receivables are appropriate approximations for the loss rates of the contract assets. Accordingly, there is no further differentiation between trade receivables and contract assets.

On this basis, the allowances for trade receivables and contract assets were determined as follows as of December 31, 2021, and as of December 31, 2020:

December 31, 2021 € in K	Not due	1 – 30 days overdue	31 – 60 days overdue	61-90 days overdue	More than 90 days overdue	Total
Gross carrying amount of trade receivables	284,366	20,542	18,502	11,921	26,649	361,980
Gross carrying amount of contract assets	3,956	0	0	0	0	3,956
Impairment loss allowance	721	14	577	70	8,548	9,931

December 31, 2020 € in K	Not due	1 – 30 days overdue	31 – 60 days overdue	61 - 90 days overdue	More than 90 days overdue	Total
Gross carrying amount of trade receivables	222,059	7,493	2,375	4,498	24,476	260,900
Gross carrying amount of contract assets	6,159	0	0	0	0	6,159
Impairment loss allowance	251	241	702	218	8,753	10,166

The expected credit losses are determined based on a loss rate of 0.05%. In addition, impairments are determined on the basis of individual assessments. Days overdue are one essential criterion in this context. A default is generally presumed when there is no reasonable expectation of recovering a financial asset. In such a case, the respective receivables are derecognized.

The movements in the allowance for impairment with respect to trade receivables and contract assets are presented below:

€ in K	2021 12 months	2020 12 months
Valuation allowance at the beginning of the year	–10,166	–6,226
Increase during the year	–3,761	–5,391
Derecognition and consumption	335	338
Recoveries of amounts previously impaired	3,929	2,353
Foreign currency translation differences	–190	147
Business combinations	–79	–1,388
Valuation allowance at the end of the year	–9,931	–10,166

Impairment of Other Financial Assets

Besides trade receivables, cash and cash equivalents are the most material financial assets on the Group's statement of financial position as of the reporting date, December 31, 2021. The expected credit losses are monitored at regular intervals. Due to the high creditworthiness of the counterparties and the short maturities, the impairment that would have to be recognized for these financial assets is immaterial. Therefore, no impairment is recognized for cash and cash equivalents.

For the other financial assets measured at amortized cost, no impairment is recognized as of December 31, 2021, for the twelve months' expected credit losses due to immaterial historical credit losses. In the event of a significant increase in credit risk, which is generally presumed when a payment is more than 30 days past due, the lifetime expected credit losses are recognized for the respective financial asset. A default is generally presumed when there is no reasonable expectation of recovering a financial asset. This is generally presumed when payments are more than 90 days past due. As of the reporting date, there are no indications of increases in credit risk to a material extent. The carrying amounts of the financial assets reflect the maximum credit loss for these assets at the end of the reporting period.

42. Other Risks Associated with Financial Instruments

As of the reporting date, the Sartorius Stedim Biotech Group was not exposed to the risk of volatility in share prices. The only exception is related to the financial liability as a result of the contingent consideration agreement in connection with the acquisition of BIA Separations which depends on the share price development of Sartorius Stedim Biotech S.A. as a valuation parameter (see Note 8).

43. Share-based Payments

On the level of Sartorius Stedim Biotech's majority shareholder Sartorius AG, share-based payments exist in the form of so-called phantom stock units. Under this plan, the respective board member is granted a certain number of phantom stocks each year that represent an agreed amount of money. The exercise of these stocks is not possible before four years and depends on certain requirements regarding the performance of the Sartorius AG shares.

When the stocks are paid out, the amount is based on the share price at the exercise date. The payment is capped at an amount of 2.5 times the share price at the time these virtual options were granted. For further details, please refer to the Remuneration Report.

The fair value of the phantom stock units granted to Sartorius AG board member that are also members of the Board of Directors of Sartorius Stedim Biotech S.A. is disclosed as follows:

	Number of phantom stock units	Subscription price in €	Fair value when granted on Jan. 1 of the particular year € in K	Fair value at year-end on Dec. 31, 2021 € in K	Paid out € in K	Exercisable
Tranche of phantom stock units for 2017	2,950	70.51	208	0	260	
Tranche of phantom stock units for 2018	2,685	80.32	216	539	0	no
Tranche of phantom stock units for 2019	2,884	113.78	328	821	0	no
Tranche of phantom stock units for 2020	1,818	190.30	346	865	0	no
Tranche of phantom stock units for 2021	1,229	354.13	435	669	0	no
Total	11,566			2,894	260	

Other Disclosures

The consolidated financial statements were prepared on a going-concern basis.

Material Events after the Reporting Date

On February 7, 2022, the Group closed the acquisition of the Novasep chromatography division. Antitrust approval required for this transaction was granted by the U.S. Federal Trade Commission end of January 2022. The business acquired achieved sales revenue of around €40 million at double-digit profit margins in 2020. As of the acquisition date, approximately 100 employees were taken on as part of the Group workforce. The majority of these currently work at the site in Pompey in northern France and some in the USA, China, and India.

The chromatography business acquired comprises batch and intensified chromatography systems, and primarily focuses on applications for smaller molecules, such as oligonucleotides, peptides, and insulin. It is complementary to the Group's chromatography offering for biopharma customers.

The purchase price for the acquired chromatography business amounted to approx. €45 million and was paid in cash. Expenses directly attributable to the acquisition of €6.2 million were recognized in other operating expenses through profit or loss in prior years. In view of the short period between the acquisition and the preparation of the consolidated financial statements, no preliminary revaluation of the acquired net assets and goodwill is available. It is expected that the material assets will be intangible assets for technologies (preliminary estimate: about €18.5 million) and customer relationships (preliminary estimate: about €8 million). Any goodwill may reflect the expansion of the product portfolio as well as intangible assets not recognizable separately, such as the workforce acquired. Goodwill is not expected to be deductible for tax purposes. The transaction was not yet recognized in the consolidated financial statements for fiscal 2021 as the entity will be consolidated as of the acquisition date.

No other material events occurred after the reporting date.

Number of Employees

The average workforce employed during the reporting year 2021 was 9,236 (6,900 in 2020).

44. Related Parties

General

The majority shareholder of Sartorius Stedim Biotech S.A. is Sartorius AG, which holds a controlling interest in the company of 74.3% in equity capital – and 84.5% of the voting rights. The Sartorius Group itself is organized in two divisions: Bioprocess Solutions (mainly run by the Sartorius Stedim Biotech Group) and Lab Products & Services (mainly run by the other companies of Sartorius Group). As a result of this structure, the Sartorius Group holds two subsidiaries in most of the countries in which it is represented, and these companies partially share space, staff, and other resources. Furthermore, the German Sartorius Group companies carry out various central functions and accordingly deliver services to the worldwide entities (e.g., IT support). Sartorius Corporate Administration GmbH, a 100% subsidiary of Sartorius AG, has incorporated numerous Group functions, such as Group finance, human resources, information technology services, investor relations, and legal services. These services are charged within the Group and, to a significant extent, also to Sartorius Stedim Biotech.

The structures described give rise to a number of relations and transactions with related parties. Transactions between Sartorius Stedim Biotech S.A. and its subsidiaries (presented in Note 7) were eliminated on consolidation and are not disclosed under this Note. Details of transactions between the Group and other related parties, belonging to the Sartorius Group, are disclosed below.

Sales, Purchases and Commissions

In certain business areas, members of the Sartorius Group act as contract manufacturers for the Sartorius Stedim Biotech Group and vice versa. The respective transactions are carried out at an arm's length principle and are disclosed in the table below as "Sales revenue" and "Purchases."

€ in K	Sales revenue 2021	Purchases 2021	Receivables Dec. 31, 2021	Payables Dec. 31, 2021
Related parties of Sartorius Group	103,841	20,951	21,200	540,051

€ in K	Sales revenue 2020	Purchases 2020	Receivables Dec. 31, 2020	Payables Dec. 31, 2020
Related parties of Sartorius Group	83,703	14,361	18,123	536,492

Certain product groups of the Sartorius Stedim Biotech portfolio are sold through the sales force of other Sartorius entities. For arranging these sales, the Sartorius Stedim Biotech Group paid commissions of €2.4 million (€2.7 million in 2020). These commissions are typically calculated as a percentage of the sales revenue generated.

Management Fees and Other Shareholder Costs

The Executive Board of Sartorius AG, the German parent company of Sartorius Stedim Biotech, also manages Sartorius Stedim Biotech Group to a large extent. Two of Sartorius Stedim Biotech S.A.'s board members are also members of the Sartorius AG Executive Board. For their services to Sartorius Stedim Biotech, a portion of their remuneration is charged to Sartorius Stedim Biotech S.A. (€1.4 million in 2021; €1.4 million in 2020) and to Sartorius Stedim Biotech GmbH (€2.4 million in 2021; €2.0 million in 2020).

The use of the Sartorius brand by Sartorius Stedim Biotech entities is subject to a brand name fee. In 2021, an amount of €15.8 million was charged (2020: €7.8 million). Other shareholder functions, such as group financial reporting, compliance, and investor relations, are performed by above-mentioned Sartorius Corporate Administration GmbH in Germany. These services were charged to Sartorius Stedim Biotech S.A. in the amount of €1.3 million (2020: €1.3 million).

Shareholder Loan

Sartorius Stedim Biotech Group's loans raised from its parent company Sartorius AG are described in Note 31. The interest rates are based on arm's length conditions.

Administration Charges and Shared Costs

As described above, the companies in most countries share certain functions and costs. The underlying contracts include mainly agreements to share office space and central administrative functions, such as accounting and controlling, human resources management and IT. In this respect, the relevant companies charge rent, salaries, social security costs, and other expenses for such services, as well as a pro-rated profit margin for the services they provide.

The most significant contract in this context is the one between Sartorius Stedim Biotech GmbH, Germany, and Sartorius Corporate Administration GmbH. This company provides all central service and administrative functions to Sartorius Stedim Biotech GmbH and other Group companies. The calculation for service fees typically includes a surcharge of 3% on total costs. 3% is a surcharge compliant with arm's length principles for routine tasks in line with OECD and EU guidelines. In 2021, services of approx. €94.6 million were provided to Sartorius Stedim Biotech GmbH (€66.6 million in 2020). This amount covers the following functions:

- Marketing communication and corporate branding, e-commerce, business development
- Environment, health and security (EHS); factory maintenance
- Finance, human resources, information technology services
- Central services and general organization.

Compensation of Key Management Personnel

In 2020 and 2021, the Executive Board Management received the following remuneration:

€ in K	Total	Short-term benefits	Post-employment benefits	Other long-term benefits	Termination benefits	Share-based payments
2021 [1]	2,903	1,576	158	248	0	921
2020 [1]	2,518	1,375	156	109	0	879

1 For more information please refer to the chapter Corporate Governance (See pages 71 to 102).

Statutory Auditors' Report on the Consolidated Financial Statements

This is a translation into English of the statutory auditors’ report on the financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.

This statutory auditors’ report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the management report and other documents provided to shareholders.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

For the year ended 31 December 2021

To the Shareholders of Sartorius Stedim Biotech S.A.,

Opinion

In compliance with the engagement entrusted to us by your Shareholders’ meetings, we have audited the accompanying consolidated financial statements of Sartorius Stedim Biotech S.A. for the year ended 31 December 2021.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at 31 December 2021 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Statutory Auditors’ Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

Independence

We conducted our audit engagement in compliance with independence requirements of the French Commercial Code (code de commerce) and the French Code of Ethics (code de déontologie) for statutory auditors for the period from 1 January 2021 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014.

Justification of Assessments - Key Audit Matters

Due to the global crisis related to the Covid-19 pandemic, the financial statements of this period have been prepared and audited under specific conditions. Indeed, this crisis and the exceptional measures taken in the context of the state of sanitary emergency have had numerous consequences for companies, particularly on their operations and their financing, and have led to greater uncertainties on their future prospects. Those measures, such as travel restrictions and remote working, have also had an impact on the companies' internal organization and the performance of the audits.

It is in this complex and evolving context that, in accordance with the requirements of Articles L.823-9 and R.823-7 of the French Commercial Code (code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

Goodwill valuation – Impairment test

Identified risk

As of 31 December 2021, goodwill amounts to 820.7 M€, or 20.8% of total consolidated assets.

As described in Note 5 to the consolidated financial statements, Sartorius Stedim Biotech S.A. is an "integrated solution provider" for its customers, and as a result there is only one operating segment from a product and customer perspective: "Biopharm ". In addition, as indicated in Note 16 to the consolidated financial statements, because of the interdependence of the market in which your group operates, the lowest level at which goodwill can be allocated is the Biopharm segment. The goodwill has therefore been fully allocated to the Cash Generating Unit (C.G.U.) corresponding to the Biopharm segment.

Goodwill is subject to an annual impairment test and whenever there are indicators of impairment in accordance with the methods and assumptions described in Notes 3 and 16 to the consolidated financial statements. In particular, in view of what has been described above, the impairment test is carried out at the level of the Biopharm segment.

We considered that the determination of the value of goodwill is a key point of our audit given its significance in the consolidated financial statements of your group, and because the determination of the recoverable amount taken into account in the impairment test on the basis of the value in use of the C.G.U. requires the use of estimates and assumptions (in particular in respect of future cash flows, perpetual revenue growth rates and the discount rate) that require significant management judgment.

Responses obtained during our audit

We obtained the impairment test from the C.G.U. group corresponding to the Biopharm segment as well as the forecasts underlying the calculation (4-year plan).

We reviewed the compliance of the company's methodology with applicable accounting standards.

We also performed a critical analysis of how the company has implemented this methodology, including the following procedures:

- Assessed the reasonableness of the key assumptions used to determine the cash flow of the Biopharm segment as well as that used for the perpetual growth rate;

- Assessed, with the support of our valuation specialists, the discount rate used by management. We compared this rate with our own estimates and analysed its various constituent components;

- Checked the arithmetical accuracy of the impairment test performed by your group.

We have also obtained and assessed the sensitivity analyses carried out by management, as shown in Note 16 of the notes to the consolidated financial statements. As a result, we were able to verify that only an extremely large change in the main assumptions could lead to the recognition of an impairment of goodwill.

Lastly, we verified the appropriateness of the information provided in Notes 3, 4 and 16 to the consolidated financial statements.

Specific Verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations of the Group’s information given in the management report of the Board of Directors.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

Report on Other Legal and Regulatory Requirements

Format of presentation of the consolidated financial statements intended to be included in the annual financial report

We have also verified, in accordance with the professional standard applicable in France relating to the procedures performed by the statutory auditor relating to the annual and consolidated financial statements presented in the European single electronic format, that the presentation of the consolidated financial statements intended to be included in the annual financial report mentioned in Article L.451-1-2, I of the French Monetary and Financial Code (code monétaire et financier), prepared under the responsibility of the

Chief executive officer complies with the single electronic format defined in the European Delegated Regulation N° 2019/815 of 17 December 2018. As it relates to consolidated financial statements, our work includes verifying that the tagging of these consolidated financial statements complies with the format defined in the above delegated regulation.

Based on the work we have performed, we conclude that the presentation of the consolidated financial statements intended to be included in the annual financial report complies, in all material respects, with the European single electronic format.

We have no responsibility to verify that the consolidated financial statements that will ultimately be included by your company in the annual financial report filed with the AMF are in agreement with those on which we have performed our work.

Appointment of the Statutory Auditors

We were appointed as statutory auditors of Sartorius Stedim Biotech S.A. by he annual general meeting held on 7 April 2015 for KPMG S.A. and on 19 May 2006 for Deloitte & Associés.

As at 31 December 2021, KPMG S.A. and Deloitte & Associés were in the 7th year and 16th year without interruption.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As specified in Article L.823-10-1 of the French Commercial Code (code de commerce), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.

- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements.

- Assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein.

- Evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The statutory auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit Committee

We submit to the Audit Committee a report which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters, that we are required to describe in this audit report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L.822-10 to L.822-14 of the French Commercial Code (code de commerce) and in the French Code of Ethics (code de déontologie) for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Marseille, 11 February 2022

The Statutory Auditors

French original signed by

KPMG Audit
A Division of KPMG S.A.

Nicolas Blasquez
Partner

Deloitte & Associés

Christophe Perrau
Partner