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Convenience Translation

This document is a translation of the report "Gutachtliche Stellungnahme über die Ermittlung des Unternehmenswerts zum 13. Juli 2023 der SLM Solutions Group AG" for convenience purposes, which was written in German. The essential parts of the translation were performed by a professional translator. Ebner Stolz GmbH & Co. KG does not assume any responsibility for the correctness of the translation. The German version is authoritative for decision-making purposes.

Expert Opinion

on the Calculation of the Business Value

as at 13 July 2023

SLM Solutions Group AG

Lübeck

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Abbreviations

Abbreviation	Full term
AG	*Die Aktiengesellschaft*: a German trade journal on stock corporation law
AktG	*Aktiengesetz*: German Stock Corporation Act
AMER	North and South America
APAC	Asia Pacific
BaFin	*Bundesanstalt für Finanzdienstleistungsaufsicht*: Federal Financial Supervisory Agency
BJT	Binder Jetting
BGH	*Bundesgerichtshof*: Federal Court of Justice
Bloomberg	Bloomberg Finance L.P., New York, USA
BVerfG	*Bundesverfassungsgericht*: Federal Constitutional Court
CAGR	Compound Annual Growth Rate
CAPM	Capital Asset Pricing Model
DB	*Der Betrieb*: a German business administration journal
EBIT	Earnings before interest and taxes
EBITDA	Earnings before interest, taxes, depreciation and amortization

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Abbreviation	Full term
Ebner Stolz	Ebner Stolz GmbH & Co. KG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Stuttgart
EBT	Earnings before taxes
EUR	Euro
EMEA	Europe, Middle East and Africa
FAUB	Technical committee for business valuations and commerce of the Institute of Public Auditors in Germany
FB	*Finanz Betrieb*: a German journal on finance
FC	Forecast
Fraunhofer IGCV	Fraunhofer-Institut für Gießerei-, Composite- und Verarbeitungstechnik
IDW	Institut der Wirtschaftsprüfer in Deutschland e.V., Düsseldorf: Institute of Public Auditors in Germany
IMF	International Monetary Fund
KStG	*Körperschaftsteuergesetz*: German Corporate Income Tax Act
LG	*Landgericht*: Regional Court
LB/EB DED	Wire Laser an Electron Beam Energy Deposition (LB/EB DED)

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Abbreviation	Full term
Metal ME	Metal Material Extrusion
OLG	*Oberlandesgericht*: Higher Regional Court
p.a.	per annum
PBF	Powder Bed Fusion
SolZ	*Solidaritätszuschlag*: Solidarity surcharge
SLM AG	SLM Solutions Group AG, Lübeck
Arc	Wire Electric and Plasma Arc Energy Deposition
WPg	*Die Wirtschaftsprüfung*: a German journal for the auditing profession
WpÜG	*Wertpapiererwerbs- und Übernahmegesetz*: German Securities Acquisition and Takeover Act
ZIP	*Zeitschrift für Wirtschaftsrecht*: a German journal for commercial law

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General Engagement Terms

For technical reasons the tables may contain rounding differences of ± one unit (TEUR, % etc.).

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1. Engagement and Performance of the Engagement

We were engaged by

Nikon AM. AG, Berlin (in future Lübeck)
("Nikon AM. AG"),

the majority shareholder of SLM Solutions Group AG, to calculate the business value of

SLM Solutions Group AG, Lübeck
("SLM AG" or "Company"),

as at 13 July 2023 in order to derive a fair settlement payment ["Abfindung"] for the intended forced transfer of the shares held by minority interests in the Company to Nikon AM. AG in connection with the merger of SLM Solutions AG to Nikon AM. AG (squeeze-out under the law of mergers). We performed our work intermittently in the period from 13 February 2023 to 30 May 2023, partly in the offices of SLM AG, Lübeck, and otherwise in our own offices.

The engagement is based on Standard S1 "Principles for the Performance of Business Valuations" (IDW S1 2008) released by the Institute of Public Auditors in Germany (IDW) on 2 April 2008. We observed IDW accounting practice statement 2/2017 "Beurteilung einer Unternehmensplanung bei Bewertung, Restrukturierungen, Due Diligence und Fairness Opinion" (assessment of the business planning for the purposes of valuations, restructuring, due diligence and fairness opinions). In accordance with our engagement we have determined an objectified value for the business in our capacity as neutral valuers.

We draw attention to the fact that the Management Board of SLM AG is responsible for compiling and presenting the planning statements and the premises underlying the planning. We assume no responsibility for the realization of the assumptions made in the planning statement and results and/or the measures to be performed or the results of entrepreneurial activity. We would like to point out that future events frequently pan out differently to what was expected and that large deviations to the business planning may arise. Our liability and responsibility is thus limited to the due professional care required for a critical assessment and appraisal. Our activities differ significantly both in terms of scope and in their aims from an audit of the annual financial statements or similar activities. For this reason, we do not issue an audit opinion and not any other

form of attestation. Likewise, we do not provide any assurance on the financial statements or the system of internal controls of SLM AG and its subsidiaries and equity investments. The compliance of the (consolidated) financial statements and the management reports with the legal requirements has been confirmed by the independent auditor, KPMG AG Wirtschaftsprüfungsgesellschaft, engaged for this task.

We have recorded the nature and scope of our valuation work in our working papers.

Should there be any material changes in the assets, liabilities, financial position or financial performance, or any other basis used for the valuation of SLM AG in the period between the conclusion of our valuation work and the prospective date of 13 July 2023 on which the Annual General Meeting of SLM Solutions Group AG passes a resolution on the forced transfer of the shares of minority shareholders to the majority shareholder, then these remain to be considered in the valuation.

On the part of SLM AG, we were voluntarily provided with information by the Management Board and the persons appointed by the board to provide us with information.

We have added the customary letters of representation – in which the Management Board of Nikon AM. AG and the Management Board of SLM AG provide assurance that all the information relevant to this business valuation has been provided to us completely and accurately – to our working papers.

The General Engagement Terms for "Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften" [German Public Auditors and Public Audit Firms], dated 1 January 2017, apply to the execution of this engagement and govern our responsibilities, also to third parties.

This expert opinion serves the sole purposes of providing an information base and foundation on which decisions can be made by our Client in connection with the determination of a fair settlement payment and to render a report on the transfer of the shares in accordance with Sec. 327c (2) AktG and may not be used for any other purposes. This restriction on use does not apply to publications and measures related to preparing and conducting the annual general meeting passing a resolution on the squeeze-out of minority shareholders or to court cases that may be conducted in connection with the squeeze-out. Other than the above, any disclosure to third parties requires our prior written approval.

Documents associated with the engagement

Generally, the following documents were presented to us to perform the valuation:

- Reports of KPMG on the audit of the consolidated financial statements and the Group management report of SLM Solutions Group AG for the financial years 2020 to 2022.
- Reports by KPMG on the audit of the annual financial statements and management report of the SLM Solutions Group AG for the financial years 2020 to 2022.
- Annual reports of the SLM Solutions Group AG for the financial years 2020 to 2022.
- Planning statement of the SLM Solutions Group AG for the years 2023 to 2027 and the underlying planning assumptions.
- internal controlling analyses of the SLM Solutions Group AG.
- Minutes of the meetings of the Supervisory Board in the period from 18 January 2021 to 16 March 2023.
- Articles of association of SLM Solutions Group AG
- Extract from the commercial register.
- various market and industry-specific publications.
- publicly available information, in particular capital market data.

2. Description of the Valuation Object

2.1. Legal Background

SLM AG is registered in the commercial register of the local court of Lübeck under the number HRB 13827 HL. The financial year corresponds to the calendar year.

The Company's capital stock as at 31 December 2022 amounted to EUR 25,744,680.00 and was split into 25,744,680 no-par value bearer shares with an imputed share in capital of EUR 1.00 each. Due to the issuance of new shares because of the conversion of convertible bonds issued by the Company, the Company's capital stock increased to EUR 31,107,819.00 by 3 April 2023, divided into 31,107,819 no-par value bearer shares with an imputed share in capital of EUR 1.00 each and remains unchanged at this amount. This also corresponds to the capital stock and the number of shares at the valuation date. According to information provided by Nikon AM. AG (confirmed by certificates of its custodian bank), it has held more than 90% of the shares in SLM AG since 10 February 2023.

Of the total of 31,107,819 shares of the Company, 25,744,680 shares, which are entitled to dividends as of 1 January, are listed for trading on the regulated market of the Frankfurt Stock Exchange under ISIN DE000A111338 and simultaneously admitted to the Prime Standard segment of the regulated market which entails further obligations subsequent to admission. In addition, 2,316,282 SLM shares, which are entitled to dividends as of 1 January 2023, are listed for trading on the regulated market of the Frankfurt Stock Exchange under ISIN DE000A30VLG2 with additional obligations subsequent to admission. In addition, this listed SLM shares are traded on the XETRA electronic trading platform of Deutsche Börse AG, as well as on Gettex, the electronic trading platform of the Munich stock exchange and on Quotrix, the electronic trading platform of the Düsseldorf stock exchange. Moreover, the shares are traded on the open market of the stock exchanges in Berlin, Düsseldorf, Hamburg, Hanover, Munich and Stuttgart as well as on Tradegate Exchange and LS Exchange. In addition, there are 3,046,857 SLM shares, which are entitled to dividends as of 1 January 2023, bearing ISIN DE000A289BJ8 and held exclusively by Nikon AM. AG, which are not admitted to stock exchange trading.

The Company issued a number of convertible bonds in past years. After the takeover of the Company, all convertible bonds have been repaid in the meantime, so that there are no longer any convertible bonds on the valuation date.

By resolution of the Annual General Meeting, the Management Board was authorized until 16 May 2027 to increase share capital by up to EUR 11,350,862.00 by issuing 11,350,862 new no-par value bearer shares with an imputed share in capital of EUR 1.00 each, in either one or multiple share issues, in return for cash contribution and/or contribution in kind, subject to approval from the Supervisory Board (Authorized Capital 2022). On 2 September 2022, the Management Board, with the consent of the Supervisory Board of the Company on the same day, made partial use of this authorization and resolved to increase the share capital of the Company by EUR 2,270,172.00 by partially utilizing the Authorized Capital 2022 of EUR 22,701,725.00 through the issuance of 2,270,172 new no-par value bearer shares, each with an imputed share in capital of EUR 1.00 and with dividend rights as of 1 January 2022 (the "New Shares") to EUR 24,971,897.00 (the "Capital Increase 2022") and to exclude the shareholders' subscription rights to the New Shares. The Capital Increase 2022 became effective upon registration of its implementation in the commercial register on 9 September 2022. Since then, the Authorised Capital 2022 still amounts to EUR 9,080,690.

In addition, according to Art. 4 (6) of the articles of incorporation, the share capital of the Company may be conditionally increased by up to EUR 8,416,704.00 by the issue of up to 8,416,704 no-par value bearer shares (Conditional Capital 2014/2018/2020). Due to the issuance of 5,363,139 New Shares as a result of the partial conversion of convertible bonds issued by the Company, the Conditional Capital 2014/2018/2020 was reduced until 3 April 2023 and since then has remained unchanged at only EUR 3,053,565.00. According to the Company, the wording of Article 4 para. 6 of the Articles of Association is to be amended accordingly in a timely manner based on a resolution of the Company's Supervisory Board.

The subject of the business valuation is SLM AG and its subsidiaries and equity investments.

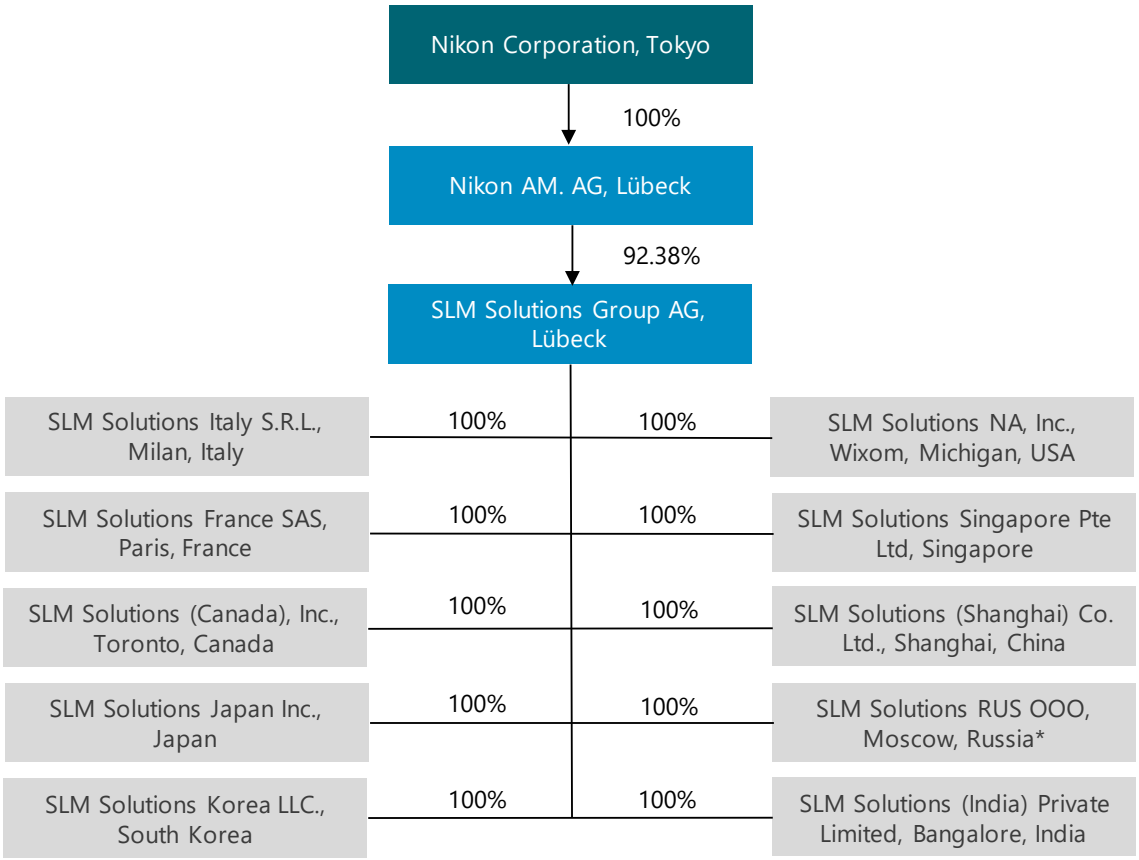
We therefore also refer to SLM AG and its subsidiaries and equity holdings collectively below as "SLM Group".

2.2. Economic Background

a) Business Activity of the SLM Group

The business activity of the SLM Group, which operates globally, extends to all aspects of metal-based additive manufacturing and mainly comprises the development, manufacture and distribution of plant and machinery, samples, small-run series for additive manufacturing and prototype construction, as well as providing the associated consumables and related services.

The structure of the SLM Group is presented in condensed form below, taking account of the significant entities:



*The Russian subsidiary closed down its operations and was liquidated in 2023.

Source: SLM AG, own presentation.

SLM Solutions Group AG is a subsidiary of Nikon AM. AG, which holds a stake of more than 90% in SLM Solutions Group AG. The remaining shares of SLM Solutions Group AG are in free float. Nikon AM. AG is a wholly-owned subsidiary of Nikon Corporation, Tokyo, Japan.

SLM Solutions Group AG currently has nine wholly-owned subsidiaries. The Russian subsidiary, SLM Solutions RUS OOO, was liquidated in the year 2023.

SLM AG acts as the sole production unit of the SLM Group and is responsible for the majority of operative and administrative tasks, product development within the Group and coordinating global sales activities. The subsidiaries based in the United States, Singapore, China, India, Italy, France, Canada, Japan and South Korea promote local sales within the sales territories allocated to them.

The SLM Group is a provider of metal-based additive manufacturing ("3D-printing technology"). The product range currently consists of six systems / machines: SLM®125, SLM®280, SLM®500, SLM®800, the NXG XII 600 and the NXG XII 600 E. The systems differ from each other primarily in terms of the size of the build envelope and the number of lasers incorporated in each machine. The systems offered allow direct production of complex metal components using input materials such as titanium, aluminum, cobalt-chrome and special alloys such as tooling alloy, stainless steel and super alloys. The systems technology exploits the process of selective laser melting in which a 3D computer model of the piece to be manufactured serves as the point of departure for the additive manufacturing process. The piece is then constructed by applying a number of laser beams to fuse the piece together layer-by-layer in a metal powder bed.

The NXG XII 600 is a new machine equipped with 12 lasers. It has a much larger build envelope in comparison to the SLM®800 and is the largest machine in the SLM product portfolio. The NXG XII 600 is the first system that allows mass production using additive manufacturing technology.

In addition, the Company launched its free-float technology in financial year 2021. Free-float is a software application that allows components to be printed with significantly fewer support structures. Support structures have been a major element in 3D printing since the 1990s. Support structures not only hold up overhanging structures but also play an important role in the cooling process by absorbing residual heat and conducting it away from the work piece.

The business of SLM Solutions Group AG breaks down into the operating segments of Machines and After Sales.

The Machines segment comprises the development, production, distribution and marketing of machines and peripherals for selective laser melting. Products are either marketed directly to customers or distributed via local sales representatives or dealers in countries where there is no sales organization. The main focus of business activity is currently on the Machines segment.

The business of the After Sales segment consists of machine-related services, the sale of accessories, spare parts and consumables as well as services unrelated to the machines.

The customers of the SLM Group are found in various industrial sectors, such as the automobile industry, tool and machine engineering, aerospace, energy and medical technology. The customers can be separated into two segments: contract manufacturers and end users.

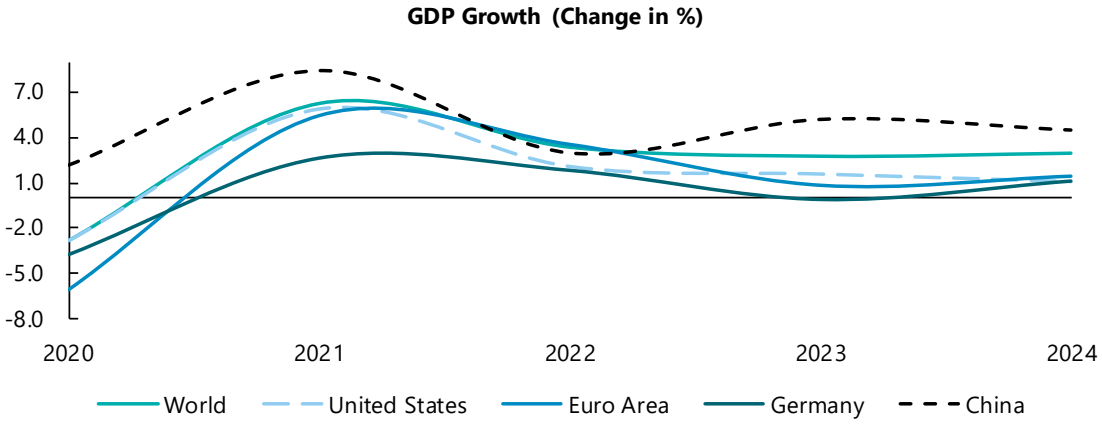
In addition to Europe, the target markets are North America and Asia Pacific.

As at 31 December 2022, the SLM Group employed 537 full-time equivalents (prior year: 488), of whom almost a quarter were assigned to research and development.

b) Market Environment

Macroeconomic environment

The following summary presents the latest forecasts for the global economy from the International Momentary Fund (see IMF, World Economic Outlook, April 2023, p. 142, 143) and growth in **real gross domestic product** (GDP) for selected countries and the euro zone.



Source: Ebner Stolz analysis; International Monetary Fund, April 2023, p. 142,143.

In April 2023, the International Monetary Fund forecast that **global economic growth** would come to 2.8% for the year 2023, before steadying at around 3.0% in 2024 (IMF, World Economic Outlook, April 2023). This represents the weakest growth profile since 2001 with the exception of the global financial crisis and the most acute phase of the corona pandemic. This forecast is 0.1 percentage points below the prediction from January 2023 and reflects the fiscal tightening to combat high inflation rates in many countries, the deterioration in financial conditions for companies and continuing disruptions caused by the war in Ukraine. A particularly sharp downturn is forecast for the developed economies with growth declining from 2.7% in 2022 to 1.3% in 2023. The first signs of recovery in the global economy at the beginning of 2023, with falling inflation and stable growth, have evaporated with inflation remaining stubbornly high and recent turbulence in the financial sector. Even though inflation has fallen slightly due to the central banks raising interest rates, and despite a slight decline in the prices of food and groceries and energy, the upwards pressure on prices has proven to be persistent. In addition, labor markets in a number of economies are tight. The rapid rise in key lending rates has placed the focus on the susceptibility of the banking sector with fears of contagion rising across the broader financial sector, including non-banking institutes (see IMF, World Economic Outlook, April 2023, p. 16 et seq.).

In parallel, other factors affecting the global economy in the year 2022 appear to have continued through into this year, albeit at less intensity. Debt levels remain high and this is restricting the ability of monetary policy to respond to the new challenges. Although the rise in commodity prices in the wake of the Ukraine war has begun to wane, the war continues, and geopolitical tensions remain high. In addition, infectious strains of COVID-19 resulted in further outbreaks of corona in the past year. The most heavily affected economies, China most of all, appear to be recovering, reducing the risk of supply chain interruptions. Growth of 5.2% is expected for China in the year 2023. (See IMF, World Economic Outlook, April 2023, p. 18 et seq., p. 29).

The United States and the euro zone are going through a phase of pronounced economic weakness. It can be assumed that the combination of slower growth, tightening financial conditions and higher debt levels will lead to a decline in investment activity and a rise in company insolvencies (see World Bank, Global Economic Prospects, January 2023, p. 3-7).

In the **euro zone**, economic activity weakened considerably over the course of the second half of the year 2022 due to a sharp rise in energy prices, the ensuing high inflation rate and more difficult conditions for financing. In anticipation of sustained disruptions to energy supplies and continued tightening of monetary policy, growth of 0.8% is expected for the year 2023, before the economy stabilizes again as both energy prices and inflation begin to fall again. For the United States, growth of just 1.6% is forecast for 2023. Very moderate GDP growth is also expected in the year 2024 for both the United States and the euro zone (see IMF, World Economic Outlook, April 2023, p. 142/143; World Bank, Global Economic Prospects, January 2023, p. 3-10).

The latest inflation projections from bank analysts for selected countries and the euro zone are presented below.

Mean value of Inflation estimates	2023	2024	2025
	%	%	%
United States	4.3	2.7	2.4
Euro Area	5.7	2.7	2.0
Germany	6.4	2.9	2.0
China	1.7	2.3	2.1

Source: Bloomberg, own analyses.

More restrictive monetary policy will drive down inflation expectations in the euro zone and the United States. Inflation rates in the euro zone, Germany and the United States are projected to amount 5.7%, 6.4% and 4.3%, respectively, which are still very high. In China, an inflation rate of approximately 1.7% is expected for the year 2023.

The inflation rates in Germany and the euro zone as well as the United States and China should return to moderate rates of between 2.0% and 2.4% by 2025.

Market for additive manufacturing

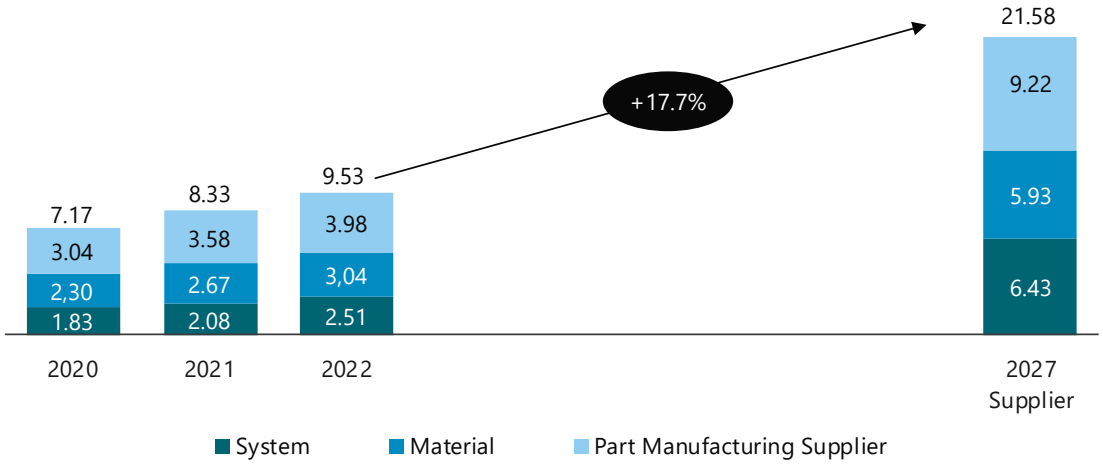
The overall market for industrial additive manufacturing can be split into the market for **metal-based** and **polymer-based additive manufacturing**. Additive manufacturing distinguishes itself from subtractive production methods, where unneeded material is removed from a block of material. By contrast, additive manufacturing fuses the material layer-by-layer to create an object on the basis of a 3D digital file using a 3D printer and the associated software.

Additive manufacturing methods originated in plastics processing. Additive manufacturing methods for processing plastics have (already) reached a degree of maturity that enables series production of high-performance polymers in sectors such as medical technology or aviation (see Frauenhofer IGCV, "Polymerbasierte Additive Fertigung").

Additive manufacturing of metal parts uses either a direct or an indirect method. In the direct production method, the product is created with fully-fledged properties directly by additive processes. In the indirect method, a green compact is created using 3D printing methods that is then debinded before being sintered (see Frauenhofer, IGVC, "Metallbasierte Additive Fertigung").

The following chart shows the development of the total market for both **metal- and polymer-based** additive manufacturing, broken down into the segments of Systems, Materials and Part Manufacturing Suppliers from 2020 to 2022 as well as the Supplier Forecast 2027 from AMPOWER, a market research institute and consulting firm:

Global Metal and Polymer Additive Manufacturing Market 2020 to 2022 and Supplier Forecast 2027 in EUR Billion

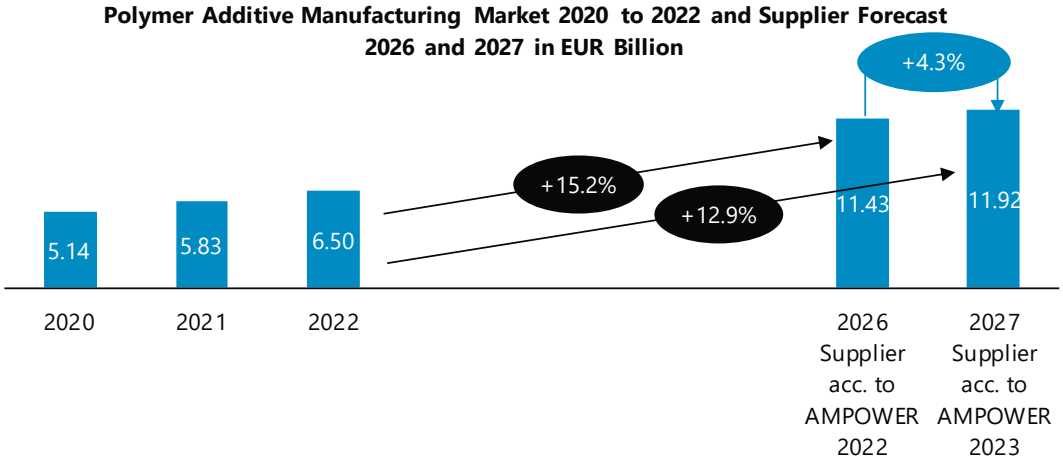


Source: AMPOWER Report 2023, p. 18.

The study from AMPOWER splits the market into Suppliers and Customers. The Suppliers segment is further broken down into three groups: Systems, Materials and Part Manufacturing Suppliers. The "Part Manufacturing Suppliers" group comprises companies that render production services in the field of additive manufacturing for a range of customers. The "Systems" (system providers) segment consists of the sale of machines as well as the associated services, such as maintenance and applications development. The "Materials" (material suppliers) category consists of sales of raw materials. The Customers segment consists of the users of additive manufacturing technology who purchase machines and raw materials or production services from suppliers in the Part Manufacturer Suppliers group in order to produce and deliver parts to their own customers.

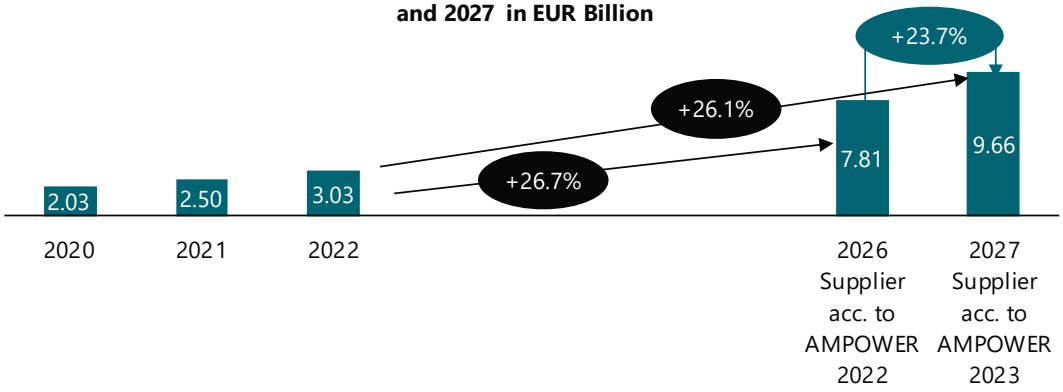
In the year 2022, the global market for metal- and polymer-based additive manufacturing (metal and polymer AM) was estimated to come to approximately EUR 9.53 billion, whereby the polymer market accounts for roughly 70% of the total market. Although the system sales for both methods are roughly the same, the revenue generated in production services and materials is much higher for polymer AM applications due to the greater maturity of this market (see AMPOWER Report 2023, p. 18). The market for metal- and polymer-based additive manufacturing is expected to grow by a compound annual growth rate (CAGR) of roughly 17.7% until 2027.

The following chart presents the development of the metal-based and polymer-based additive manufacturing market from 2020 to 2022 as well as the supplier forecast for the year 2026, as published in AMPOWER 2022 and for the year 2027, as published in AMPOWER 2023:



Source: AMPOWER Report 2023, p. 64; AMPOWER Report 2022, p. 65.

Metal Additive Manufacturing Market 2020 to 2022 and Supplier Forecast 2026 and 2027 in EUR Billion



Source: AMPOWER Report 2023, p. 24; AMPOWER Report 2022, p. 23.

While the polymer AM market recorded growth of around 13.4% between 2020 and 2021, and growth of 11.5% from 2021 to 2022, the market for metal-based additive manufacturing grew by 23.2% and 21.2% in the same periods. According to AMPOWER the size of the market for metal-based additive manufacturing in 2021 grew to roughly EUR 2.5 billion and to roughly EUR 3.03 billion in the year 2022.

The market for metal-based additive manufacturing is projected to grow by a CAGR of roughly 26.7% from 2022 to 2026. By contrast, the polymer AM market is forecast to grow by an annual average of roughly 15.2% until 2026, which indicates the greater maturity of the polymer AM market compared to the metal-based AM market. Starting from the baseline of 2022, annual growth rates of 26.1% are projected for the metal AM market and 12.9% for the polymer AM market until the year 2027.

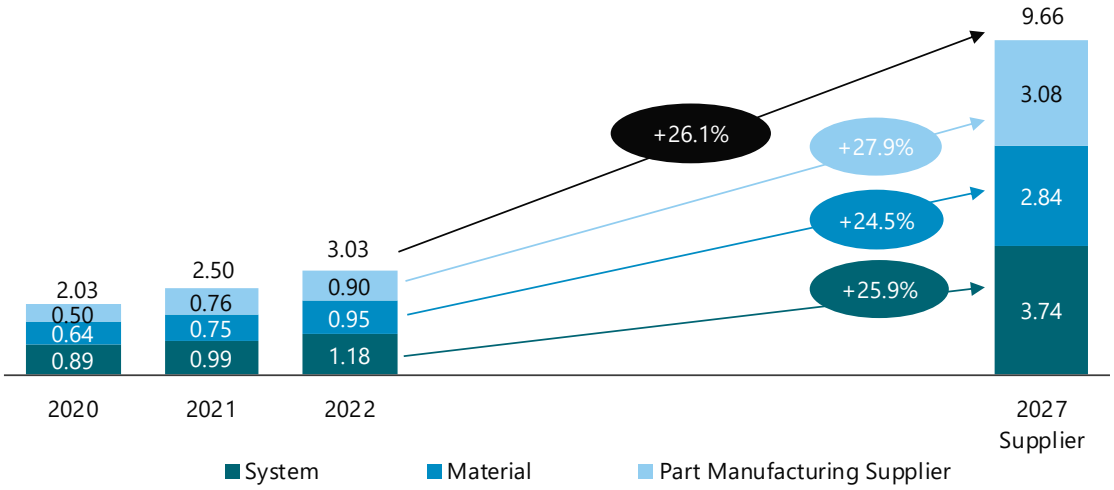
Using the market volume projected by AMPOWER in the Supplier Forecast for the year 2027, it is possible to derive the projected annual growth rates of the polymer AM market and the metal AM market between 2026 and 2027. These come to 23.7% and 4.3% respectively.

Market for metal-based additive manufacturing

The business model of SLM Solutions Group AG is based on the technology of selective laser melting (SLM). The following chart visualizes the market addressed by the SLM Group. The business activity breaks down into the two divisions of Machines and After Sales. The Machines segment consists of the sale of machines for selective laser melting and power sieving stations and other peripherals. The After Sales segment comprises service, spare parts, merchandise including powders as well as training and the installation of the machines. The relevant markets for SLM AG are therefore the "Materials" and "Systems" segments with a focus on metal-based additive manufacturing of high-quality metal components using powder bed fusion (PBF).

The following chart shows the development of the market for metal-based additive manufacturing, broken down into the segments of Systems, Materials and Part Manufacturing Suppliers from 2020 to 2022 as well as the Supplier Forecast from AMPOWER for the year 2027:

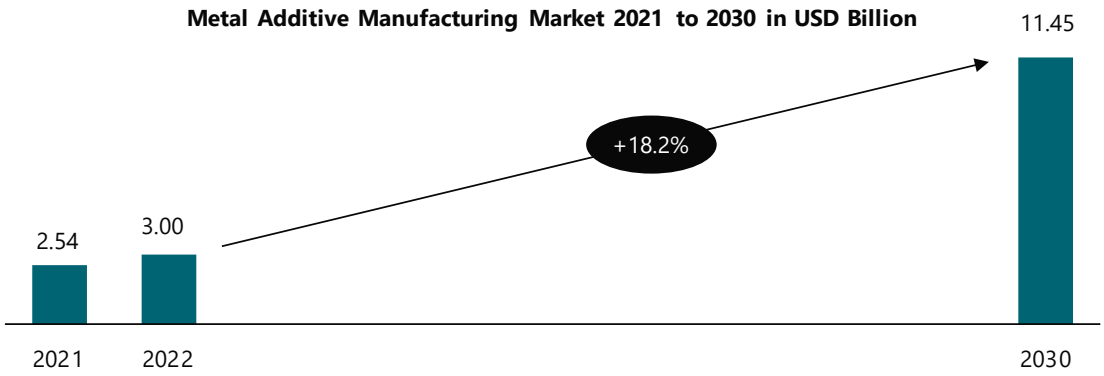
Metal Additive Manufacturing Market 2020 to 2022 and Supplier Forecast 2027 in EUR Billion



Source: AMPOWER Report 2023, p. 24.

The volume of the global market for metal-based additive manufacturing was estimated to come to approximately EUR 3.03 billion in the year 2022. Of this total, roughly EUR 1.18 billion is attributable to Systems, EUR 0.95 billion to Material and EUR 0.90 billion to Part Manufacturing Suppliers. Taking the year 2022 as the baseline, a CAGR of approximately 26.1% is forecast for suppliers until 2027. The highest CAGR of 27.9% is anticipated for the Part Manufacturing segment. In terms of the Materials and Systems segments, slightly lower CAGRs of between 24.5% and 25.9% are expected between 2022 and 2027.

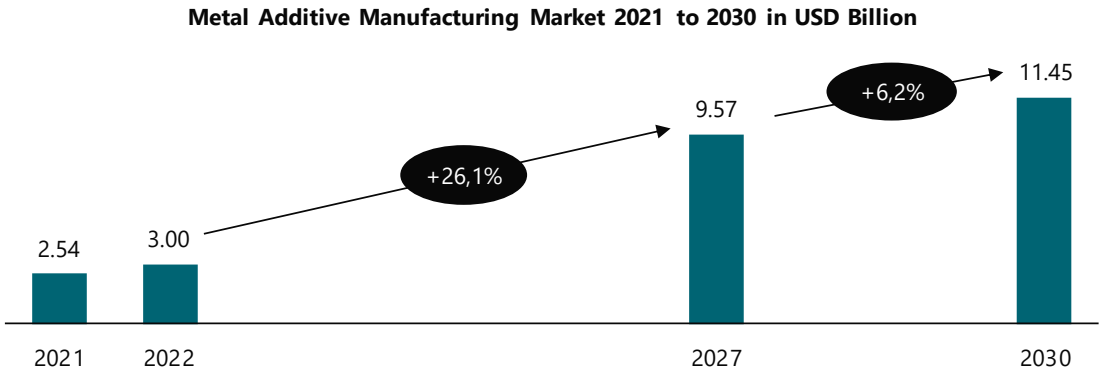
The following chart presents the development of the market for metal-based additive manufacturing between 2021 and 2022 and the projections until the year 2030, listed in USD billions, as issued by Precedence Research:



Source: Precedence Research, Metal Additive Manufacturing Market, June 2022.

According to Precedence Research, the market for metal-based additive manufacturing is expected to grow at a CAGR of roughly 18.2% from 2022 to 2030. A study from Technavio forecasts a CAGR of approximately 20.84% from 2022 until 2027 for the metal-based additive manufacturing market (see "Metal Additive Manufacturing Market by Type, Application, and Geography - Forecast and Analysis 2023-2027", Technavio, January 2023).

Applying the CAGR projected by AMPOWER until the year 2027 of 26.1%, and market volume forecast by Precedence Research for the year 2030, it is possible to derive the (implied) CAGR for the years 2027 to 2030. At 6.2% this lies significantly below the CAGR forecast for the preceding years (until 2027) which is a sign that market growth is forecast to slow considerably over the medium term, primarily because the market volume will be much larger by then.



Source: Combination: Precedence Research, Metal Additive Manufacturing Market, June 2022, AMPOWER Report 2023, p. 24.

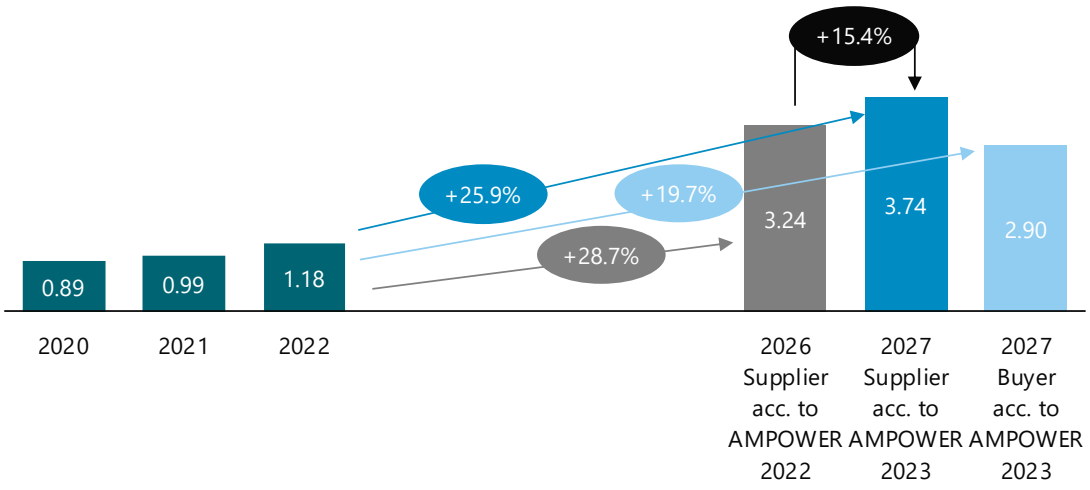
Expected innovations to exploit the benefits of using 3D metal printers in industry are seen as a key growth factor. The forecast increase in the use of 3D printers in design and prototyping of products and objects is also viewed as a growth factor as they offer lower production cost and greater accuracy in the final product. According to Grand View Research, the market for metal-based additive manufacturing systems will see high demand, particularly in the health sector, the automobile industry, aerospace and defense (see Grand View Research, Inc., Bloomberg).

Due to the fact that the SLM Group generates revenue in the segments of **Systems and Materials** these segments are examined in more depth below:

Market for metal-based additive manufacturing systems

The following chart presents the development of the market for additive manufacturing systems from 2020 to 2027. Both a supplier and a buyer forecast is available for the year 2027.

Metal Additive Manufacturing System Market 2020 to 2022,Supplier Forecast 2026 and 2027 and Buyer Forecast 2027 EUR Billion



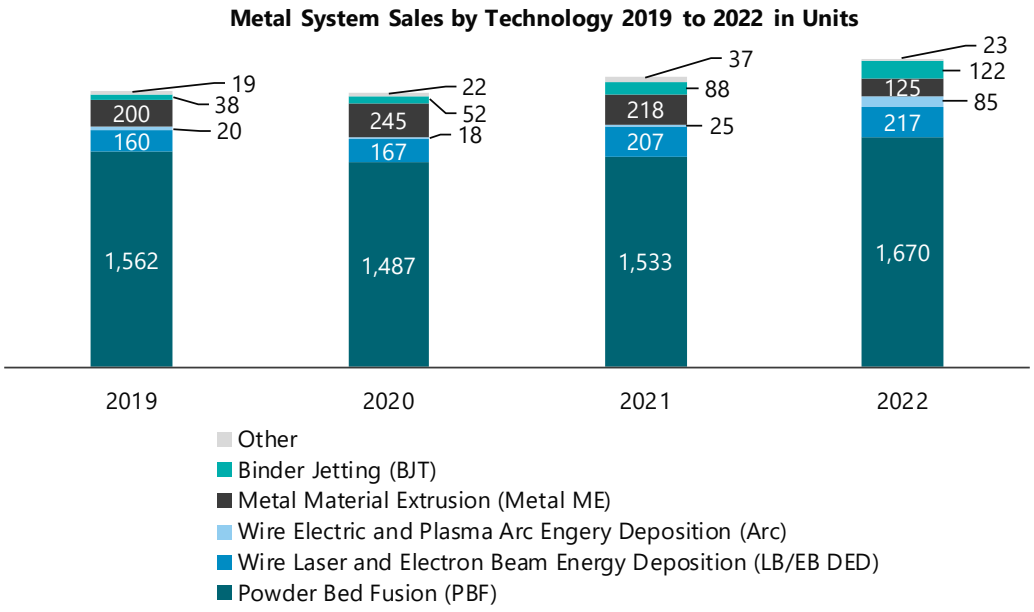
Source: AMPOWER Report 2023, p. 24, 25; AMPOWER Report 2022, p. 23.

AMPOWER estimates the market volume of the **Systems** segment to have come to approximately EUR 1.18 billion in the year 2022. While growth of approximately 25.9% to EUR 3.74 billion is forecast for suppliers of metal-based additive manufacturing systems from the year 2022 to 2027, the growth rate for customers is forecast to only come to roughly 20% from 2022 to 2027. Potential buyers therefore estimate the market volume in 2027 to lie at roughly EUR 2.9 billion.

Using the Supplier Forecast 2026 referred to by AMPOWER, which forecasts a market volume of EUR 3.24 billion by 2026, the CAGR from 2022 to 2026 therefore comes to 28.7%. This implies a growth rate from 2026 to 2027 of approximately 15.4%, which is significantly below the CAGR forecast for the period from 2022 to 2027.

This illustrates that the supplier forecasts are much more optimistic about purchase decisions by buyers than the final buyers themselves. The users in the survey frequently report that internal projects to optimize the efficiency and productivity of existing machines and production processes are already underway or planned for the near future. For example, by adjusting obsolete process parameters, it is possible to alter the layer thickness which raises the productivity of existing resources and reduces the potential sales volume of new machines (see AMPOWER Report 2023, p. 25).

The following chart presents the number of systems sold by technology from 2019 to 2022:



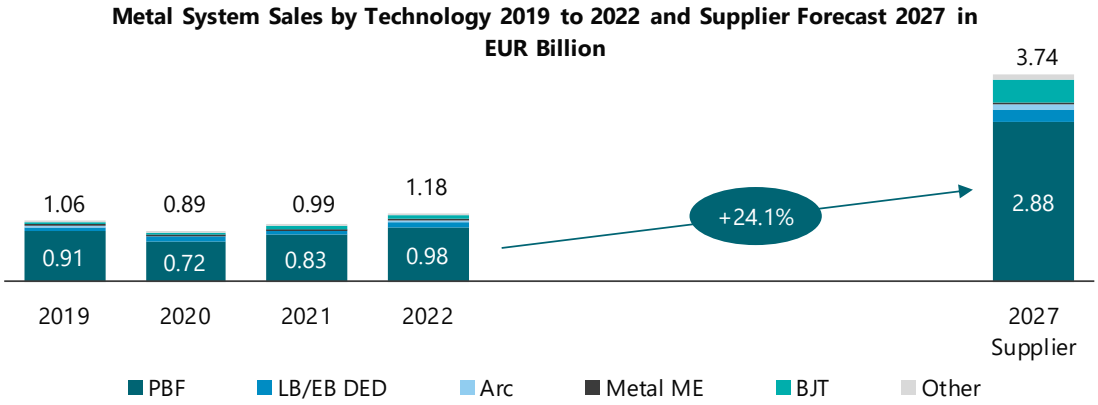
Source: AMPOWER Report 2023, p. 38.

The SLM Group operates in the field of **Powder Bed Fusion (PBF)**, which is the most commonly used technology in the market for metal-based additive manufacturing. Approximately 70% of all systems sold in the years 2019 to 2022 used this technology (see AMPOWER Report 2023, p. 38). Suppliers expect to see a compound annual growth rate of roughly 24.1% in their sales of machines equipped with PBF technology for the years from 2022 to 2027 (see AMPOWER Report 2023, p. 41).

The serviceable available market for the SLM Group in the Systems segment came to roughly EUR 980 million in the year 2022. By 2027, an increase to roughly EUR 2.84 billion is forecast, based on the Supplier Forecast.

With sales of roughly EUR 84.9 million in its Machines division, the SLM Group therefore accounted for roughly 8.7% of the total market volume of PBF-based system sales and, measured on the total sales volume of the SLM Solutions Group in 2022, approximately 10.7% (EUR 84.9 million / EUR 980 million = 8.7%; EUR 105.7 million / EUR 980 million = 10.7%).

The following chart presents the development of system sales within the market for metal-based additive manufacturing between 2019 and 2022 as well as the Supplier Forecast 2027, broken down by technology, all figures in billion euro.



Source: AMPOWER Report 2023, p. 41.

A classification of the market growth of the metal AM market by **technology and size** of systems using powder bed fusion technology shows that the fastest growth rates until 2027 are expected for machines with a build envelope of > 600 mm. Starting from 2022, when PBF technology accounted for 6% of the market, suppliers and buyers expect this segment to account for 15% and 11% respectively of the market by the year 2027 (see AMPOWER Report 2023, p. 46). This is due to the fact that large machines allow large components to be printed.

Market for metal-based additive manufacturing materials

In addition to the Systems division, the **Materials** market segment is also relevant for the SLM Group. However, it should be noted that the SLM Group is not to be viewed as a producer of metal powders but acts as a middleman to supply the customers of its own machines. The majority of the After Sales revenue of the SLM Group is due to service and spare parts. Only a small portion of the After Sales revenue of the SLM Group is attributable to sales of materials.

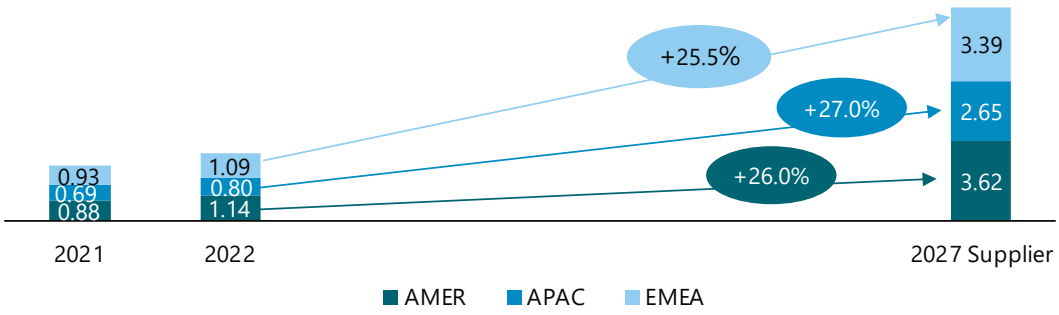
It is expected that the market for metal-based additive manufacturing materials will rise from 6,852 tons in the year 2022 to roughly 42,000 tons in the year 2027, corresponding to a CAGR of roughly 44%. The greatest share in both consumption and sales will be generated with metal powders, which are primarily used in PBF technology. However, the volumes of powder used in additive manufacturing only represent a niche segment of the powder production industry, accounting for just 2% to 3% of the total market for metal powder. In addition to the constant increase in powder materials, the share of wire as a production input will also increase. In addition to the increasing diversity in steel, nickel or titanium alloys, specialist materials such as niobium, zinc and tungsten are also available. However, this trend is seen as inevitable in order to increase the number of industrial applications for metal-based additive manufacturing (see AMPOWER Report 2023, p. 53).

In the year 2022, the sale of raw metals for additive manufacturing resulted in revenue of approximately EUR 952 million, of which the majority was accounted for by nickel and titanium alloys (see AMPOWER Report 2023, p. 55).

Regional forecast

The following regional market analysis presents the latest market data and the Supplier Forecast 2027 for the three regions of AMER, APAC and EMEA.

Regional Distribution of Systems, Material and Part Manufacturing Supplier Sales Revenue 2021 to 2022, Supplier Forecast 2027 in EUR Billion



Source: AMPOWER Report 2023, p. 30.

Starting from the year 2022, forecast compound annual growth rates are comparable across all regions and lie between 25.5% in EMEA and 27.0% in the APAC region. In the year 2022, AMER has the largest market share of the global market for metal-based additive manufacturing, accounting for 37.6% of total sales, followed closely by EMEA with roughly 35.9%. Comparable market shares are forecast for the year 2027.

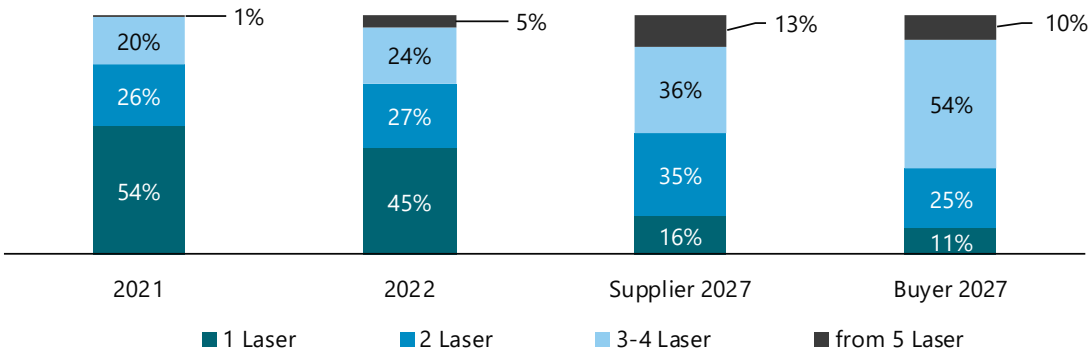
In the field of powder bed fusion technology, APAC is the leading region, measured on the number of units sold. In the year 2022, almost half of the PBF systems were supplied by providers based in the APAC region (see AMPOWER Report 2023, p. 32, 35). In particular, Chinese OEM's have significantly increased both their production and sales activities over recent years (see AMPOWER Report 2023, p. 35). To date, Chinese providers have primarily provided systems for the domestic market. However, it can be assumed that Chinese providers will increasingly penetrate western markets for industrial PBF systems (see AMPOWER Report 2023, p. 69).

Forecast by number of lasers

Users are increasingly turning to systems with multi-laser configurations in order to raise productivity. In this regard, the number of sold systems equipped with just one laser fell from 54% in the year 2021 to 45% in 2022. According to the Buyer Forecast for 2027, the sale of machines with two lasers will account for 89% of total machine sales.

The following chart illustrates these trends in the number of lasers in PBF systems between 2021 and 2022 and the Supplier Forecast and Buyer Forecast for 2027:

Share of Lasers per sold PBF-System from 2021 to 2022 and Supplier vs. Buyer Forecast 2027



Source: AMPOWER Report 2023, p. 47.

c) Competition

In competition with other manufacturers of additive manufacturing systems, the SLM Group currently holds the technological leadership in the field of selective laser melting. Particularly with regard to the NXG XII 600, the Company believes it has a technological edge of possibly one to three years over the competition. Competitive products can arise not only from competitors who use the same powder bed fusion technology, but also from alternative technologies that also allow additive processing of metals.

The SLM Group is already exposed to **intensive competition**, both in the markets it currently serves and also its potentially serviceable markets. This is also expected to intensify as Chinese providers make further progress. At the same time, the SLM Group currently exhibits a high degree of concentration among both customers and suppliers.

Peer Group Additive Manufacturing

In order to present a more detailed analysis of the competitive situation, we identified the following peer group of listed companies from the field of additive manufacturing technologies on the basis of an analysis of the operating activities, the market and the competition and the interviews conducted with the Management Board.

Stratasys Ltd., Rehovot, Israel

Stratasys is a provider of polymer-based 3D printing solutions ranging from the design draft through to production and maintenance. In addition to 3D printers for series production and prototyping of plastic components, the company offers software and a materials and technology partner ecosystem. The 3D polymer printers from Stratasys employ a number of technologies, such as polyjet, fused deposition modeling (FDM), programmable photopolymerization (P3), stereolithography, selective absorption fusion (SAF) and 3D-fashion. Currently, it is the proprietor of around 1,700 patents in additive technologies for the construction of models, prototypes, production tools, and production parts in a range of industries, such as the aerospace industry, automobile manufacturing and the health sector. In addition, Stratasys offers 3D printing services via its own company network. Stratasys generated revenue of approximately USD 651.5 million in financial year 2022.

Desktop Metal, Inc., Burlington, USA

Desktop Metal offers additive manufacturing technologies that are concentrated on the series production of parts for consumer goods. The Company offers a portfolio of integrated additive manufacturing solutions consisting of hardware, software, materials and services. The solutions from Desktop Metal cover the entire product life cycle, from product development through to mass production and are aimed at a variety of sectors, such as the automobile industry, healthcare and dental, consumer goods, industry, aerospace, machine design and research and development. Furthermore, the company invests in 3D printing platforms such as binder jetting and digital light procession. The company acquired EnvisionTec and ExOne in recent years. Desktop Metal generated revenue of roughly USD 209.0 million in financial year 2022.

3D Systems Corporation, Rock Hill, USA

3D Systems is a provider of 3D printing and manufacturing solutions. The company develops, manufactures and distributes 3D printers for plastics and metals as well as the associated materials and software. The product portfolio in the field of 3D printers includes five different kinds of printers. In addition to 3D metal and 3D polymer printers, the company offers metal casting 3D printers and 3D printers for jewelry and dental applications. In terms of materials, the product portfolio includes not just metals, such as aluminum, steel, titanium and alloys, but also a variety of technical plastics, dental materials and materials for jewelry and metal casting. In addition, the company offers a 3D printing service, consulting services and software under its Services division. 3D Systems uses a wide variety of 3D printing technologies, including stereolithography (SLA), selective laser sintering, direct metal deposition, MultiJet printing, ColorJet printing, polymer extrusion and SLA-based bio-printing. It generated revenue of USD 538.0 million in the year 2022.

Velo3D, Inc., California, USA

Velo3D offers integrated solutions for metal-based additive manufacturing from software through to hardware and product support. The Velo3D-AM solution consists of Flow Software, the Sapphire family of metal printers and software for quality validation and quality control. Solutions from Velo3D are used in aerospace, supersonic and hypersonic flight, renewable energies and the development of automotive tooling. In financial year 2022, Velo3D generated revenue of USD 80.8 million.

Markforged Holding Corporation, Waltham, USA

Markforged is a provider of additive manufacturing platforms. The company produces and distributes 3D printers, metal and composite materials and software. The portfolio includes desktop printers, industrial printers and metal printers. The cloud-based “Digital Forge” additive manufacturing platform combines software, printers and materials and was developed for integration within existing production ecosystems. Markforged generated revenue of approximately USD 100.9 million in financial year 2022.

Peer Group (machine) tool manufacturers

The consulting firm AMPOWER already classifies the technology "Powder Bed Fusion" in the category of widespread industrial use. For this categorisation, the technology must be established in several industries as a production technology for functional end parts. It is assumed that the market for metal-based additive manufacturing, which is currently still in a very clear development and growth phase, will develop into an established market in the medium to long term. Parallels can be drawn with the current market and competitive situation of machine tools, as it can be assumed that metal-based additive manufacturing systems will substitute or complement established products in this area. In this context, we have identified an alternative peer group from the area of (machine tool) manufacturers. The background is the consideration, that the SLM Group – provided that the L-PBF-technology enforces as planned – with their 3D-Printers can occupy a comparable position to the current situation of conventional or established tool manufacturers in the long-term, so that the realised and forecast margins in this area of established companies can provide indications of developments to be expected in the long term and achievable margins.

We have used the following companies as alternative peer group companies:

Mikron Holding AG, Biel/Switzerland

Mikron Holding AG produces and distributes machine tools and robots. The company produces lathes, milling tools, calibration tools, gun drills, reamers, flat, twist and step drills, moulds for plastic products, high-speed assembly systems, robot assembly systems, plastic injection moulded parts and mobile phone components and accessories. In the 2022 financial year, Mikron generated sales of CHF 309.4 million.

Sandvik AB, Stockholm/Sweden

Sandvik AB is a manufacturer of machine tools and industrial tools. The company develops, manufactures and markets tools for metalworking applications, machines and tools for excavation, stainless steel products, special alloys and resistance heating materials, and process systems. Sandvik achieved sales of approximately SEK 112,332 million in the financial year 2022.

DMG Mori AG, Tokyo/Japan

DMG Mori AG manufactures and distributes machine tools. The company's products include automatic lathes, milling machines, turning machines, laser machines and ultrasonic equipment.

Tornos Holding AG, Moutier/Switzerland

Tornos Holding Ltd manufactures machine tools. It develops, manufactures and distributes single-spindle and multi-spindle mobile lathes. Tornos markets its turning machines primarily to companies in the automotive, medical, electronics and microtechnology industries. It sells its products in Europe, the USA and Asia. Tornos achieved sales of around CHF 181.4 million in the 2022 financial year.

OKUMA Corp., Aichi/Japan

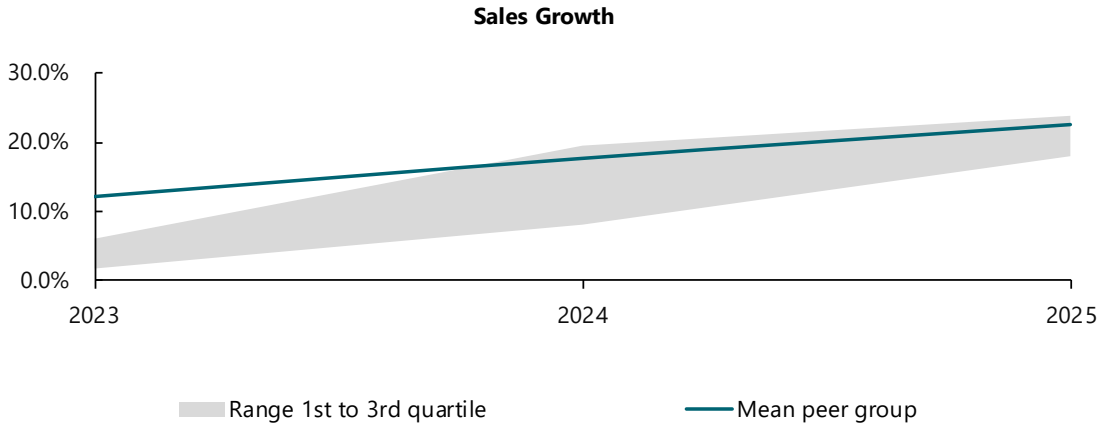
OKUMA Corporation manufactures and distributes machine tools and industrial equipment. The company's products include CNC machine tools such as lathes, machining centres, grinding machines and drilling machines In 2023, sales revenues of JPY 227.6 billion were generated.

Tsugami Corp, Tokyo/Japan

Tsugami Corp. manufactures and sells CNC machine tools including precision lathes and precision machining centres. The company also produces grinding machines & thread rolling machines, measuring equipment and other industrial tools. Tsugami achieved sales of approximately JPY 95.0 billion in the 2023 financial year.

Sales and margins of the peer group companies

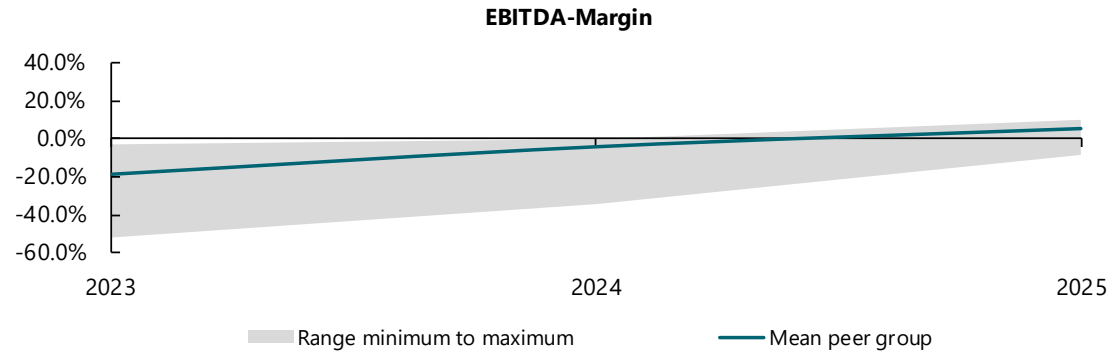
The following overview shows the mean value of the **revenue growth of the peer group additive manufacturing** for the historical period from 2021 to 2022 supplemented by the mean value of the growth rates forecast by analysts for the years 2023 to 2025. The grey shaded area delimits the respective 1st quartile and 3rd quartile of the range of turnover growth rates of the peer group companies.



Source: Ebner Stolz Analysis, Bloomberg.

For the forecast period, the projected growth rates (mean) for the peer group companies range between 12.2 % to 22.5%.

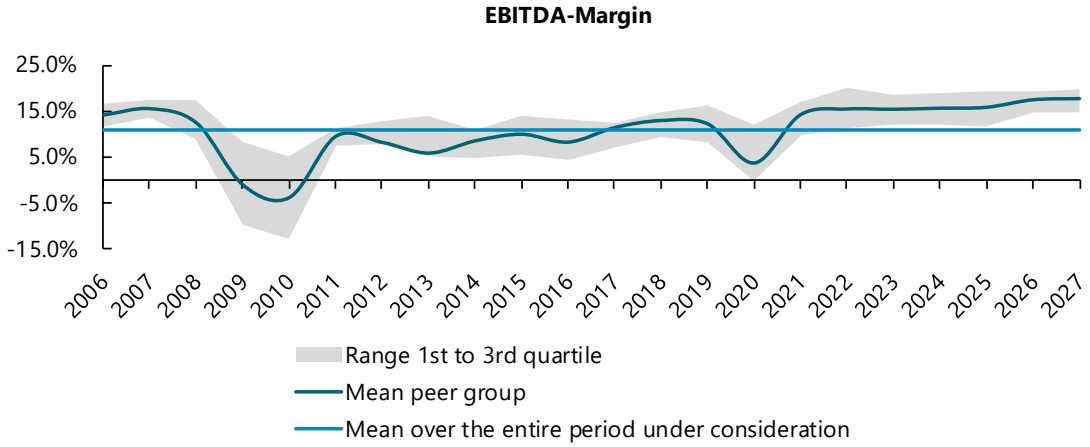
The peer group companies of the peer group additive manufacturing regularly show negative EBITDA margins with regard to actual results. The following summary presents the average **EBITDA margins** (EBITDA/revenue) of the **peer group additive manufacturing** based on the EBITDA margins forecast by analysts for the years 2023 to 2025. The grey area demarcates the respective minimum and maximum in the range of EBITDA margins.



Source: Ebner Stolz Analysis, Bloomberg.

For the forecast period from 2023 to 2025, the projected EBITDA margins (mean) range from -19.1% to 5.3%.

The following summary presents the average **EBITDA margins of the peer group of (machine tool) manufacturers** for the historical period from 2006 to 2022 supplemented by the average EBITDA margin projections of industry analysts for the years 2023 to 2027. The grey area demarcates the respective 1st quartile and 3rd quartile in the range of EBITDA margins.



Source: Ebner Stolz Analysis, Bloomberg.

The average EBITDA margins over the historical period from 2023 to 2027, range between 15.5 % to 17.8 %.

The average EBITDA margin for the historical period from 2006 to 2022 comes to approximately 9.4%. In the forecast period 2023 to 2027, the average EBITDA margin is 16.5 %. Over the entire period presented, the mean value of the EBITDA margin is 11.1%.

3. Fundamentals of Business Valuations

3.1. Functional Dependence of Business Value

Assuming the exclusive pursuit of financial objectives, the value of a company is determined by the present value of the net cash flows to the shareholders. The value of future earnings is basically the result of the free cash flow which can be generated from continuing the company's operations. The liquidation value of any non-operating assets must be added to this. The net present value of these surpluses is derived by applying a discount rate that equates with the return of an investment that can be reasonably taken as an adequate alternative investment to an investment in the company being valued.

At present there is general agreement between theory, practice and legal precedent that there is no such thing as an "objective, generally valid" business value nor such a thing as a "simply correct" business value. Rather, business value is dependent on the respective purpose of the valuation. Whether the business value needs to be calculated for a decision, for arbitration or as an objectified value is dependent on the purpose of the valuation and is therefore dependent on the function assumed by the neutral valuer.

Depending on the respective purpose of the valuation, there are generally a number of different assumptions that need to be made on the forecasts and discounting of future financial surpluses, the nature and scope of the synergies that need to be considered, as well as personal circumstances of the shareholders or how they should be typified for the purposes of the valuation. For this reason, an appropriate business valuation necessitates that the function of the independent auditor is defined within the framework of issuing the engagement in order to derive the corresponding assumptions and typifications for the respective purpose of the valuation.

According to prevailing court rulings and generally accepted valuation practice, which this business valuation is based on, a fair settlement payment should be derived from an objectified measure of the business value. The objectified business value represents the verifiable "inter-subjective" value of future earnings from the perspective of the various shareholders which would result when the company continues to operate under its existing business model. Should the business valuation be required under the law or for contractual reasons, the valuation is performed from the perspective of the shareholder as a natural domestic tax-payer subject to unrestricted taxation in Germany (IDW S1 2008 No. 31).

In accordance with our engagement we have determined an objectified value for the Company in our capacity as neutral valuers.

3.2. Valuation Principles

a) General Remarks

When performing a business valuation, the principles that have become established in both theory and practice must be applied. These are found in the pronouncements issued by the Institute of Public Auditors in Germany (IDW), in particular the standard titled "Principles for the Performance of Business Valuations" (IDW S1 2008).

b) Capitalized Earnings Value

The present value of future earnings (cash surpluses) is the theoretically correct value of an enterprise. According to IDW S1 2008 No. 7 the business value, as a measurement of future earnings, can be determined using the capitalized earnings method [*Ertragswertverfahren*] or the discounted cash flow method. In this case the business value has been determined using the capitalized earnings method which is most commonly used in practice in Germany and recognized by the courts. Considering the fact that both methods lead to the same business value if the underlying assumptions are identical, particularly as regards financing and risk content of the tax shield, as well as the use of suitable formulas to adjust the beta factor to the capital structure (see IDW S1 2008 No. 101), no use has been made of the discounted cash flow method to derive the business value to supplement the capitalized earnings method.

In spite of the general acceptance of the capitalized earnings method, it should be noted that this model is associated with a number of uncertainties. For this reason, this business valuation also cannot determine the mathematically exact or true business value as at the valuation date (see BVerfG, 24 May 2012, 1 BvR 3221/10, No. 30 (juris); BGH, 29 September 2015, II ZB 23/14/14, No. 36 (juris); OLG Munich, 14 July 2009, 31 Wx 121/06, No. 10 (juris)). The numerous forward-looking estimates and individual decisions in the method are not commensurate to an assessment of accuracy but rather to an assessment of reasonableness (see OLG Munich, 2 September 2019, 31 Wx 358/16, No. 34 (BeckRS); OLG Stuttgart, 17 October 2011, 20 W 7/11, No. 179 (juris)).

The objectified business value therefore constitutes an inter-subjective verifiable value of future earnings from the perspective of the shareholders. These arise when the company continues to operate under its existing business model taking account of all of the realistic expectations for the future in terms of market opportunities and risks, financial possibilities and other factors of influence. (IDW S1 2008, No. 29). Moreover, an objectified value that is determined for a specific purpose represents a valuation of the company prior to considering the effects of the measure underlying the respective reason for the valuation or its consequences (see Popp, Berücksichtigung von Steuern, in: Peemöller (publisher), Praxishandbuch der Unternehmensbewertung, 7th edition, 2019, p. 1425, 1435).

The valuation of SLM Solutions Group AG was performed on a **stand-alone basis** in keeping with the prevailing opinion of the courts and professional practice (see OLG Munich, 2 September 2022, 31 Wx 358/16, No. 81 (BeckRS); OLG Frankfurt, 28 March 2014, 21 W 15/11, No. 146 (juris); OLG Stuttgart, 5 June 2013, 20 W 6/10, No. 169 (juris); Popp, AG 2010, p. 1, 2; van Rossum, in: Münchener Komm. zum AktG, 5th edition, 2020, § 305 No. 171; Koch, in Koch, AktG, 16th edition, 2022, § 305 No. 33; krit.: Krieger, in: Münch. Hdb. AG, 5th edition, 2020, § 71, No. 135; Emmerich, in: Emmerich/Habersack, Aktien- und GmbH-Konzernrecht, 10th edition, 2019, § 305 No. 111). Consequently, any effects that only arise from the execution of the structural measure do not need to be considered during the valuation. The right to a fair guaranteed dividend and a fair settlement payment does not endow the holder with any rights to participate in the benefits that would not otherwise exist without the corporate agreement (see LG Stuttgart, 17 September 2018, 31 O 1/15, *ratio decidendi* p. 84). In other words, the more important goal of allowing minority shareholders to exit the company without suffering any economic disadvantage implies that synergies that only arise as a consequence of the corporate measure must be ignored (see BGH, 4 March 1998, II ZB 5/97, p. 2 (BeckRS)).

When considering potential synergies, the courts and also IDW S1 make a distinction between genuine synergies and pseudo (non-genuine) synergies (for details see Bertl/Popp, RWZ 2022, p. 88 et seq., Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung, in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition, 2019, No. 12.25 et seq.). Consideration of **genuine synergies**, which are typically the very reason for conducting structural measures, is not required by law and on the basis of the prevailing opinion of the courts, they are consequently not presented in an objectified valuation (see OLG Munich, 19 January 2022, 31 Wx 366/17, *ratio decidendi* p. 18; OLG Hamburg, 23 September 2021, 13 W 87/18, *ratio decidendi* p. 15; OLG Düsseldorf, 8 July 2021, 26 W 10/20, *ratio decidendi* p. 20; OLG Stuttgart, 30 March 2021, 20 W 8/19, *ratio decidendi* p. 41; OLG Düsseldorf, 24 September 2020, 26 W 5/16, No. 56 (BeckRS); OLG Stuttgart, 3 March 2020, 20 W 2/17, *ratio decidendi* p. 21; OLG Munich, 2 September 2019, 31 Wx 358/16, No. 81 (BeckRS); OLG Zweibrücken, 14 August 2018, 9 W 4/14, *ratio decidendi* p. 21; OLG Munich, 26 June 2018, 31 Wx 382/15, No. 46 (BeckRS); OLG Frankfurt, 26 January 2017, 21 W 75/15, No. 61 (BeckRS)). Real synergies only arise when the structural measures underlying the valuation are executed (in this case of a merger squeeze-out). In other words, genuine synergies cannot be realized without executing the structural measure, which is the very reason for the valuation. **Pseudo synergies**, on the other hand, are characterized by the fact that they can be realized without concluding the domination and profit and loss transfer agreement (see WPH Edition, Bewertung und Transaktionsberatung, 2018, Chap. C, No. 120). The Higher Regional Court of Munich has stressed, justifiably so, that hypothetical future developments do not provide a sufficiently sound basis for forecasting the future earnings of the business being valued (31 March 2008, 31 Wx 88/06, No. 22 (juris)).

In the course of our work, we addressed the issue of synergies with the Management Board of SLM Solutions Group AG and Nikon AM. AG. It was found that the planning statements underlying the business valuation were all compiled from the perspective of the valuation date after deducting the effects expected from the squeeze-out under the law of mergers. To this extent, no further synergies need to be considered.

Integrated business planning considers the planned investments, the distribution policy, retained earnings and the financial policy of the organization. If the business plan reveals a temporary need for more capital after exploiting planned borrowings, this could be financed by not distributing profits. This form of internal financing in the detailed planning phase (**actual retention of earnings**) can be used to repay liabilities or make the investments required for business operations. Pursuant to IDW S1 2008, No. 35, when determining objectified business values an assumption is made that all financial surpluses that are available for distribution will in fact be distributed after considering the documented business concept and legal restrictions. The volume of distributions is reflected in the valuation as the **value added from distributions**. In the perpetuity phase (referred to as the terminal value) a typified assumption is made that the distribution patterns of the valuation object are equivalent to the distribution patterns of an alternative investment.

With regard to the terminal value, it is generally assumed that there will be inflation-induced growth in perpetuity. Even if all financial surpluses are distributed (sometimes referred to as fictitious full distribution) the capital remaining in the company is subject to inflation-induced growth. Consequently, the assets and liabilities presented in the final balance sheet of the detailed planning phase are rolled forward in perpetuity considering a growth factor for inflation (see WPH Edition: Bewertung und Transaktionsberatung, 2018, Chap. A No. 455). To finance growth in perpetuity, certain components of the sustainable net income must be regularly retained otherwise it would be impossible for the company's leverage to reach a steady state. This is referred to as **growth-related retention of earnings** (see Popp, Der Konzern 2019, p. 105, 108 et seq.; Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung, in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition, 2019, No. 12.56).

If the net profit for the year is retained (or a portion thereof) without there being any specific plans for its use, this is customarily treated within the framework of the capitalized earnings method as an economically reasonable net-present-value-neutral reinvestment (see IDW S1 2008, No. 37). These funds, which are not actually distributed, can be modeled as a fictitious direct allocation to the shareholders and constitute the **value-added from retained earnings**. The fictitious investment of these amounts at the level of the company results in additional income in the years following their initial retention. From the perspective of a typified shareholder, the direct fictitious allocation results in an appreciation in value, which triggers a gain on sale from a tax perspective. Assuming a longer holding period, this is subject to a lower effective tax burden from a valuation perspective due to personal income tax. Moreover, **inflation-induced gains on sale** need to be considered when deriving the net financial surpluses (see Popp, Berücksichtigung von Steuern, in: Peemöller (publisher), Praxishandbuch der Unternehmensbewertung, 7th edition, 2019, p. 1425, 1437 et seq.; Popp, Der Konzern 2019, p. 149 et seq.; LG Munich I, 16 April 2021, 5 HK O 5711/19; OLG Düsseldorf, 27 June 2022, 26 W 13/18, No. 66 (BeckRS); OLG Hamburg, 31 March 2022, 13 W 20/21, *ratio decidendi* p. 21; KG Berlin, 1 November 2021, 2 W 6/17, *ratio decidendi* p. 22; OLG Munich, 9 April 2021, 31 Wx 2/19, 31 Wx 142/19; OLG Munich, 3 December 2020, 31 Wx 330/16, No. 74 et seq. (BeckRS); OLG Frankfurt, 8 September 2020, 21 W 121/15, No. 101 et seq. (BeckRS)).

Due to the fact that the business value is determined from the perspective of a shareholder, the shareholders' tax burden incurred on the dividends and the gains on sale must be considered. With regard to dividend payments, this only applies to the extent that these do not qualify as capital redemptions from the owners' contribution account for tax purposes, and therefore do not trigger any tax burden (see Popp, Berücksichtigung von Steuern, in: Peemöller (publisher), Praxishandbuch der Unternehmensbewertung, 7th edition, 2019, p. 1425, 1428 et seq.; OLG Jena, 3 March 2021, 2 W 407/18, *ratio decidendi* p. 32; OLG Frankfurt, 3 November 2020, 21 W 76/19, No. 71 (BeckRS); OLG Munich, 13 November 2018, 31 Wx 372/15, No. 8 (BeckRS) in conjunction with LG Munich I, 21 August 2015, 5 HK O 1913/14, *ratio decidendi* p. 9; LG Munich I, 28 March 2019, 5 HK 3374/18, No. 118 (BeckRS)).

The value of future earnings is determined by discounting future distributable cash flows using the cost of capital. Here too, the tax effect at shareholder level must be taken into consideration. In our opinion and according to the professional standards of business valuations, the yield obtained from a stock portfolio must be taken as an alternative investment and the average tax burden incurred on such returns must be calculated (IDW S1 2008, No. 93).

Factors which cannot be represented in the calculation of the capitalized earnings value, or incompletely so, must be valued separately and added as a separate item (including liabilities) to the capitalized earnings value. In addition to non-operating assets, these could include certain other financial assets, tax effects, pension obligations and dilutive effects from convertible bonds and stock option programs.

Non-operating assets which can be sold separately without affecting the operations of the company (criteria of a functional distinction) are considered at their liquidation value after deducting selling costs and the tax impact of the sale at company level. To what extent taxes need to be considered at the level of the owners depends on the intended use of the profits generated (see IDW S1 2008, No. 61). Neither the possibility of a non-recurring tax-free share repurchase discussed in earlier years nor the reinvestment of earnings at the same rate of return until the liquidation proceeds are distributed to the shareholders (see: Wagner et al., WPg 2006, p. 1005, 1022) are possible without incurring income tax under the current withholding tax regime. If it is assumed that earnings or non-essential liquidity are distributed to the owners, this normally entails consideration of the (typified) personal income taxes of the shareholder in the valuation (see Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung, in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition, 2019, No. 12.156; Popp, Der Konzern 2020, p. 177, 179 with further references; OLG Munich, 9 April 2021, 31 Wx 2/19, 31 Wx 142/19, No. 121 (BeckRS) in conjunction with LG Munich I, 29 August 2018, 5 HK O 16585/15, *ratio decidendi* p. 126).

c) Liquidation Value and Net Asset Value

According to the Principles for the Performance of Business Valuations, the liquidation value must be determined alternatively to the capitalized earnings value if the net present value of financial surpluses resulting from a liquidation of the company exceeds the capitalized earnings value, assuming the company is a going concern (see IDW S1 2008, No. 5).

According to the court rulings, the liquidation value should be applied only if there is an intention to actually liquidate the company and the earnings forecasts of the company are negative for a sustained period (see BGH ruling dated 18 September 2006, II ZR 225/04, AG 2006 p. 887, 889; OLG Munich, 30 July 2018, 31 Wx 122/16, *ratio decidendi* p. 14; OLG Munich, 17 July 2014, 31 Wx 407/13, p. 6 (BeckRS); OLG Düsseldorf, 10 June 2009, 26 W 1/07, No. 96 et seq. (juris); OLG Düsseldorf, 29 July 2009, 26 W 1/08, No. 37 (juris)) or there is a financial need to liquidate the operation in full or in part or it appears that the operation is no longer commercially viable (see OLG Zweibrücken, 23 November 2020, 9 W 1/18, 9 W 1/18, No. 84 (BeckRS); OLG Munich, 15 December 2020, 31 Wx 299/16, *ratio decidendi* p. 7). The deliberations, especially behind the court rulings on stock corporate law cases brought under the terms of the SpruchG [Spruchverfahrensgesetz: German act on the procedures to be applied for certain corporate law disputes], whereby the liquidation value is not always to be considered as the lower limit, result not least from the fact that the minority shareholders entitled to settlement payments are not in a position to realize the liquidation value.

However, more recent court rulings not only make a distinction as to whether there is an intention to liquidate the company but also on the basis of the reasons and circumstances of companies remaining in business, even if they may be unprofitable. If there is a legal or de facto necessity to keep the company in business (see OLG Düsseldorf, 28 January 2009, 26 W 7/07, AG 2009, p. 667, 668), then the liquidation value can be ruled out as a measure of the business value. Neither of these cases apply in the current case.

Due to the fact that there are plans to continue the Company as a going concern for the indefinite future and it can be assumed that the capitalized earnings value is above the liquidation value due to the costs that would be incurred in an assumed liquidation (e.g. redundancy plans, compensation payments), we have refrained from calculating and presenting the liquidation value within the framework of this expert opinion.

Alternatively, reference can be made to the carrying value of equity in the consolidated financial statements of SLM Solutions Group AG as at 31 December 2022, which is approximately EUR 64.3 million. Even without considering the costs of liquidation, this only corresponds to approximately 12 % of the business value based on its capitalized earnings value of approximately EUR 540 million (see Section 4.4 c)).

In contrast to the liquidation value, the net asset value as defined by IDW S1 is without any informative value when determining the overall value of a going concern, even if there are plans to liquidate the business (see IDW S1 2008, No. 6.; OLG Stuttgart, 14 September 2011, 20 W 6/08, No. 202 (juris); OLG Düsseldorf, 28 January 2009, 26 W 7/07, AG 2009, p. 667, 668; Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung, in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition 2019, No. 12.162; Großfeld/Egger/Tönnes, Recht der Unternehmensbewertung, 9th edition, 2020, p. 29; LG Munich, 14 February 2014, 5 HK O 16505/08, *ratio decidendi* p. 64). Even in the case where a liquidation is planned, the liquidation value should be used, not the net asset value.

d) Market Prices

As the shares of SLM Solutions Group AG are admitted to trading on the exchange, the listed share price is fundamentally one option for setting the lower limit of the settlement payment.

In its DAT/ALTANA ruling dated 27 April 1999 (1 BvR 1613/94, AG 1999 p. 566 et seq.), the Federal Constitutional Court emphasized the relevance of market share prices for establishing the lower limit for calculating the fair settlement in cases where a profit transfer agreement is to be concluded, and also for corporate integrations. In the prevailing opinion in the technical literature and the rulings of the Federal Court of Justice (19 July 2010, II ZB 18/09, AG 2010, p. 629, 630), this also applies to squeeze out cases.

Use of the market price as the lower limit for the fair settlement can be justified from a commercial perspective. The potential divestment value, or more exactly the divestment price, is relevant for setting the lower limit. The divestment price is the price at which an individual share (not a bundle of shares or the company as a whole) could be sold – actually and voluntarily – on the market, divorced from the structural measure. The significance of the market price does not depend on how efficient the capital market is at providing information and therefore how fair the market price is, i.e. it is not important whether the market has derived the "right" valuation (see Ruthardt/Popp, AG 2022, p. 347, 349; FAUB, AG 2021, p. 588, No. 4). Rather, the sole relevant factor is whether the shareholders would have actually been able to divest of their shares at this price, i.e. there is sufficient trading volume available and sufficient market depth.

The criteria of Sec. 5 (4) WpÜG-AngebV can be used as an indication when reviewing the ability to sell the shares voluntarily (see OLG Hamburg, 7 September 2020, 13 W 123/20, No. 30 (BeckRS);

OLG Karlsruhe, 12 September 2017, 12 W 1/17, No. 33 (BeckRS); OLG Frankfurt, 28 March 2014, 21 W 15/11, AG 2014, p. 822; LG Stuttgart, 8 May 2019, 31 O 25/13, No. 294 (BeckRS)). However, failure to meet the criteria of Sec. 5 (4) WpÜG-AngebV does not provide any basis for assessing the informational efficiency of the capital market or whether the market price is an appropriate indication of the business value or (only) a fair settlement (for an extensive discussion of the significance of the market price from an economic perspective, see: Ruthardt/Popp, AG 2020, p. 240, 244 et seq.; FAUB, AG 2021, p. 588 et seq.).

In its regular communications of weighted average share prices in Germany, the BaFin itself indicates that the criteria of Sec. 5 (4) WpÜG-AngebV are "narrow" criteria when it states that the BaFin is not able to calculate a minimum price only "under narrow legal prerequisites".

In its ruling dated 19 July 2010 (II ZB 18/09, AG 2010, p. 629 et seq., "Stollwerck") the Federal Court of Justice ruled that the share price used to derive a fair settlement payment paid to minority shareholders within the framework of a squeeze-out must be measured on the weighted average share price over a three-month period prior to announcement of the structural measure. Reference is made to Section 4.6 for our comments on the relevance of the share price in this specific case.

e) Comparative Valuations

In addition to discounted cash flow-based valuations, business valuation practice also uses multiples of various indicators to estimate preliminary business value, set a range of values or to test plausibility. Like the capitalized earnings method, this valuation concept is also based on earnings. However, the business value in this case is determined by multiplying a performance indicator. The multiples method is based on a comparative valuation in the sense that the suitable multiples are derived from capital market data of listed peer group companies or transactions and then applied to the company to be valued.

Such multiples-based valuations only represent a simplified valuation, but in some cases they can provide an indication of the plausibility of other methods (see IDW S1 2008, No. 143; OLG Düsseldorf, 29 October 2018, 26 W 13/17, No. 55 (BeckRS); for critical opinions on their informative value see: OLG Frankfurt, 17 January 2017, 21 W 37/12, No. 146 (BeckRS); OLG Frankfurt 2 May 2011, 21 W 3/11, No. 83 (juris); OLG Frankfurt, 15 February 2010, 5 W 52/09; No. 105 (juris); LG Munich I, 2 December 2016, 5 HK 5781/15, No. 62 (juris)). In the opinion of the Higher Regional Court of Stuttgart, a multiples-based analysis can at best only confirm the result of a fundamental valuation, but not refute it (see OLG Stuttgart, 11 January 2021, 20 W 10/19, *ratio decidendi* p. 23).

In addition to the analytical valuation using the capitalized earnings method, we also conducted a comparative valuation using analyst estimates (see Section 4.5).

f) Prior Acquisitions by Nikon AM. AG

In its ruling on 27 April 1999, the Federal Constitutional Court ruled that the price actually paid by a majority shareholder for shares in an entity it controlled could be ignored in the valuation of equity when calculating a fair settlement payment pursuant to Sec. 305 AktG because they have no relationship to the "true" value of equity held by the minority shareholder nor to the fair market value of the shares (see BVerfG, 27 April 1999, BvR 1613/94, AG 1999, p. 566, 568). The deliberations of a majority shareholder prior to taking and preparing any measure to alter the legal structure of the entity with the concomitant willingness to pay a higher price, for example, in the context of a takeover bid, only apply to the situation of the majority shareholder and have no relevance for third parties. From the view of the minority shareholder, the (elevated) price paid by the majority shareholder for individual shares can only be realized if it managed to sell its shares to the majority shareholder. However, the minority shareholder has no constitutional right to force such a sale. This ruling agrees with the prevailing opinion in the technical literature and the rulings from the highest court (see, for all, van Rossum, in: Münchener Kommentar zum AktG, 5th edition, 2020, § 305, No. 91, BGH, 19 July 2010, II ZB 18/09, AG 2010, p. 629, 632).

The European Court of Justice came to a similar conclusion in its ruling dated 15 October 2009 (Rs. C 101/08, AG 2009, p. 821 et seq.). In the opinion of the ECJ, European law does not contain any legal principle which would protect minority interests to the extent that the majority shareholder is duty-bound to buy shares at the same terms and conditions as those it accepted when it acquired its majority holding to obtain control or reinforce its control of the entity. The irrelevance of prices paid by the majority shareholder was once again expressly confirmed in a ruling handed down by the Federal Court of Justice (26 June 2018, 31 Wx 382/15, No. 34 (BeckRS)), the Higher Regional Court of Düsseldorf (28 November 2022, 26 W 4/21, No. 183 (BeckRS); 22 March 2018, 26 W 20/14, No. 58 (BeckRS); 12 November 2015, 26 W 9/14, No. 43 (BeckRS)), the Higher Regional Court of Stuttgart (30 March 2021, 20 W 8/19, *ratio decidendi* p. 61 et seq.; 4 May 2020, 20 W 3/19, *ratio decidendi* p. 34), the Higher Regional Court of Frankfurt (8 September 2020, 21 W 121/15, No. 33 (BeckRS)), the Higher Regional Court of Jena (16 May 2022, 2 W 197/19, *ratio decidendi* p. 19; 3 March 2021, 2 W 407/18, *ratio decidendi* p. 18), as well as the Higher Regional Court of Hamburg (8 October 2018, 13 W 20/16, No. 30 (BeckRS); (27 March 2012, 13 W 20/09, *ratio decidendi*, p. 7), (for a similar view see also LG Munich I, 28 March 2019, 5 HK 3374/18, *ratio decidendi* p. 85 with further references).

The Higher Regional Court of Frankfurt has recently clarified that the prices prior to the acquisition are not generally relevant to setting the settlement payment. However, this general precedent does not necessarily imply that the prices prior to an acquisition cannot be referred to as the market prices when estimating damages pursuant to Sec. 287 ZPO. This is especially true when an "elevated" price (by this, a package premium is meant) cannot be identified (see OLG Frankfurt, 13 September 2021, 21 W 38/15, No. 32 (BeckRS)). The reference point needs to be identified separately (see Ruthardt/Popp, AG 2022, p. 347, 356).

In conclusion, it can be stated that the market prices set during earlier share purchases prior to the acquisition are not relevant for the business valuation.

3.3. Valuation Date

The derivation of the business value is based on a certain valuation date which is the date on which the general shareholders' meeting passes the resolution to determine a fair settlement payment pursuant to Sec. 327b (1) AktG. Correspondingly, the date of 13 July 2023, the date scheduled for the Annual General Meeting of SLM Solutions Group AG was chosen as the valuation date.

The technical valuation date was set at 1 January 2023. The future financial surpluses available for distribution were initially discounted to this date. Thereafter, the present value of the financial surpluses calculated in this way is unwound (compounded) geometrically to the valuation date of 13 July 2023 using the discount rate (see OLG Frankfurt, 29 January 2016, 21 W 70/15, No. 83 (BeckRS); LG Munich, 7 May 2014, 5 HK O 21386/12, *ratio decidendi* p. 59).

4. Explanation of the Result of the Valuation

The estimate of future income is fundamentally subject to a certain degree of uncertainty in terms of future expectations. This involves appraising risks and rewards equally. Actual past results can be used as an initial indicator of value.

4.1. Analysis of Historical Results

a) General Remarks

Below we have analyzed the key profit drivers in the past on the basis of the audited consolidated statements of financial position and consolidated income statements of SLM Solutions Group AG prepared in accordance with IFRS for the years 2020 to 2022.

The analysis of historical results within the framework of determining the business value of SLM Solutions Group AG and the adjustments made to them serve the purpose of being better able to assess fundamentals underlying the planning statements as a first step. These adjustments are presented separately in the non-operating result. The adjustments made in the course of analyzing historical results do not have any impact on the calculation of the business value as the valuation is based on future results. Therefore, the adjusted results of the past merely serve to assess plausibility.

b) Assets and Liabilities

The assets and liabilities of SLM Solutions Group AG on the reporting dates for the financial years 2020 to 2022 correspond to the those presented in the audited IFRS consolidated financial statements.

Assets are as follows:

	Dec 20 Actual	Dec 21 Actual	Dec 22 Actual
	kEUR	kEUR	kEUR
Cash and cash equivalents	18,864	24,998	31,160
Trade receivables	13,449	22,231	26,769
Inventories	20,770	25,842	39,888
Current tax receivables	0	490	23
Other non-financial assets	5,782	6,214	9,585
Total current assets	58,866	79,775	107,425
Intangible assets	28,092	32,601	37,430
Property, land and equipment	38,486	35,757	35,809
Other financial assets	208	718	1,127
Other non-financial assets	207	101	0
Deferred tax liabilities	388	83	520
Total non-current assets	67,381	69,261	74,886
	126,247	149,036	182,311

Cash and cash equivalents at the end of 2022 break down into bank deposits of EUR 27,535k (2021: EUR 23,244k) and time deposits of EUR 2,617k (2021: EUR 1,754k). The time deposits were subject to restricted availability in financial year 2022 as they were primarily used to secure bank guarantees. In addition, cash and cash equivalents contained cash in transit of EUR 1.0 million as at 31 December 2022.

The increase of approximately 25% in cash and cash equivalents in the year 2022 is mainly due to the issue of new shares and the third tranche of the convertible bond 2022/2026 with a nominal value of EUR 30,213k.

The increase of roughly 65% in **trade receivables** as at 31 December 2021 in comparison to the prior year can be attributed to less favorable terms of payment in the fourth quarter of 2021. In addition, the rise can be attributed to the fact that most machines were shipped in December 2021. This led to payments due upon the final completion of installation still being outstanding at the end of the financial year.

The SLM Group acts as both a lessor and a lessee. As at 31 December 2022, there were three and in the prior year one finance lease(s) in place for machines and accessories in the field of selective laser melting for which the ownership rights to the leased asset automatically passes to the lessee at the end of the lease term. The receivables from finance leases are presented under trade receivables.

The **current tax receivables** relate to **tax benefits** on taxable income for the financial year due to local tax legislation.

The increase in **inventories** in financial years 2021 and 2022 is due to the need to stock up in response to the global shortages in the supply chains and the general increase in business activity. In addition to raw materials, consumables and supplies of EUR 11.4 million, inventories in financial year 2022 include work in progress of EUR 11.2 million, finished goods and merchandise of EUR 15.1 million and payments on account of EUR 2.3 million.

Current other non-financial assets mainly consist of contract assets of EUR 6,496k (2021: EUR 4,010 k; 2020: EUR 2,163k), VAT receivables of EUR 1,484k (2021: EUR 950 k; 2020: EUR 1,313k) and other non-financial assets of EUR 1,605k (2021: EUR 1,254k (EUR 1,355k less the non-current portion of EUR 101k); 2020: EUR 2,009k (EUR 2,216k less the non-current portion of EUR 207k)). In financial year 2020, this line item also included receivables from the cooperation agreement with a University of EUR 297k.

The items under other non-financial assets mainly consist of prepaid rent, prepaid exhibition expenses and insurance premiums. In addition to one machine manufactured under contract that is accounted for using the percentage of completion method, contract assets in financial year 2022 relate to the rights of the Group to receive consideration for work that had been completed on machines that had already been shipped but not yet billed as at the reporting date. The increase in contract assets is largely due to an increase in revenue.

Intangible assets mainly consist of laser technology and capitalized development costs. The increase in financial years 2021 and 2022 is mainly due to investments in technology and other development work. Total spending on research and development in financial year 2022 came to EUR 18,006k (2021: EUR 14,632k), which represents an increase of 23% on the prior year.

Unrecognized intangible assets were identified in the course of a past business combination. These consisted of an basic research technology underlying the SLM machines and the customer base at the time. They are measured at historical cost less accumulated amortization and any impairment losses. Straight-line amortization is recorded over a useful life of 15 years for basic research technology and over 10 years for the customer base. In the financial year 2022, these assets are fully attributable to laser technology in the amount of EUR 6,041k (2021: EUR 7,323k; 2020: EUR 8,605k (each incl. customer base)).

Property, plant and equipment came to EUR 35,809k as at 31 December 2022 (2021: EUR 35,575 k; 2020: EUR 38,486k) and remained relatively stable in financial year 2021. The decrease in financial year 2021 is mainly due to the sale of systems by the Applications Center, which were to be replaced in following periods. We were informed that the Company regularly sells its demonstration machines to customers as second-hand machines. In addition, the scheduled depreciation recorded on assets covered by finance leases in financial year 2021 led to a reduction in property, plant and equipment.

Property, plant and equipment include right-of-use assets pursuant to IFRS 16. In financial year 2022, right-of-use assets amounted to approximately EUR 1,016k of which EUR 410k relate to buildings (2021: EUR 246 k; 2020: EUR 441k) and an amount of EUR 606k to vehicles, operating equipment, furniture and fixtures (2021: EUR 475 k; 2020: EUR 1,196k).

In addition to foreign non-current trade receivables, **other financial assets** include prepayments, security deposits and prepaid exhibition costs. Other non-financial assets came to approximately EUR 208k as at 31 December 2020 and rose to a level of EUR 1,127k as at 31 December 2022 (2021: EUR 718k). In financial year 2022, an amount of EUR 1,100k was attributable to trade receivables denominated in foreign currency.

Non-current other non-financial assets amounted to EUR 101k in financial year 2021 and EUR 207k in financial year 2020. These primarily consist of the receivable for the transfer of shares in SLM Software GmbH. In financial year 2019, 51% of the shares in SLM Software GmbH, Perg, Austria, were sold to a joint venture partner. An amount of EUR 162k was collected in financial year 2022 and the receivable settled in full.

Deferred tax assets recognized on unused tax losses of EUR 5,013k carried by SLM AG to the extent that the deferred tax assets were matched by deferred tax liabilities, taking account of the minimum taxation rule.

Equity and liabilities are as follows:

	Dec 20 Actual	Dec 21 Actual	Dec 22 Actual
	kEUR	kEUR	kEUR
Trade payables	6,983	11,008	11,523
Financial liabilities	2,781	60,453	2,347
Other non-financial liabilities	6,522	7,872	15,303
Provisions	4,304	4,896	4,983
Tax provisions	29	7	1,080
Finance lease obligation - short-term	0	0	162
Total current liabilities	20,619	84,236	35,398
Financial liabilities	75,014	20,112	69,461
Pensions and similar obligations	6,982	6,304	4,005
Other financial liabilities	1,143	771	669
Other non-financial liabilities	13	0	44
Provisions	875	111	841
Deferred tax liabilities	5,832	4,831	7,638
Total non-current liabilities	89,859	32,129	82,659
Total liabilities	110,478	116,365	118,057
Subscribed share capital	19,779	22,702	25,745
Additional paid-in capital	100,584	134,322	185,515
Consolidated loss for the period included in retained earnings	-101,589	-121,964	-146,708
Reserves	-3,005	-2,389	-298
Total equity	15,768	32,671	64,254
	126,247	149,036	182,311

The **increase in trade payables** in 2021 and 2022 results from business growth.

There were two **convertible bonds** in circulation at the end of financial year 2022. The first bond was issued with an original interest rate of 5.5% p.a. and a term expiring on 11 October 2022. The 2017/2022 bond was partially repaid in 2022 and otherwise prolonged by two years by the creditors in the year 2022 and the interest rate raised to 7.5% p.a. The second bond was issued in three tranches in 2020, 2021 and 2022 and partially converted in 2022 (see below).

The increase in **current financial liabilities** in financial year 2021 is chiefly attributable to the reclassification in financial year 2021 of the 2017/2022 bond that fell due for repayment in financial year 2022 to current liabilities. The subsequent decrease in current financial liabilities is due in particular to the reclassification of the convertible bond 2017/2024 from current to non-current financial liabilities (see also below). Current financial liabilities also include liabilities to banks of EUR 2,074k (2021: EUR 2,125k; 2020: EUR 2,110k), current financial liabilities include current lease liabilities of EUR 263k (2021: EUR 325k; 2020: EUR 620k) and tax liabilities (withholding tax, goods and services tax, harmonized sales tax; 2022: EUR 0k, 2021: EUR 92k; 2020: EUR 1.4k).

The decrease in current financial liabilities in 2022 was partially offset by an increase in **current other non-financial liabilitie**s from EUR 7,872k in the year 2021 to EUR 15,303k in the year 2022. Current other non-financial liabilities consist of payments received on account of orders, liabilities towards employees and other taxes. Current other non-financial liabilities amount to roughly EUR 15,303k as at 31 December 2022 and contain liabilities towards employees of EUR 10,626k and payments received on account of orders of EUR 4,422k. The increase in other financial liabilities results primarily from the increase in liabilities towards employees of roughly EUR 6,597k on the prior year, which is related to the public takeover offer of Nikon AM. AG in 2022.

Current provisions include provisions for warranties and installation costs, provisions for bonuses and commission payable and amount to approximately EUR 4,983k as at 31 December 2022 (2021: EUR 4,896 k; 2020: EUR 4,304k). While warranty provisions in financial year 2022 increased by roughly EUR 584k as a result of business activity, other provisions decreased by roughly EUR 497k. The increase in current provisions in financial year 2021 is chiefly attributable to the increase in provisions for warranties due to the business expansion.

Tax provisions consist of income tax and VAT liabilities. The increase in tax provisions is mainly due to a reclassification of accounts; the individual accounts do not show any significant increase.

Financial lease obligations amount to EUR 162k as at 31 December 2022. These mainly relate to leases for technical equipment.

Non-current financial liabilities mainly consist of financial liabilities in the form of convertible bonds and bank loans which were taken out to construct the Company's headquarters in Lübeck. The bank loans need to be serviced in regular installments until 31 December 2026. The installments consist of 30 equivalent installments of EUR 333k that fall due on a quarterly basis beginning on 30 June 2019, plus a final installment of EUR 133k. The liabilities to banks for the following year are presented under current financial liabilities.

In 2022, non-current financial liabilities increased due to the issue of the third tranche of the convertible bond 2020/2026 (2022/2026) with a face value of EUR 30,213k. In addition, the prolongation of the maturity date of the convertible bond 2017/2024 resulted in current liabilities being reclassified as non-current liabilities (see above).

The decrease in **pension liabilities** is due to discounting future pension obligations to present value using higher average interest rates. Pensions and similar obligations amount to EUR 4,005k as at 31 December 2022. We were informed that the SLM Group carried pension obligations that arose in the course of founding the Company due to a spin-off s from another entity. In this connection, the existing pension obligations of the employees transferred within the course of the spin-off were transferred (in accordance with Sec. 613a BGB) to the newly formed company that now forms the current SLM Group. The SLM Group has not issued any new pension entitlements of its own. The obligations are ultimately limited to 17 individuals, of whom four are active employees with vested benefits as at 31 December 2022.

Other financial liabilities relate to non-current and current lease liabilities pursuant to IFRS 16 and other current obligations. Current lease liabilities as at 31 December 2022 amount to EUR 263k and non-current lease liabilities with terms of up to five years to EUR 669k. Lease liabilities pursuant to IFRS 16 are counterbalanced by right-of-use assets of EUR 1,016k as at 31 December 2022.

Non-current other non-financial liabilities amount to approximately EUR 44k as at 31 December 2022 (2021: EUR 0 k; 2020: EUR 13k).

Non-current provisions consist of non-current provisions for the Long-Term Incentive Program (LTIP). They rose by EUR 111k to EUR 841k in financial year 2022 due to the supplementary agreements on share-based payments made with the three members to the Management Board, which contain alternative arrangements in the event of a change of control. In financial year 2020, non-current provisions contained provisions for the LTI program of EUR 97k and non-current warranty provisions of EUR 777k.

Deferred tax liabilities mainly originate from the recognition of internal development costs as intangible assets. As at 31 December 2022 deferred tax liabilities amount to EUR 7,638k.

c) Financial Performance

We analyzed the past financial performance of SLM Solutions Group AG in order to assess its existing profitability and the plausibility of its planning statements. This involved eliminating extraordinary items from earnings before interest and taxes (EBIT) to derive an adjusted EBIT. Eliminating non-recurring events allows the planning statements to be assessed more accurately (see IDW AcPS 2/2017, No. 25).

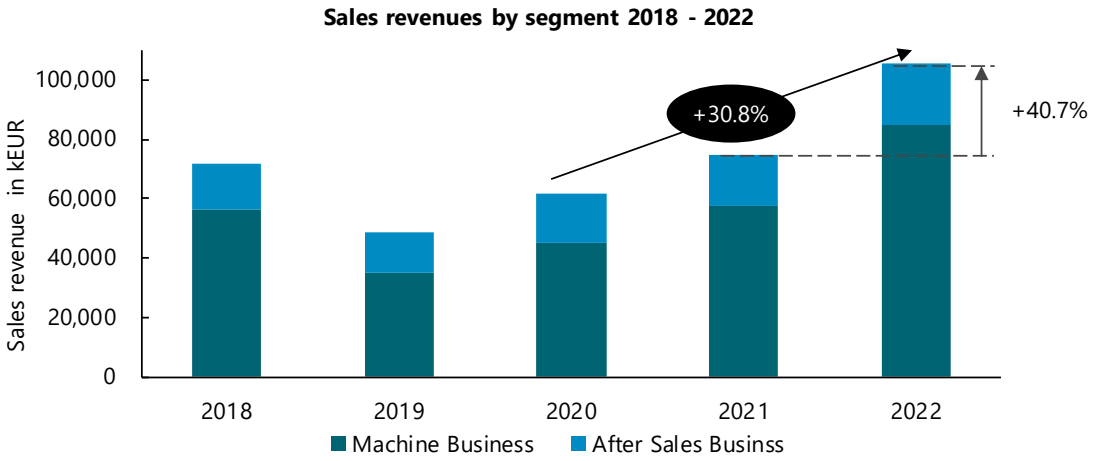
The **adjusted earnings** of SLM Solutions Group AG for the financial years 2020 to 2022 are presented in the following table based on the audited IFRS consolidated income statements:

	2020 Actual	2021 Actual	2022 Actual	2020-22 CAGR
	kEUR	kEUR	kEUR	%
Revenue	61,759	75,115	105,709	*30.8%*
Incr./decr. of finished/unfinished stock on hand	-2,219	1,558	9,471	*n/a*
Other activated contributions	5,030	6,633	7,189	*19.6%*
Total output	64,570	83,306	122,369	*37.7%*
Cost of material	-26,257	-34,947	-54,367	*43.9%*
Gross profit	38,313	48,359	68,002	*33.2%*
Payroll	-35,732	-38,633	-45,740	*13.1%*
Other operating income	851	186	262	*-44.5%*
Other operating expenses	-15,599	-18,300	-21,672	*17.9%*
Proceeds from associated companies	-7	0	0	*-100.0%*
EBITDA adj.	-12,175	-8,387	852	*n/a*
Deprecitation & amortization	-7,331	-6,416	-7,330	*0.0%*
EBIT adj.	-19,506	-14,803	-6,478	*-42.4%*
Adjustments	-3,888	-1,492	-9,779	*58.6%*
EBIT	-23,394	-16,295	-16,258	*-16.6%*
Financial income	-4,461	-5,269	-6,123	*17.2%*
EBT	-27,855	-21,564	-22,380	*-10.4%*
Tax payable	-2,397	1,188	-2,364	*-0.7%*
Result for the period	-30,252	-20,375	-24,744	*-9.6%*
EBITDA adj. in % of Revenue	*-19.7%*	*-11.2%*	*0.8%*	
EBIT adj. in % of Revenue	*-31.6%*	*-19.7%*	*-6.1%*	
as a percentage of total output				
Cost of material	*40.7%*	*42.0%*	*44.4%*	
Payroll	*55.3%*	*46.4%*	*37.4%*	
Other operating income	*1.3%*	*0.2%*	*0.2%*	
Other operating expenses	*24.2%*	*22.0%*	*17.7%*	

The increase in **revenue** to roughly EUR 105,709k in financial year 2022, which represents a rise of approximately 41% on financial year 2021 (EUR 75,115k) can be primarily attributed to sales of the NXG XII 600. To this extent, the rising demand for machines from SLM AG, which was already observed in financial year 2021, continued on its growth trajectory.

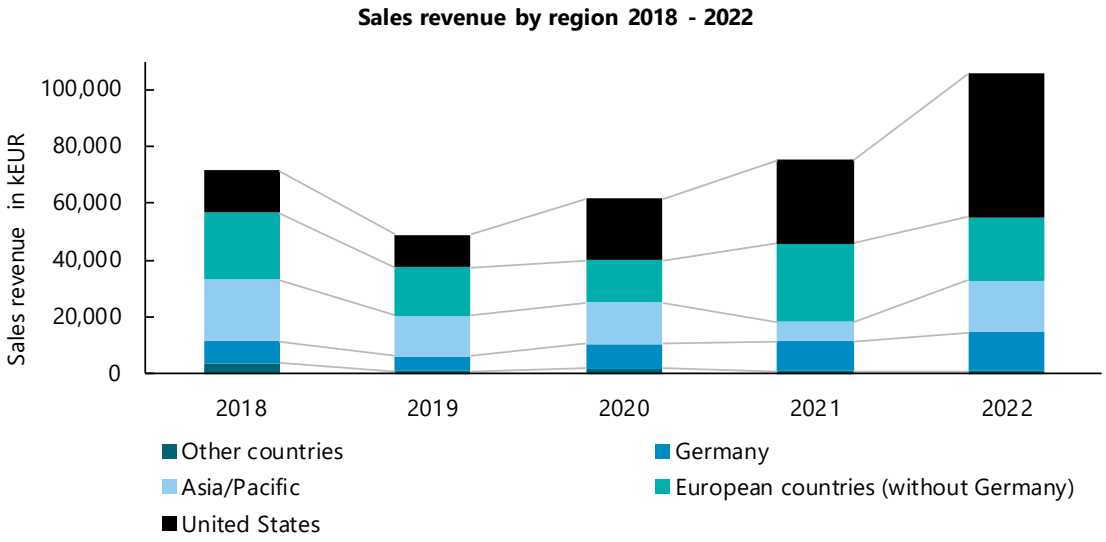
In its segment reporting, the Company reports its net sales by segment and region.

The following chart presents the development of segment revenue from 2018 to 2022:



In financial year 2022, approximately 80% of revenue was attributable to the Machines segment, which sells selective laser melting machines, powder sieving stations and other peripherals. While the Machines segment generated revenue growth of roughly 47% in financial year 2022, the After Sales segment, which generates revenue from services, sales of spare parts, merchandise and powder, as well as training and installation of the machines, recorded revenue growth of approximately 20%. Between financial years 2020 and 2022 revenue grew by an annual average of approximately 31%, with revenue growth of roughly 41% being realized between 2021 and 2022.

The following chart presents the development of revenue by region from 2018 to 2022:



The chart shows that most revenue in the observed period was generated in the United States, Germany and other European countries. Of all the regions, growth was most vigorous in the United States, which saw revenue rise by roughly 74% on the prior year in financial year 2022.

Increase / Decrease of finished / unfinished stock on hand amounts to EUR 9,471k in 2022 (2021: EUR 1,558k; 2020: EUR -2,219k.

Own work capitalized amounted to EUR 7,189k in financial year 2022 (2021: EUR 6,633 k; 2020: EUR 5,030k) and consists of the hours of labor spent on development work that resulted in a plan or a draft for new or substantially improved products and processes. The increase in own work capitalized over the observed period is primarily due to the increase in development activity.

Adjusted cost of materials is essentially made up of the components installed in the machines of SLM Solutions AG. In financial year 2022, the Company reported adjusted costs of materials of EUR 54,367k, which represents a year-on-year increase of approximately 55%, more rapidly than both total operating performance and the sum of revenue and the change in inventories. This reflects an increase in the ratio of the cost of materials to total operating performance of roughly 2.5 percentage points and roughly 1.6 percentage points measured on revenue and the change in inventories in comparison to the prior year.

Adjusted payroll increased from roughly EUR 35,732k in the year 2021 to roughly EUR 45,740k in the year 2022, which represents an annual growth rate of roughly 13.1%. The adjusted ratio of personnel expenses, measured on total operating performance, decreased from approximately 55.3% to 37.4% in the observed period. When measured against the sum of revenue and the change in inventories, the adjusted ratio of personnel expenses decreased from approximately 60% in the year 2020 to roughly 40% in the year 2022. This decrease in the ratio of personnel expenses is largely due to the increase in revenue and total operating performance in relationship to the number of full-time equivalents (FTE). As at 31 December 2022, 537 full-time equivalents were employed (2021: 488; 2020: 429). As at 31 December 2022 around 116 FTE are allocated to Research and Development, 81 FTE to Sales, 122 FTE to After Sales, 101 FTE to Production and 117 FTE to Administration.

While revenue rose by approximately 21.6% between 2020 and 2021 and approximately 40.7% between 2021 and 2022, the number of FTEs rose by 13.8% and 10.0% over the same periods.

Adjusted other operating income decreased from approximately EUR 851k in the year 2020 to roughly EUR 186k in the year 2021 and rose again to EUR 262k in the year 2022. The decrease is largely due to a change in the classification of accounts in these financial years.

Adjusted other operating expenses include in particular logistics costs, operating expenses (e.g. IT-costs) and legal and consulting fees. Adjusted other operating expenses rose from roughly EUR 15,599k in 2020 to EUR 21,672k in 2022 and therefore grew at an annual average rate of roughly 17.9%. Particularly, the increase is due to higher logistics costs as a result of globally increased transport costs due to delivery bottlenecks, as well as to the increase in sales volume. Compared to the CAGR of approximately 37.7% seen in the total operating performance until 2022, the ratio of operating expenses relative to total operating performance decreased by roughly 6 percentage points in the observed period.

Investment income from entities accounted for using the equity method in financial year 2020 of EUR -7k relates to the equity investment held in 3D Metal Powder GmbH. The 51% stake held in this entity, which was founded in the year 2016 was sold in financial year 2020. The profits and losses of the entity were considered until 30 June 2020.

Adjusted EBITDA rose from EUR -12,175k in the year 2020 to EUR 852k in the year 2022.

Depreciation and amortization in financial year 2022 came to EUR 7,330k (2021: EUR 6,416 k; 2020: EUR 7,331k). Depreciation consists of amortization of intangible assets and depreciation of property, plant, and equipment. It also includes depreciation of right of use assets.

Adjusted EBIT is clearly negative over the entire period under review.

The **financial result** comprises interest on the convertible bond and bank loans, which were partly offset by interest and other income of EUR 79k (2021: EUR 61k). The increase in interest expenses is largely due to the additional interest expenses incurred on the convertible bond 2020/2026 issued in June 2022 in combination with the interest expenses paid for the full year for the first time on the convertible bond 2021/2026 that was issued in April 2021. The increase in interest expenses in financial year 2020 is attributable to the first tranche of the second convertible bond 2020/2026 issued in July 2020. In total, the financial result deteriorated from EUR -4,461k in the year 2020 to EUR -6,123k in the year 2022.

The SLM Group recorded a **tax expense** for the financial year ending in December 2022, primarily for deferred taxes of EUR 2,364k. This compares to tax income of EUR 1,188k for the financial year 2021 due to an income tax benefit. This effect in 2021 is primarily due to the recognition of deferred tax assets in excess of deferred tax liabilities on account of loss carryforwards.

In the last three financial years, the SLM Group generated substantial **net losses.** The net loss for the financial year 2022 deteriorated from EUR -20,375k in the year 2021k to EUR -24,744k.

Adjustments

To improve comparability and to review the plausibility of the planning statements, we eliminated the following items from historical earnings.

	2020 Actual	2021 Actual	2022 Actual
	kEUR	kEUR	kEUR
Currency gains	484	1,423	0
Currency losses	-1,017	0	-975
Income from the reversal of specific bad debt allowances	463	74	263
Release of provision	1,206	151	255
Recognition of provisions	-151	-255	0
Release of accrual related to wrong customs classification in the US	0	0	959
Government grants	723	803	0
Non-recurring costs related to Nikon Takeover	0	0	-6,559
Inventory-Write-Offs	-4,408	-2,100	-1,985
Severance Pay	-305	-374	-537
Income from the disposal of fixed assets	0	67	0
Loss from disposal of fixed assets	0	0	-24
Short-time work at German Facilities	400	0	0
PPA-Amortization	-1,282	-1,282	-1,175
Adjustments	-3,888	-1,492	-9,779

In the years 2020 to 2022, the cost of materials included impairment losses and write-downs for aging inventories of EUR 1,985k (2022), EUR 2,100k (2021) and EUR 4,408k (2020).

Likewise, exchange rate gains and losses included in other operating income and other operating expenses have been eliminated along with gains and losses on the disposal of assets and income from the reversal of specific valuation allowances.

In the financial years 2020 to 2022, income from the release of provisions came to EUR 1,206k (2020), EUR 151k (2021) and EUR 255k (2022). As a simplification, it has been assumed that a provision was recognized in the previous financial year.

In addition, other operating income in 2022 includes income from the release of a provision amounting to EUR 959k. This provision had been recognized in the year 2019 due to a faulty customs declaration in the United States that used the wrong code. The provision was released as the statute of limitations was reached in some respects.

The government subsidies of EUR 723k and EUR 803k received from the federal governments in the United States and Canada in connection with the corona pandemic in the financial years 2020 and 2021 were eliminated from other operating income. In the years 2021 and 2022 this mainly concerns subsidies received under the "Paycheck Protection Program" established in the United States on account of the corona pandemic. In financial year 2021, a portion of roughly EUR 7k is attributable to a comparable program set up by the Canadian government.

In financial year 2022, non-recurring administrative expenses of roughly EUR 6.5 million were incurred in connection with the public takeover offer from Nikon AM. AG which were adjusted in payroll and the other operating expenses respectively.

Income of EUR 400k received in financial year 2020 in connection with the "*Kurzarbeit*" furlough scheme in Germany was eliminated from personnel expenses.

In addition, severance payments of EUR 305k, EUR 374k and EUR 537k were eliminated from the years 2020 to 2022 respectively.

In addition, we eliminated non-deductible depreciation and amortization of assets identified in the PPA in the course of the acquisition of SLM Solutions AG in the year 2014 related to the IPO of EUR 1,282k in the years 2020 and 2021 and EUR 1,175k in the year 2022.

4.2. Planning Statements

a) Description of the Planning Process

The annual planning process of SLM Solutions Group AG begins in August of the respective year. At the beginning, a forecast of expected orders is obtained from the sales staff (order forecast). A pronounced level of detail is available for the planning statement mainly for the first year (budget year). The planning of orders and sales as well as direct material expenses is carried out at the level of the individual machine types and, for the budget year, also at the level of the sales region. After-sales revenues and the corresponding cost of materials are deducted separately. When planning other expenses, detailed forecasts are obtained for the budget year at the level of the individual cost centres.

Within the framework of medium-term planning an update is carried out taking into account the market development, the product portfolio and the product planning.

The **most recent planning** includes the budget for the year 2023 and the medium-term planning for the years 2024 to 2027. The planning for the budget year was updated in May 2023 and supplemented with the medium-term planning. The planning statement shall be approved by the supervisory board at the meeting on 31 May 2023.

b) Budget Comparisons

The historical planning statements reflect management's expectations at the time for the future development of the Company. These are not wholly divorced from the purpose pursued by the planning. which could also be to define certain targets. Planning reliability is analyzed by comparing the actual results to the original business plans over the historical periods and examining the causes for any budget deviations. This can result in an assessment of whether the planning was too optimistic or too pessimistic or was realistic in the past (see OLG Düsseldorf, 9 May 2022, 26 W 3/21, No. 41 (BeckRS); OLG Düsseldorf, 25 February 2020, 26 W 7/18, No. 39 (BeckRS); OLG Munich, 14 December 2021, 31 Wx 190/20, No. 109 (BeckRS)). Budget comparisons over a number of individual years can also be performed for the respective mid-range planning issued in recent years.

In order to assess the reliability of the historical planning statements, we compared the planning statements from the financial years 2019 to 2021 for the financial years 2020 to 2022 with the respective (unadjusted) actual figures. We have refrained from presenting the planning accuracy for adjusted results, as the aim is to gain an assessment of the extent to which the planned actual results were structurally exceeded or fallen short of. Planning deviations were identified at the level of net sales, EBITDA and order volume. The left column always indicates the year of planning (e.g. 2019) for the following planning year. In 2020 (for the planning years 2021 to 2025) and 2021 (for the planning years 2022 to 2026), there is a planning horizon of five years in each case. In 2019, only one budget year (2020) was planned. Green fields show a plan overfulfilment, red fields a negative plan deviation.

At the level of **turnover**, the deviations from plan are as follows:

Δ Revenue (%)		year		
		2020	2021	2022
Plan	2019	-4%		
	2020		1%	-11%
	2021			-8%
average Δ		-4%	1%	-9%

The analysis of the deviations at the level of sales revenues shows that the figures in the planning from the year 2019 for the year 2020 were below the realized revenues.The planned turnover in 2020, at least for the first year of the plan in 2021 was marginally exceeded. With regard to the second planning year 2022, the sales revenues are approx. 11% below the planned revenues. The turnover planned in 2021 for 2022 was also missed by about 8%.

At the level of **EBITDA** (absolute), the plan-actual deviations are as follows:

Δ EBITDA (%)		year		
		2020	2021	2022
Plan	2019	-69%		
	2020		30%	-172%
	2021			-361%
average Δ		-69%	30%	-266%

The significantly negative deviation from the plan in 2020 is due to the not achieved sales volume as well as due to material expenses above the planned expenses. The positive deviation in 2021 is attributable to an significantly overfulfilment of planned own work capitalized. The significantly negative deviations of the year 2022 is due to the non-achievement of planned sales and higher material and personnel expenses.

In addition, we have carried out an analysis of the planned/actual deviations on the basis of **incoming orders** in TEUR. We do not have any planning data for 2019.

Δ Order intake in kEUR (%)		year		
		2020	2021	2022
Plan	2019			
	2020		-32%	-40%
	2021			-25%
average Δ		n/a	-32%	-33%

The analysis of the deviations at the level of incoming orders shows that - insofar as information is available - the planned incoming orders exceed the planned orders.

Based on the analysis of planning fidelity, it should be noted, that we couldn't identify any hints questioning the suitability of planning accounting for business valuation purposes. As a result, the deviations from the planned/actual figures show a strategic nature of planning. In particular, there is no structurally conservative planning approach.

c) Planning Statements of the SLM Group

Operative planning

The following summary presents the latest planning statements of the SLM Group for the planning years 2023 to 2027:

	2022 Actual*	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Revenue	105,709	152,299	207,727	261,611	337,714	430,194
Incr./decr. fin./unfin. stock on hand	9,471	5,587	5,338	9,036	9,675	11,553
Other activated contributions	7,189	8,973	10,768	12,921	15,505	18,606
Total output	122,369	166,858	223,832	283,569	362,895	460,354
Cost of material	-54,367	-72,467	-98,245	-124,016	-160,760	-205,883
Gross profit	68,002	94,391	125,588	159,553	202,135	254,471
Payroll	-45,740	-59,807	-68,778	-79,095	-90,959	-104,603
Other operating income	262	0	0	0	0	0
Other operating expenses	-21,672	-27,144	-29,859	-32,844	-36,129	-39,742
EBITDA	852	7,440	26,951	47,613	75,047	110,126
Deprecitation & amortization	-7,330	-9,022	-10,827	-12,992	-15,590	-18,709
EBIT	-6,479	-1,583	16,124	34,621	59,457	91,418
*adjusted						
Sales growth rate	*40.7%*	*44.1%*	*36.4%*	*25.9%*	*29.1%*	*27.4%*
EBITDA in % of Revenue	*0.8%*	*4.9%*	*13.0%*	*18.2%*	*22.2%*	*25.6%*
EBIT in % of Revenue	*-6.1%*	*-1.0%*	*7.8%*	*13.2%*	*17.6%*	*21.3%*
as a percentage of total output						
Cost of material	*-44.4%*	*-43.4%*	*-43.9%*	*-43.7%*	*-44.3%*	*-44.7%*
Payroll	*-37.4%*	*-35.8%*	*-30.7%*	*-27.9%*	*-25.1%*	*-22.7%*
Other operating expenses	*-17.7%*	*-16.3%*	*-13.3%*	*-11.6%*	*-10.0%*	*-8.6%*

The planning statement is characterized by a significant increase in **revenue**, which is expected to more than quadruple from 2022 to 2027 with an average annual growth rate of 32.4%. In total, an increase in revenue of approximately EUR 324.485k is to be achieved in the period from 2022 to 2027. The high growth is mainly driven by a strong increase in planned order intake and sales volume in the segment Machine Business.

The following table shows the planned revenue development of the segments Machine Business and After Sales:

	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Machine	84,889	126,290	172,380	211,935	268,535	336,932
After Sales	20,820	26,009	35,347	49,677	69,179	93,263
Total	105,709	152,299	207,727	261,611	337,714	430,194
in % of Revenue						
Machine	*80%*	*83%*	*83%*	*81%*	*80%*	*78%*
After Sales	*20%*	*17%*	*17%*	*19%*	*20%*	*22%*

Revenue growth in the segment **Machine** is expected to be mainly driven by the strong increase in the sale of systems of the NXG-family. A continuous further development of the product portfolio is planned throughout the planning period, which should also have growth-enhancing effects. The planned increase of sales are to be achieved in particular with customers in the aerospace and defense sectors. Additionally, a closer cooperation with customers, which should encourage the introduction and extension of additive manufacturing is planned.

The planned increase in the installed base has a delayed effect on revenue in the **After Sales** segment, which is expected to grow strongly, especially in the middle of the planning period. A rising share of revenue from powder sales is planned over time, corresponding to the expected increase in additive manufacturing at customer companies.

In connection with the expansion of the volume of business **the changes in inventories of finished goods and work in progress** are positive in the entire planning process. Compared to revenue growth, the increase in inventories is significantly lower, so that the capital tied up in inventories is expected to improve considerably in the planning period.

The planned growth is based on a continuous development of the technology and the product portfolio. This resulted in a further increase in other own work capitalized, which is, however, disproportionately low in relation to revenue. The share of other own work capitalized in personal expenses increases from 15.7% in 2023 to 17.8% in 2027.

Cost of materials essentially consists of direct cost of materials for machines and the materials sold in the After Sales Business (spare parts, powder, supplies). Compared to revenue and total output, however, only a disproportionately low increase is planned, with a compound annual growth rate of around 30.5 %. This is also reflected in the slight increase in the cost of materials ratio in relation to total output.

In addition to salary increases the growth in **payroll** in the planning period reflects in particular the planned new hirings, which will mainly be made in Production, Engineering and Service. In connection with the expected increasing application of the machines in additive manufacturing the sales volume per customer is also expected to increase, so that a smaller increase in sales staff is planned in Sales. In relation to total output, there is a significant improvement int the personal expenses ratio from 37% in 2022 to 23% in 2027.

Other operating income is not expected in the planning period.

Other operating expenses are expected to increase only slightly, at a compound annual growth rate of around 12.9%, due to planned cost improvements in Logistics and Marketing and a expected decrease in legal and consulting fee.

EBITDA is planned to increase from EUR 852 thousand in 2022 to EUR 110,126 thousand by 2027. In this respect, an increase in the EBITDA margin in relation to revenue from 0.8 % in 2022 to 25.6 % at the end of the planning period in 2027 is mapped.

The increase in **depreciation** in the planning period is in particular due to the continued development activities and is therefore related to the planned increase in own work capitalized.

EBIT is expected to be positive in 2024 and is expected to strongly increase in the subsequent planning years. Particularly, this is due to the disproportionately low planned increase in personnel expenses and other operating expenses in relation to revenue. From 2022 to 2027 the company expects an increase in EBIT of around EUR 120,653k which correspond to 37% of the planned increase in revenue.

Classification and assessment of the plausibility of the operative planning

Budget targets set by a company as part of its incentive program fulfill their specific purpose particularly when the targets are ambitious and in pursuit of the business opportunities identified by management (for a critical view of incentive planning: OLG Stuttgart, 3 April 2012, 20 W 6/09, No. 134 (juris)). The corresponding risks are either fully ignored when setting the targets or at least no adequately considered. To this extent, incentive-based planning does not reflect the actually expected results. However, incentive-based planning is not necessarily wrong. It simply has a fundamentally different function than that of the business planning needed to conduct a business valuation. Consequently, within the course of a business valuation, it needs to be examined whether the planned financial surpluses represent the actual expectations (see IDW AcPS 2/2017, No. 53; Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung, in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition, 2019, No. 12.22).

With a view to uncertainty that is inherent to business planning, an assessment needs to be made as to whether the assumptions underlying the planning are plausible, i.e. comprehensible, consistent and free of internal inconsistencies (see IDW AcPS 2/2017, No. 5).

Generally, planning is to be considered plausible when it is both arithmetically correct and has been compiled on the basis of a suitable planning process, ties in consistently with an analysis of historical figures and the current situation of the valuation object, the deviations to past trends can be logically explained and the expected development of the valuation object is reflected in a comprehensible manner.

In the course of our valuation work, we verified the planning both arithmetically as well as in term of its comprehensibility and consistence with the underlying assumptions. Based on our findings, the planning is plausible, both arithmetically and formally, in the sense of IDW AcPS 2/2017, No. 15, 19 et seq.

We conducted our assessment of the substantive internal plausibility of the planning calculations based on our findings relating to the business model, the adjusted historical figures and the past development of the SLM Group as well as after considering the comprehensive supplementary explanations and documents submitted to us relating to the management assumptions.

We based our assessment of the substantive external plausibility of the planning on our knowledge of the market and the competitive environment.

According to the findings of our audit, both the substantive internal plausibility and the substantive external plausibility of the planning calculations as required by IDW AcPS 2/2017 No. 16 et seq. and 22 et seq. are given, considering the following deliberations.

Starting from the year 2022, the company expects a very significant expansion of sales revenues with an average annual growth rate of 32.4% until 2027. The planned average annual growth rate lies significantly above the market development forecast by external market observers for the relevant market and thus implies significant market share increases. At the same time, at the level of the operating result, the company expect significant margin increases. It should be taken into account that the company has a history of losses; in 2024 the EBIT is expected to be positive and is expected to increase significantly in the following years. Overall, an EBIT increase of EUR 120.653k is to be achieved in the period from 2022 to 2027 which corresponds to a share of 37% of the planned increase in turnover or 114% of the turnover achieved in 2022.

The company sees the market success of the NXG XII 600, of which only a few machines have been sold so far, as the driver for the very significant increase in turnover. In this respect, future development of SLM-Group is essentially tied to the success of this type of machine. Success depends on the one hand, on the development of technology (machine reliability) and, on the other hand, on the period of existence of actual technological advantages.

The expected significant improvement of the operative margin is to be achieved against the background of constant price pressure on the sales side and simultaneous concentration on a few suppliers on the input side.

In conclusion, the business planning is heavily dependent on both internal and external success factors beyond the influence of the management and can be characterized as ambitious overall. In our opinion, it will be a great business challenge to reach the planned results.

Financial result

We derived the financial result using an integrated financial requirements and planning model. The calculation of cash requirements considers the distribution strategy, capital expenditure and changes in net working capital and provisions.

The financial planning used to determine the financial result begins with the interest-bearing assets and liabilities as at 31 December 2022. When deriving the interest result, we took the conditions available to the SLM Group as the point of departure.

In accordance with the cut-off-date principle, financial surpluses that have already accrued to the owners of the business, or whose appropriation has been fixed, should no longer be considered when determining the business value of the Company. Dividend distributions that have been passed by resolution and dividend payments reduce the net result and therefore the earnings potential of the entity (see OLG Hamburg, 11 April 2003, 11 U 215/02, AG 2003, p. 441 et seq; LG Frankfurt, 4 July 2006, 3-5 O 52/05, *ratio decidendi* p. 10). The converse argument is that all potential dividend rights, that have not yet been passed by resolution are allocable to the shareholders and should therefore be included in the calculation of the capitalized earnings value.

As there are no plans to distribute a dividend for the financial year 2022, there are no matching issues also not with regard to the shares issued after 31 December 2022.

Corporate taxation

We calculated the tax burden of the SLM Group considering the current status of the applicable corporate tax legislation.

The income tax burden considers **trade tax and corporate income tax** as well as the **solidarity surcharge** on corporate income tax that is charged on domestic income as well as **corporate taxation** charged in other countries.

We have integrated the loss carry-forwards existing before the takeover by Nikon AM. AG as well as new tax losses carried forward afterwards when deriving the expected tax payments. If unused tax losses are already considered in the integrated calculation of capitalized earnings, to avoid double counting in the valuation model, they cannot be considered as a separately-valued asset (see Popp, Berücksichtigung von Steuern, in: Peemöller (publisher), Praxishandbuch der Unternehmensbewertung, 7th edition, 2019, p. 1425, 1429).

We have taken into account the temporary tax advantage from the depreciation still expected to exceed the sustainable level at the beginning of the perpetuity when determining the sustainable taxes.

Deferred taxes are not considered due to the fact that they have no cash impact.

Shares of minority shareholders in profit or loss

In keeping with the principle of full consolidation, the projected profits or losses of entities, in which – from the perspective of SLM Solutions Group AG – minority interests or third parties hold a stake, must be posted to the consolidated income statement in full. There are no minority interests in the subsidiaries of SLM Solutions Group AG. Consequently, there are no allocation issues.

d) Transition phase and sustainable result

The financial surpluses available for distribution can be more accurately assessed and more reliably forecast for a period of time that lies closer to the valuation date than for a more remote future. In addition, detailed business planning is generally only prepared for a period of three to five years (detailed planning phase). After this period (inevitably simplified) assumptions must be made on the financial surpluses to arrive at the financial surpluses that can be expected in the indefinite future. The level of earnings in the first year of the terminal phase can be reached at the end of the detailed planning phase or lie higher (or lower). The terminal value can therefore lie below the earnings of the last year of the planning or individual years in the detailed planning phase. When setting the terminal value, an assumption is made of an "ideal steady state" in terms of financial performance, financial position and cash flows.

According to IDW practice statement 2/2017 No. 54, the terminal value must be derived independently taking account of separate analyses. To this extent, the final year of the detailed planning phase cannot be adopted in perpetuity without further reflection. The terminal value must consider the realizable returns that can be expected for the long term. Indicators of the terminal value can be derived from normalized historical earnings and the detailed planning phase as well as from industry indicators (see IDW AcPS 2/2017, No. 57).

Generally the plausibility of the terminal value is tested on the basis of the margins (e.g. EBIT/EBITDA margins). In particular, a comparison with average margins is suitable for companies that are exposed to economic cycles on competitive markets but also those companies which report fluctuating returns due to the nature of their business model and/or accounting. The prevailing opinion in business theory is that the terminal value should reflect the average earnings for the indefinite future (for more details see Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition, 2019, No. 12.52 et seq.).

If the state of equilibrium has not yet been reached at the end of the detailed planning period, it may be necessary to plan a transition phase. Deviations may arise, for example - as is the case here - in the case of (young) companies in the growth phase (see IDW AcPS 2/2017, No. 55).

The planning statement of the SLM Group shows a growth above the expected market growth, which should be achieved by temporary competitive advantage due to the currently existing technological position. In terms of speed, NXG XII 600 has a unique selling proposition. However, this is not expected to be permanent.

In the course of the valuation work, the management of SLM AG provided us with a guidance or an assessment of the company, respectively, in which the expected development after the end of the detailed planning period is presented. Accordingly, a significantly declining growth rate is expected from 2028 onwards. In the long term, the product portfolio achieved by then, which requires corresponding investment, should generate consistent stable growth at a significant lower level.

Especially with regard to NXG XII 600, a technological competitive advantage is currently seen, which the company believes could be present for another one to three years. Competitive products can arise not only from competitors who use the same technology of powder bed fusion and are currently already working on further developments, but also through alternative technologies that also allow additive processing of metals.

With the increasing supply of competing products that also have a productivity corresponding to NXG XII 600, this product is also expected to face increasing competition and a corresponding decline in margin. In addition, it is assumed that with the now beginning and increasing industrialization of the industry, sales to large customers - at correspondingly lower margins - will increase. In the long term, an EBITDA and EBIT margin of a magnitude that can already be observed for established machine tool manufacturers is expected.

In order to check the plausibility of the sales and earnings level expected after the planning period and in the long term of SLM AG, we had various discussions with the management responsible for planning and analyzed past and planned sales and margin developments, also at the level of individual machine sales. In addition, we have taken into account market studies in the area of additive manufacturing and the market development as well as historical and expected margins for the peer group of machine tool manufacturers. We consider the expectation expressed by the company of a further increase in competition, a weakening of growth rates after the planning period and a long-term margin level in the order of magnitude of established machine tool manufacturers to be plausible.

The company's assessment is consistent with the development and increasing industrialization predicted in market studies. According to the forecast of AMPOWER, by 2027 only 16% of parts produced with additive manufacturing will be used for prototypes or research and development. Furthermore, a long-term slowdown in growth is already discernible from the available market forecasts over various time periods (see. section 2.2. b)). Very intense competition can already be observed today for the smaller machines.

Based on the information provided to us, our knowledge of the business model of the SLM Group and the above explanations we have expertly estimated the following revenue and EBITDA for the years 2028 to 2034:

	2028 TP	2029 TP	2030 TP	2031 TP	2032 TP	2033 TP	2034 TP
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Revenue	537,743	656,046	780,695	897,799	996,557	1,076,281	1,140,858
Revenue growth rate	*25%*	*22%*	*19%*	*15%*	*11%*	*8%*	*6%*
EBITDA	134,436	154,171	171,753	184,049	189,346	188,349	182,537
EBITDA in % of revenue	*25%*	*24%*	*22%*	*21%*	*19%*	*18%*	*16%*

We have derived the investments and depreciations taking into account the investments made in the planning statement as well as the estimates of the company. In the perpetual annuity we have applied the investments required to maintain the sustainable level of revenue and derived the corresponding depreciation.

As additional depreciation above the sustainable level is still expected after the planning period, we have taken the corresponding tax advantage into account when calculating the sustainable taxes.

e) Income statement

The condensed income statement is as follows:

	Detailed planning phase					Transition phase							TV
	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan	2028 TP	2029 TP	2030 TP	2031 TP	2032 TP	2033 TP	2034 TP	2035
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Revenue	152,299	207,727	261,611	337,714	430,194	537,743	656,046	780,695	897,799	996,557	1,076,281	1,140,858	1,152,267
Incr./decr. fin./unfin. stock on hand	5,587	5,338	9,036	9,675	11,553								
Other activated contributions	8,973	10,768	12,921	15,505	18,606								
Total output	166,858	223,832	283,569	362,895	460,354								
Cost of material	-72,467	-98,245	-124,016	-160,760	-205,883								
Gross profit	94,391	125,588	159,553	202,135	254,471								
Payroll	-59,807	-68,778	-79,095	-90,959	-104,603								
Other operating expenses	-27,144	-29,859	-32,844	-36,129	-39,742								
EBITDA	7,440	26,951	47,613	75,047	110,126	134,436	154,171	171,753	184,049	189,346	188,349	182,537	184,363
Deprecitation & amortization	-9,022	-10,827	-12,992	-15,590	-18,709	-23,788	-28,672	-33,608	-38,251	-43,488	-49,256	-54,707	-38,859
EBIT	-1,583	16,124	34,621	59,457	91,418	110,648	125,499	138,144	145,798	145,858	139,093	127,830	145,504
Financial income	-635	-892	-1,185	-1,048	-447	-479	-1,252	-1,640	-1,662	-1,609	-1,364	-890	-615
EBT	-2,218	15,232	33,436	58,409	90,970	110,169	124,246	136,504	144,136	144,249	137,729	126,941	144,889
Tax payable	0	-2,152	-5,472	-9,640	-15,068	-18,274	-21,244	-38,276	-40,934	-40,964	-39,105	-36,027	-40,858
Result for the period	-2,218	13,080	27,964	48,768	75,902	91,894	103,002	98,228	103,202	103,285	98,624	90,914	104,031

f) Deriving Expected Net Distributions

Sustainable retained earnings

Generally, various sources of growth need to be considered. These can be broken down into real growth drivers measured as trends (both positive and negative) in the performance indicators in the sense of operative growth (optimization or expansion of capacity) and merely nominal trends, i.e. due to changes in prices (inflation-induced growth) – see WPH Edition: Bewertung und Transaktionsberatung, 2018, Chap. A. No. 441.

Due to the (fiction of) the full distribution of net surpluses, i.e. allocation of all financial surpluses generated in perpetuity, the additional growth generated by investments in business expansion cannot be modeled in the growth factor for valuation purposes as this would lead to multiple counting of one and the same components of earnings. In the steady-state phase of the terminal value, it can be assumed that the returns on retained earnings that have been reinvested in the company correspond to the cost of capital. In other words, assuming that investments are neutral in terms of the cost of capital, it is of no relevance as to whether they are (a) reinvested and the future returns of these investments affect value or (b) reinvestment of these funds is ignored in the planning and their distribution immediately affects value. To the extent that it can assumed that investments in business expansion are neutral in terms of the cost of capital, they do not need to be explicitly considered in the terminal value for valuation purposes.

With regard to the terminal value, it is generally assumed that there will be inflation-induced growth in perpetuity. Even if all financial surpluses are distributed (sometimes referred to as fictitious full distribution) the capital remaining in the company is subject to inflation-induced growth. Consequently, the economic equity presented in the final balance sheet of the detailed planning phase is rolled forward in perpetuity after considering a growth factor for inflation (see WPH Edition: Bewertung und Transaktionsberatung, 2018, Chap. A No. 455). To finance growth in perpetuity, certain components of the terminal value must be regularly retained, otherwise it would be impossible for the company's leverage to reach a steady state. This is referred to as **growth-related retention of earnings** (see Popp Der Konzern 2019, p. 105, 108 et seq.). This can already be deduced from the fact that line items that are driven by purchases or sales (e.g. working capital) will be subject to rising prices and also investments in replacements of capital goods are subject to inflation. In other words, the line items of the income statement and the line items of the balance sheet are expected to grow each year at the sustainable growth rate. An exception are those line items whose changes do not affect cash, such as deferred taxes, or when no growth is assumed for them in perpetuity, e.g. historically acquired goodwill. From an accounting perspective, growth-related retained earnings can be calculated by multiplying economic equity with the growth rate at the end of the detailed planning phase (see Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung, in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition, 2019, No. 12.56).

In order to finance growth over the long term, retained earnings must therefore be considered in the terminal value at a rate equal to the growth rate related to economic equity as at 31 December 2027 (see OLG Jena, 3 March 2021, 2 W 407/18, *ratio decidendi* p. 30 ; OLG Zweibrücken, 23 November 2020, 9 W 1/18, No. 73 (BeckRS); OLG Frankfurt, 3 November 2020, 21 W 76/19, No. 39 (BeckRS); OLG Frankfurt, 8 September 2020, 21 W 121/15, No. 88 et seq. (BeckRS); OLG Munich, 11 March 2020, 31 Wx 341/17, No. 58 (BeckRS); OLG Düsseldorf, 25 February 2020, 26 W 7/18, No. 74 (BeckRS); OLG Stuttgart, 5 June 2013, 20 W 6/10, No. 181 (juris)).

Payout ratio and taxation of dividends

If a specific distribution policy is in place, the distribution volume is modeled as the **value added by distributions**. If the net profit for the year is retained (or a portion thereof) without there being any specific plans for its use, this is customarily treated as an economically sensible reinvestment exhibiting the same rate of return as the cost of capital within the framework of the capitalized earnings model. The (fictitious) investment of these amounts at the level of the company results in additional income in the years following their initial retention. Assuming that these funds are reinvested at the same rate of return (see IDW S1 2008, No. 37), the funds, which are not actually distributed, can be modeled by a fictitious direct allocation to the shareholders and constitute the **value added by retained earnings**.

The profit appropriation policy is the product of the entrepreneurial decisions made by the Management Board of the Company (see OLG Munich, 9 September 2014, 31 Wx 128/14, *ratio decidendi* p. 8, 10; OLG Frankfurt, 9 February 2010, 5 W 33/09, No. 51 (juris); LG Stuttgart, 13 August 2019, 31 O 50/15, *ratio decidendi* p. 77; LG Munich, 28 May 2014, 5 HK O 22657/12, p. 26 (BeckRS)). Moreover, reviewing individual entrepreneurial decisions, such as the profit appropriation policy of management to determine whether they maximize profit, should be rejected (see OLG Schleswig-Holstein, 9 March 2020, 9 W 169/15, *ratio decidendi* p. 12; OLG Frankfurt, 5 March 2012, 21 W 11/11, AG 2012, p. 417, 419; OLG Frankfurt, 29 April 2011, 21 W 13/11, No. 58 (juris); OLG Frankfurt, 9 February 2010, 5 W 33/09, ZIP 2010, p. 279, 731).

Due to the amount of the loss carried forward under commercial law as of 31 December 2022, a distribution of annual results (after offsetting losses) is not to be expected until 2027 on the basis of the company's planning calculation up to EBIT and the annual results derived from this. As significant profits are expected beforehand in the planning period, a full distribution of the annual result remaining after offsetting losses is assumed for valuation purposes for the year 2027 and a full distribution of the annual results for the years 2028 to 2029. Subsequently, a payout ratio of 80% in relation to the net profit for the year is taken into account for the years 2030 to 2034. Taking into account these distribution assumptions, the investments, as well as the changes in net working capital and the provisions, this results in a relatively low debt ratio for SLM AG in the long term, which is within the range of debt ratios observed on the market for the peer group of machine tool manufacturers. The total dividend amount forming the value added by distributions is generally to be reduced by the capital gains tax of 25.0 % plus 5.5 % solidarity surcharge.

Due to the existing tax contribution account at SLM AG ["*steuerliches Einlagekonto*"] a manageable amount of the distributions are not subject to withholding tax, which we have taken into account accordingly when calculating the final withholding tax (plus solidarity surcharge) on the value contribution from distributions.

With regard to the terminal value it can generally be assumed that the distribution pattern of the company being valued is equivalent to the distribution pattern of an alternative investment (see IDW S1 2008, No. 37). For this purpose, we set a payout ratio of 50%, which lies in the middle of the customary distribution pattern observed on the market (see Großfeld/Egger/Tönnes, Recht der Unternehmensbewertung, 9th edition, 2020, p. 117; WPH Edition: Bewertung und Transaktionsberatung, 2018, Chap. A. No. 280; Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung, in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition 2019, No. 12.57, which refer to payout ratios of between 40% and 60%; OLG Zweibrücken, 23 November 2020, 9 W 1/18, No. 53 (BeckRS); OLG Frankfurt, 8 September 2020, 21 W 121/15, No. 99 (BeckRS) [50%]; OLG Munich, 2 September 2019, 31 Wx 358/16, No. 99 (BeckRS) [50%]). In this approach, the distribution patterns of the company being valued are reflected in a way that is equivalent to the distributions of an alternative investment (see OLG Düsseldorf, 11 May 2015, 26 W 2/13, No. 47 (juris); OLG Frankfurt, 26 January 2015, 21 W 26/13, No. 37 (juris); OLG Frankfurt, 18 December 2014, 21 W 34/12, No. 57 (juris); OLG Frankfurt, 29 April 2011, 21 W 13/11, No. 62 (juris)).

The amounts that are not distributed are added as "the value added by retained earnings" after deducting those retained earnings that are needed to fund growth.

Capital gains tax upon disposal

From the year 2009 the impact of the tax on capital gains upon disposal needs to be considered. Representing the amount of the effective capital gains tax in future depends both on the assumed duration of the holding, the development of the share price due to the retention of earnings by the company, as well as the alternative investment (see Wiese, WPg 2007, p. 368, 375). The figures need to be typified in order to account for the timing of the sales that trigger capital gains tax and the resulting market average capital gains tax rate (see OLG Frankfurt, 26 January 2015, 21 W 26/13, No. 29 (juris)).

In valuation practice, and as acknowledged by the courts, a typified effective capital gains tax of 12.5% plus the solidarity surcharge (13.1875% in total) is assumed (see Popp, Berücksichtigung von Steuern, in: Peemöller (publisher); Praxishandbuch der Unternehmensbewertung, 7th edition, 2019, p. 1425, 1436, with further references; OLG Munich, 3 December 2020, 31 Wx 330/16, No. 69 (BeckRS); OLG Düsseldorf, 24 September 2020, 26 W 5/19, No. 65 (BeckRS); OLG Frankfurt, 5 February 2016, 21 W 69/14, No. 85 (BeckRS)).

A decisive factor in this regard is that the primary concern here is not the amount of capital gains tax triggered by the specific settlement payment once the resolution on the squeeze-out has been registered, but rather the – earlier – calculation of the capitalized earnings value assuming that the Company will be continued for the indefinite future.

The **retained earnings that add value** in perpetuity are burdened by an effective tax rate of 13.1875%.

Moreover, **inflation-induced gains on sale** need to be considered when deriving the net financial surpluses (see Popp, Der Konzern 2019, p. 149 et seq.; Ruthardt/Popp, AG 2019, p. 196, 200; LG Munich I, 16 April 2021, 5 HK O 5711/19; OLG Düsseldorf, 27 June 2022, 26 W 13/18, No. 66 (BeckRS); OLG Hamburg, 31 March 2022, 13 W 20/21, *ratio decidendi* p. 21; KG Berlin, 1 November 2021, 2 W 6/17, No. 82 et seq. (BeckRS); OLG Munich, 9 April 2021, 31 Wx 2/19, 31 Wx 142/19, No. 73 et seq. (BeckRS); OLG Munich, 3 December 2020, 31 Wx 330/16, No. 74 et seq. (BeckRS); OLG Frankfurt, 8 September 2020, 21 W 121/15, No. 101 et seq. (BeckRS)). This is based on the fact that gains on sale are subject to tax. On grounds of materiality, they are generally only considered in the terminal value. From a purely mathematical perspective, the business value rises year for year in perpetuity at the rate of the company's specific inflation rate; this also applies assuming a fictitious distribution of all projected financial surpluses. If it is assumed that a typified shareholder will not hold the shares indefinitely, the inflation-induced (phantom) gains in the price of the share will be realized after the typified duration of the shareholding and then be subject to the effective capital gains tax plus solidarity surcharge (for more examples see WPH Edition: Bewertung und Transaktionsberatung, 2018, Chap. A No. 453 et seq.). Alternatively, this can be modeled mathematically by reducing the inflation-induced growth factor in the denominator (see Tschöpel/Wiese/Willershausen, WPg 2010, 349, 356; Jonas/Wieland-Blöse, § 17 Berücksichtigung von Steuern, in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition 2019, Fn. 1 to No. 17.41; Raths, Restwertermittlung in der Unternehmensbewertung, 2018, p. 89 et seq.; Dierkes/Sümpelmann, BewP 2019, p. 66, 68 et seq.; Wollny, Der objektivierte

Unternehmenswert, 3rd edition, 2018, Fn. 708 on p. 141).

4.3. Determining the Discount Rate

The capitalized earnings value is determined by discounting future distributable earnings to the valuation date. The discount rate represents the return on an alternative investment that is equivalent in terms of maturity, risk and taxation to the cash flows originating from an investment in the company being valued (IDW S1 2008 No. 114).

When identifying the return obtainable on an alternative investment, reference is generally first made to the returns available on the capital markets for equity investments (in the form of a stock portfolio). These returns can be split into a risk-free rate and a risk premium expected by the shareholders for their assumption of entrepreneurial risk.

a) Risk-Free Rate

The point of departure for determining the risk-free rate for calculating an objectified business value is found in the yield curve for government bonds. The yield curve shows the relationship between interest rates and the maturities of zero bonds not exposed to any risk of default. By choosing zero-bond factors derived from the yield curves for instruments of similar maturities it can be ensured that there is a correlation between the maturities involved (see OLG Munich, 30 November 2006, 31 Wx 59/06, AG 2007, p. 411, 412).

As a data basis, we chose the yield curves published by Deutsche Bundesbank which are estimated on the basis of observed returns on coupon bonds, i.e. federal bonds, federal notes and federal treasury bills. The necessary estimated parameters are available on the website of Deutsche Bundesbank.

The spot rates for hypothetical zero bonds can be derived from these parameters and the daily yield curves can be estimated on the basis of government bonds traded on the market with a residual term of 30 years. Based on the observable trends in the parameters used in this estimate, their limited use for extrapolating the spot rates further into the future becomes apparent. Due to a lack of available market data for publicly-traded bonds that are needed to estimate the interest rates on zero bonds in the period beyond the 30-year horizon, and due to the general

planning uncertainty, the FAUB (see IDW-FN 2008, p. 491) is of the opinion that the interest rates on the zero bonds with the longest available residual terms can be rolled forward in perpetuity in the planning.

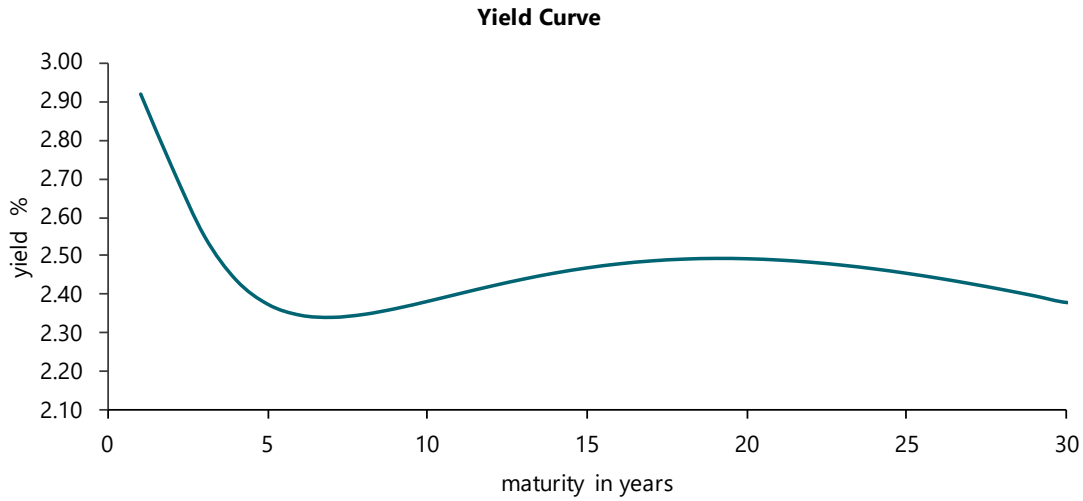
To smooth out volatility, not only the interest data applying on the valuation date have been used but also the average values for the three months preceding the valuation date (see OLG Munich, 12 May 2020, 31 Wx 361/18, No. 54 (BeckRS); OLG Frankfurt, 3 November 2020, 21 W 76/19, No. 46 (BeckRS); with further references, Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung, in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition 2019, No. 12.70). This calculation using a three-month period is based on the WpÜG-AngebV in accordance with Secs. 187 and 188 (2) BGB (see Fragen und Antworten zum IDW S 1 i.d.F. 2008 (issued: 14 October 2020), Section 4.2 in conjunction with Section 3.1, IDW Life 2020, p. 955).

When applying the yield curves directly, the financial surplus projected for each year must be discounted using the respective interest rate for an investment with the same maturity. Provided the time series does not display too much volatility, a net-present-value-equivalent risk-free rate that leads to the same result may be used as a practical expedient (see OLG Düsseldorf, 14 December 2017, 26 W 8/15, No. 50 (BeckRS); OLG Stuttgart, 27 July 2015, 20 W 5/14, *ratio decidendi* p. 29; OLG Munich, 18 February 2014, 31 Wx 211/13, No. 19 (juris)).

In accordance with the recommendation of the FAUB (see IDW-FN 2005, p. 555 et seq.; IDW-LIFE 2016, p. 731 et seq.) a uniform risk-free rate over 1.0% is to be rounded to the nearest 1/4 percentage point (and to the nearest 1/10 percentage point when under 1.0%). Such rounding has been approved by the courts (see OLG Munich, 12 May 2020, 31 Wx 361/18, No. 61 (BeckRS); OLG Munich, 6 August 2019, 31 Wx 340/17, No. 50 (BeckRS)). It should be noted that the latest professional recommendation to round the figure is neither unilateral to the burden of one party nor arbitrary, i.e. without any objective foundation.

Reasons for rounding-up the figure are (1) compensation of possible estimation errors, as the Svensson method is based on estimates (see 86th meeting of the AKU, IDW-FN 2005, p. 555, 556) and (2) compensation of minor changes in the base rate (of one or two significant figures after the decimal) during the valuation process and particularly in the period between the completion of the valuation or audit work and the date of the general shareholders' meeting (see Popp, WPg 2016, p. 926, 929). The claim that this results in "suppression of precise knowledge" (see Knoll/Kruschwitz/Löffler, RWZ 2019, p. 139, 143) is countered primarily by technical reasons inherent to the process of compiling or auditing a business valuation, particularly for all those business valuations where the end of the valuation or audit work lies before the actual date of the general shareholders' meeting (see Popp, WPg 2016, p. 926, 928). The Higher Regional Court of Munich has explicitly raised this point and stated that rounding essentially serves the purpose of facilitating planning certainty and legal assurance as well as the information needs of the minority shareholders (see OLG Munich, 12 May 2020, 31 Wx 361/18, No. 64 (BeckRS); OLG Munich, 6 August 2019, 31 Wx 340/17, No. 52 (BeckRS)).

A uniform **risk-free interest rate** of **2.50%** (after rounding) was derived from the current yield curves published by Deutsche Bundesbank for the three months as at the end of the valuation work from 27 February 2023 to 26 May 2023.



Source: Deutsche Bundesbank, own presentation

The risk-free interest rate calculated in this way then needs to be adjusted by deducting capital gains tax and the associated solidarity surcharge of 26.375% (see OLG Frankfurt, 3 November 2020, 21 2 76/19, No. 52 (BeckRS); OLG Stuttgart, 4 May 2020, 20 W 3/19, No. 61 (BeckRS)).

With regard to the review of the risk-free rate, we refer, as a purely precautionary measure, to the fact that the risk-free rate refers to an indicator that relates to the respective cut-off date but is not an indicator for a (single) cut-off date (see OLG Düsseldorf, 28 November 2022, 26 W 4/21, No. 150 (BeckRS); LG Hamburg, 29 June 2015, 412 HKO 178/12, No. 102 (juris); LG Munich I, 14 February 2014, 5 HKO 16505/08, *ratio decidendi* p. 33). Moreover, the three-month period ends on the day preceding the shareholders' meeting (see OLG Munich, 12 May 2020, 31 Wx 361/18, No. 59 (BeckRS); OLG Düsseldorf, 10 April 2019, 26 W 5/17, No. 41 (BeckRS); OLG Frankfurt, 26 January 2015, 21 W 26/13, No. 42 (juris); Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung, in Fleischer/Hüttemann (Publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition 2019, No. 12.70) When a general shareholders' meeting is convened in the morning, it is in the nature of things that parameters such as share prices or yield curves measured and published at the end of trading for that date cannot be considered in the valuation.

b) Risk Premium

When deriving the risk premium used to determine an objectified business value, the subjective risk appetite of individual shareholders is not the relevant parameter, but, rather, the general patterns on the market. It may be assumed that investors accept a particular risk when investing in companies (investor risk). The risk premium can be derived empirically from equity yields obtainable on the capital markets by using capital asset pricing models (CAPM, tax-CAPM). In spite of these reservations, the capital asset pricing model enjoys extraordinarily high acceptance in both national and international valuation practice and is therefore justifiably considered to be state of the art (see, as representative of all sources: van Rossum, Münchener Kommentar zum Aktiengesetz, 5th edition 2020, § 305 No. 147).

Because equity yields and risk premiums are fundamentally affected by personal taxes of the shareholders, tax-CAPM offers a more real explanation of empirically observed equity yields as it extends CAPM to consider the explicit effect of personal income taxes. In particular, the model considers the different taxation treatment of interest income, dividends and capital gains.

According to tax-CAPM, the discount rate is composed of a risk-free rate that has been reduced by a typified income tax rate and the after-tax risk premium identified using tax-CAPM. The Company's specific risk premium is split into two empirically observable/derivable factors: the market risk premium and the beta factor.

Market risk premium

The courts generally refer to the statement of the Federal Fiscal Court by which "that method that is recognized by professional practice and customary in practice" is decisive (for example, see OLG Stuttgart, 20 August 2018, 20 W 2/13, No. 61 (BeckRS); BGH, 29 September 2015, II ZB 23/14, No. 33, 42 (juris); BGH, 12 January 2016, II ZB 25/14, No. 21 (juris)). The same principle has to apply to the parameters used when applying the valuation method; i.e. also the market risk premium. Consequently, the methodology used to derive the parameters and the aspects of the individual parameters must be recognized by the profession and be customary in practice. However, according to the current state of the art, one single empirically accurate market risk premium that applies no matter what conditions prevail on the capital markets is not possible (see OLG Stuttgart, 31 March 2021, 20 W 8/20, No. 67 (BeckRS); OLG Jena, 3 March 2021, 2 W 407/18, *ratio decidendi* p. 28; OLG Düsseldorf, 14 December 2017, 26 W 8/15, No. 52 (BeckRS)).

At least, it cannot be the role of the courts to develop a valuation methodology that resolves the differences in opinion in the profession, particularly not for the market risk premium, given the range of different studies and publications with various motivations, calculation methods, databases and quality. In practice, the acknowledged expert opinion (OLG Düsseldorf, 10 April 2019, 26 W 6/17, No. 55 (BeckRS)) is found in the recommended ranges published by the FAUB, which are consequently regularly referred to by the courts as a proper foundation for assessing the market risk premium (in accordance with Sec. 287 (2) ZPO [Code of Civil Procedure]) (see OLG Jena, 3 March 2021, 2 W 407/18, *ratio decidendi* p. 28; OLG Bremen, 29 March 2019, 2 W 68/18, *ratio decidendi* p. 14; OLG Stuttgart, 26 June 2019, 20 W 27/18, *ratio decidendi* p. 22; OLG Düsseldorf, 5 September 2019, 26 W 8/17, *ratio decidendi* p. 23; OLG Frankfurt, 27 September 2019, 21 W 64/14, *ratio decidendi* p. 22; OLG Frankfurt, 26 January 2017, 21 W 75/15, No. 73 (BeckRS)).

In its publication from October 2012, the FAUB decided in favor of a higher range of 5.0% to 6.0% for the after-tax (withholding tax) market risk premium compared to previous recommendations (an after-tax market risk premium of 4.0% to 5.0%). In the more recent rulings handed down by the various higher regional courts on valuation dates covered by this recommended range, a **mean of 5.5%** is regularly accepted as appropriate (see Ruthardt/Popp, AG 2020, p. 322, 326 et seq.; Popp, Der Konzern 2020, p. 444, 445 et seq.; LG Munich I, 16 April 2021, 5 HK O 5711/19; OLG Munich, 9 April 2021, 31 Wx 2/19, 31 Wx 142/19, No. 95 (BeckRS); OLG Stuttgart, 31 March 2021, 20 W 8/20, No. 64 (BeckRS); OLG Jena, 3 March 2021, 2 W 407/18, *ratio decidendi* p. 27; OLG Frankfurt, 3 November 2020, 21 W 76/19, No. 56 (BeckRS); OLG Munich, 12 May 2020, 31 Wx 361/18, No. 66 (BeckRS); OLG Stuttgart, 4 May 2020, 20 W 3/19; OLG Stuttgart, 3 April 2020, 20 W 2/17; OLG Bremen, 15 May 2020, 2 W 47/19; OLG Schleswig-Holstein, 9 March 2020, 9 W 169/15 (6.0%); OLG Düsseldorf, 30 April 2018, 26 W 4/16; OLG Dresden, 16 August 2017, 8 W 244/17; OLG Frankfurt, 26 January 2017, 21 W 75/15; OLG Celle, 17 June 2016, 9 W 42/16).

The FAUB constantly monitors developments on the capital markets to review whether it should adjust its recommended range. To this end, it takes a pluralistic approach, drawing on historical stock yields and market risk premiums, long-term real stock yields and ex-ante analyses of implied market risk premiums (for a detailed justification of this pluralistic approach see Castedello et al., WPg 2018, p. 806, 806-825). The recommended range is nevertheless not based solely on the returns expected by players on the capital markets without any connection to the realities existing on the capital markets.

The current recommendation of the FAUB is based on the decision made at the meeting held on 22 October 2019. Based on the latest findings and analyses, the recommended **range for the after-tax market risk premium was lifted slightly to between 5.0% and 6.5%** (see IDW Life 2019, p. 818 et seq.).

At its meeting on 30 January 2023, the FAUB technical committee found that although key lending rates have been rising significantly since February 2022, this trend goes hand-in-hand with a sharp rise in the implied total returns and market risk premiums on the basis of the ex ante method (implied costs of capital). Since November 2022, it has been observed that total returns are declining gradually. Taking these developments into account while remaining true to the plurality of methods, the FAUB nevertheless (still) does not perceive any need at present to adjust its recommendations for the market risk premium from a holistic perspective. Consequently, the FAUB is still of the opinion that a market risk premium in a range from 6.0% to 8.0% before personal taxes or between 5.0% and 6.5% after personal taxes is appropriate (see the report on the 162nd meeting of the FAUB on 30 January 2023). In the meeting of 15 March 2023, it was also confirmed that, overall, no need for action was currently seen to adjust the recommendations (see report on the 163rd meeting of the FAUB on 15 March 2023). We would also like to point out that the current increase in the base rate is not insignificantly driven by inflation expectations and that no significant increase in the real risk-free base rate above zero percent has been observed so far.

For valuation purposes, the range recommended by the FAUB must be condensed to a single point. In our experience, the range should generally be condensed to the mean of the range for the after-tax market risk premium, an approach confirmed by the courts. The reasons for choosing a market risk premium at the higher end of the range might be founded in the higher level of uncertainty recently observed on the capital markets and the associated risk aversion, as was the case underlying the recommendations of the FAUB dated 10 January 2012 in reaction to the situation on the capital markets at the time when calculating the discount rate (see IDW Fachnachrichten: 2/2012, p. 122; OLG Schleswig-Holstein, 9 March 2020, 9 W 169/15, *ratio decidendi* p. 18). Arguments in favor of choosing a market risk premium at the lower end of the range could, by the same reasoning, lie in a lower level of uncertainty on the capital markets and waning risk aversion (see also: Großfeld/Egger/Tönnes, Recht der Unternehmensbewertung, 8th edition, 2020, p. 180).

In this case we have set the **market risk premium after personal taxes** at **5.75%** (see LG Frankfurt, 25 November 2021, 3-05 O 13/20, *ratio decidendi* p.19 (if not presented in BeckRS, No. 61)). As a result, the range recommended by the FAUB has been condensed to the mean market risk premium after personal taxes.

Beta factor

Within the framework of (tax-)CAPM, the beta measures the idiosyncratic risk inherent to a particular share which cannot be avoided by diversification and is seen as a measure of the entity's specific risk profile (see OLG Frankfurt, 17 June 2010, 5 W 39/98, No. 46 (juris)). Any deviations in the actual future cash flows from the expected cash flows represents a risk for the owners (see Franken/Schulte, BewP 2012, p. 92, 93). The beta is not a value that can be empirically measured from historical figures, but is rather an estimate pertaining to future values (see OLG Stuttgart, 17 March 2011, 20 W 9/08, AG 2010, p. 510; OLG Frankfurt, 2 May 2011, 21 W 3/11, AG 2011, p. 828).

According to the CAPM, it is assumed that the investors are able to spread their risks by acquiring investments in a number of different companies ("diversification"). For this reason, a distinction is made between the **systematic risk**, which cannot be reduced by diversification and the diversifiable **non-systematic risk**. For this reason, the risk premiums derived using the CAPM only contain a compensation for the systematic risk that cannot be further diversified and this is reflected in the beta factor.

Systematic risk, which is relevant for valuation purposes can be further broken down into **operative risk**, i.e. the risk inherent to operating activities, and **capital structure risks**. The latter is founded on the fact that the volatility of the cash flows paid to the owners increases as leverage rises.

Significance of the beta factors

In practice, the point of departure for estimating the beta is historical stock yields and this is commonly applied by the courts. Consequently, beta is derived by linear regression of the entity's specific stock yield (the dependent variable) to the yield obtained from a stock index (the independent variable). In the past, the informative value of the beta was tested using **statistical criteria** (e.g. t-test).

A prerequisite for an informative beta is that the stock yields and the underlying share prices move in objective relation to changes in the economic environment without distortion. For this reason, there is a trend towards relying on the **liquidity of the stock** (in addition) to determine how suitable the calculated beta will be for a forecast. The liquidity of a stock is measured using, for example, the bid-ask spread or trading volume, whereby the measurement of stock liquidity has not been viewed as a superior benchmark in either theory or practice to date. In addition, there are (currently) no generally accepted thresholds to measure "liquid stocks" under the individual measurement concepts (for more details see Ruthardt/Popp, AG 2020, p. 322, 328 et seq.).

The following remarks on the bid-ask spread can be found in the following references to court precedents. It should be stated, that even when the Company's own beta is statistically significant, it may nevertheless lack informative value if the bid-ask spread is too high (see OLG Düsseldorf, 13 September 2021, 26 W 1/19, No. 66 (BeckRS)).

In a ruling handed down by the Higher Regional Court of Düsseldorf on 5 September 2019, 26 W 8/17, *ratio decidendi* p. 15, reference is made to an expert opinion that from a bid-ask spread of roughly 1.25% it can "no longer be regularly" assumed that there is sufficient stock liquidity to determine undistorted beta factors for the CDAX (see also OLG Frankfurt, 20 November 2019, 21 W 77/14, No. 78 (BeckRS)).

In the opinion of the Higher Regional Court of Frankfurt, 8 September 2020, 21 W 121/15, No. 141 (BeckRS), there are substantial reservations about the liquidity of the share if the bid-ask spread is significantly above 2%. A bid-ask spread is not deemed to be adequate at 1.63% (see OLG Frankfurt, 13 January 2023, 21 W 150/21, *ratio decidendi* p. 35) 2.37% (see OLG Frankfurt, 29 January 2016, 21 W 70/15, No. 69 (BeckRS)), 3.4% (see OLG Frankfurt, 27 August 2020, 21 W 59/19, No. 49 (BeckRS)) or even 4.26% (see LG Hamburg, 23 February 2016, 403 HKO 152/14, p. 12 (BeckRS)).

The Regional Court of Munich I views a bid-ask spread of 1.0% and a maximum of 1.25% as the upper limit (see LG Munich I, 30 May 2018, 5 HK 10044/16, No. 149 (BeckRS); LG Munich I, 2 December 2016, 5 HK 4781/15, No. 147 (juris)). Any values in excess of this indicate that the price reacts too sluggishly to capital market information, as the transaction costs are too high on account of high bid-ask spreads (see LG Munich I, 30 June 2017, 5 HK 13182/15, *ratio decidendi* p. 120).

It should also be noted that the mere "meeting" of one or more of the measured parameters does not provide any indication of how **appropriate** the historical share prices or beta factors are for making forecasts without further thought. Deriving the future systematic risk on the basis of the (original) beta factor is only possible if it can be reliably determined and it is expected to remain stable over time. Thus, an analysis of share prices over time needs to be conducted with regard to structural breaks or distorting events, such as rumors of a takeover or an acquisition process. For companies that are (de facto) controlled, the (original) beta is regularly not considered to be appropriate for making forecasts for business valuation purposes (see with references to the court rulings: Ruthardt/Popp, AG 2020, p. 322, 329).

When assessing how up-to-date and statistically significant the beta is, it is necessary to set the period in which the beta is calculated. A larger sample increases the accuracy of the result from a statistical perspective. In practice, a **period** of five years with monthly intervals and a period of two years with weekly intervals between returns are frequently applied (OLG Düsseldorf, 27 June 2022, 26 W 13/18, No. 84 (BeckRS); OLG Frankfurt, 30 August 2012, 21 W 14/11, No. 80 (juris); OLG Frankfurt, 20 December 2010, 5 W 51/09, No. 63 (juris)).

Generally, a shorter period, such as two years, will be more up-to-date (see OLG Stuttgart, 5 June 2013, 20 W 6/10, No. 214 (juris); OLG Frankfurt, 30 August 2012, 21 W 14/11, No. 80 (juris); LG Frankfurt, 2 September 2010, 3-5 O 279/08, *ratio decidendi* p. 27). Longer periods in which abnormal fluctuations in share prices occur due to structural changes, such as an IPO or a squeeze-out, are not suitable for determining the beta (see OLG Stuttgart, 4 May 2011, 20 W 11/08, No. 204 (juris)). Beta factors measured over the short term could be affected by the Covid-19 pandemic and the impacts of the war in Ukraine, as share prices have been observed to be volatile on the exchanges. On the other hand, in the current circumstances it is necessary to consider crisis-related changes to the beta factor when these result from a sustained change in the business model (see Castedello/Tschöpel: Auswirkungen von COVID-19 auf die Unternehmensbewertung, WPg 2020, 914; Fachlicher Hinweis des FAUB zu den Auswirkungen der Ausbreitung des Coronavirus auf Unternehmensbewertungen from 25 March 2020, Fachlicher Hinweis des FAUB zu den Auswirkungen von Russlands Krieg gegen die Ukraine auf Unternehmensbewertungen from 20 March 2022).

Raw and ajdusted beta

The beta derived directly from the returns (on share prices) using regression is frequently referred to as the "raw beta". If this is related to the beta of the market as a whole using a weighting formula, it is referred to as the "adjusted beta". In finance, the beta is most commonly adjusted using the Blume method (see Scheld, Fundamental Beta, 2013, p. 77). In this method, the raw beta is multiplied by 0.667 (=2/3) and then 0.333 is added. According to the Vasicek adjustment method, the levered raw betas are weighted to move even closer towards a known reference value (e.g. market average), depending on the size of the standard error of the beta estimate.

In valuation practice, both the adjusted and the raw beta factors are relied on (see WPH Edition: Bewertung und Transaktionsberatung, 2018, Chap. A, No. 410). Nor do the court rulings reveal any general preference for either adjusted or raw betas from which a uniform position could be inferred (see OLG Munich, 3 December 2020, 31 Wx 330/16, No. 101 (BeckRS); OLG Frankfurt, 27 August 2020, 21 W 59/19, No. 50 (BeckRS); LG Hamburg, 26 September 2019, 412 HKO 156/16, *ratio decidendi*p. 35; LG Stuttgart, 24 September 2018, 42 O 49/16, *ratio decidendi* p. 28; LG Munich I, 28 April 2017, 5 HK O 26513/11, p. 21 (BeckRS); OLG Düsseldorf, 15 August 2016, 26 W 17/13, No. 58 (BeckRS); OLG Karlsruhe, 23 July 2015, 12a W 4/15, No. 66 (juris); OLG Frankfurt, 26 January 2015, 21 W 26/13, No. 51 (juris)). The Federal Court of Justice expressed its favor for the method applied by Vasicek for the purpose of grid regulation (see BGH, 27 January 2015, ENVR 37/13, No.10 (www.bundesgerichtshof.juris)). In the opinion of the Higher Regional Court of Munich there is no reason to reject an adjustment out of hand (see OLG Munich, 30 July 2018, 31 Wx 122/16, *ratio decidendi* p. 23 in conjunction with LG Munich I, 20 November 2015, 5 HK O 5593/14, *ratio decidendi* p. 84). In conclusion, the Regional Court of Munich I expressed the same opinion about the controversial issue, which found no reason to object to the adjustment using the method of Blume (see LG Munich I, 29 August 2018, 5 HK 16585/15, *ratio decidendi* p. 112 et seq.; for a similar view see also OLG Düsseldorf, 8 July 2021, 26 W 10/20, No. 15 (BeckRS); OLG Stuttgart, 30 March 2021, 20 W 8/19, *ratio decidendi* p. 60; LG Hamburg, 26 September 2019, 412 HKO 156/16, *ratio decidendi* p. 35).

Eliminating the effects of capital structures

To eliminate the effects from the financing structure from the specific beta factors of each company, it is customary professional practice and recognized by the courts to convert the historical beta factors into beta factors for unlevered companies (a process known as "**unlevering**") (see OLG Frankfurt, 26 January 2015, 21 W 26/13, No. 58 (juris); OLG Düsseldorf, 4 July 2012, 26 W 8/10, No. 63 (juris); OLG Stuttgart, 19 January 2011, 20 W 3/09, AG 2011, p. 205, 209; OLG Frankfurt, 20 December 2010, 5 W 51/09, No. 60 (juris); OLG Stuttgart, 18 December 2009, 20 W 2/08, No. 86 (juris)).

The conversion was performed using an adjustment formula and assuming uncertain tax shields (see OLG Frankfurt, 3 November 2020, 21 W 76/19, No. 65 (BeckRS)) and assuming debt capital subject to credit risk ("debt beta") (see OLG Munich, 13 November 2018, 31 Wx 372/15, No. 72 (BeckRS)) on the basis of the debt/equity ratio (debt to market capitalization) (see OLG Munich, 3 December 2020, 31 Wx 330/16, No. 103 (BeckRS)).

Within the framework of calculating the capitalized earnings value, the unlevered beta then needs to be adjusted specifically for each period using the debt ratio (referred to as "**relevering**").

Original beta of SLM Solutions Group AG

For publicly listed companies like SLM Solutions Group AG, an historical beta factor can be basically derived directly from the capital market data. In correspondence to the cut-off date of the share price, the prevailing opinion found in professional business valuation and legal practice is that the Company's own beta is fundamentally unsuited on account of the share prices observed in the period after announcement or disclosure of the structural measure (in this case, the intended conclusion of a domination and profit and loss transfer agreement). Rather, the measurement period used to calculate the **original beta of the company** must end on the **date on which the measure is announced** (at the latest) (see Popp/Ruthardt, § 12 Bewertungsmethoden im Spiegel der Rechtsprechung, in: Fleischer/Hüttemann (publisher), Rechtshandbuch Unternehmensbewertung, 2nd edition, 2019, No. 12.98; OLG Karlsruhe, 13 May 2013, 12 W 77/07 (13), No. 36 (juris); LG Hanover, 2 March 2016, 13 O 191/09, *ratio decidendi* p. 31; LG Düsseldorf, 3 September 2014, 33 O 55/07, No. 145 (juris)).

The announcement of the receipt of the notification of the intended squeeze-out under merger law was made on 10 February 2023. We determined SLM Solutions AG's own beta factor based on data from the financial information service provider Bloomberg with an analysis period of two years and weekly returns. In addition, we determined the beta factor for a five-year period with monthly returns. For both period-interval combinations, we based our analysis on a broad local benchmark index (CDAX Index) as well as a broad global index (MSCI World Total Return Index).

We have based the end date of the share prices included on periods prior to the announcement of the intention to implement the structural measure, i.e. prior to 10 February 2023.

The results of these calculations are summarized in the following table:

Period	Interval	Index	statistic signif.	Unlev. Beta raw	Unlev. Beta adj.
Two years	weekly	local index	yes	0.89	0.91
		GDUEACWF Index*	no	0.36	0.56
Five years	monthly	local index	yes	1.06	1.03
		GDUEACWF Index*	yes	1.25	1.15

**MSCI All Country World Daily Total Return Gross Index*

Source: Ebner Stolz; Bloomberg

The beta factors shown are not statistically significant for all periods, interval, and reference index combinations, which can be an indicator of a lack of meaningfulness of the original beta factors.

In order to further analyze the explanatory power of the original beta factors, we carried out an analysis of the liquidity of the shares of SLM Solutions Group AG. An analysis of the average bid-ask spreads of the share over the last four years (annual slices) yields values of around or above 1.00%. The bid-ask spreads are thus in an order of magnitude for which case law assumes a limited informative value.

In order to further classify the bid-ask spreads, we have collected the values of the bid-ask spread for all CDAX companies for the period from 1 April 2018 to 31 March 2023. The following overview shows the market value-weighted mean, the median and the 25% and 75% quartiles, broken down by year.

	Bid-ask spreads by year* (closing price method)				
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Mean (market value weighted)	0.18%	0.15%	0.19%	0.18%	0.17%
Median	1.13%	0.80%	0.93%	1.07%	0.91%
1st quartile	0.21%	0.16%	0.23%	0.20%	0.23%
3rd quartile	2.48%	2.23%	2.71%	2.73%	2.40%

**Annual slices for the period 01.04.2018 -31.03.2023 (1st year: 31.03.2023 - 01.04.2022)*

In a market value-weighted averaging across all CDAX companies, the average bid-ask spread is between 0.15% and 0.19% and thus very significantly below the values observed for SLM Solutions AG. In addition, the bid-ask spread of SLM Solutions AG tends to be below the median of the CDAX companies. In this respect, also against the background of this supplementary analysis, it can be assumed that the liquidity of the share is limited and thus the significance of the original beta factors of SLM Solutions AG is limited.

Due to the historically persistent cash burn from the operating business, the historical development of SLM Solutions AG was characterized by constantly necessary financing measures – such as the repeated placement of convertible bonds and capital increases. A voluntary takeover bid was made by General Electric as early as 2016. In 2019, among other things, a 10% capital increase was concluded together with an investment agreement with the US hedge fund Elliott. In the 2021 management report, the company also pointed out that events and circumstances exist that indicate the existence of a material uncertainty that may cast significant doubt on the ability of the company and thus of the group to continue as a going concern and that represent a going concern risk (see SLM Solutions AG, Annual Report 2021, p. 76). Taking this historical development into account, it can be assumed that the share price development of SLM Solutions AG has been (also) influenced by the constant uncertainties in the financing environment and takeover speculation for some time.

In summary, it cannot be assumed that the share returns of SLM Solutions AG reflect changes in the economic framework conditions in a factually and temporally undistorted manner (see Dörschell/Franken/Schulte, Der Kapitalisierungszinssatz in der Unternehmensbewertung, 2nd edition 2012, p. 167, as well as the references to literature and case law above). In the absence of forecasting suitability, the use of the original beta factor of the company for the purpose of determining the objectified enterprise value is ruled out.

Beta factor of the peer group

In accordance with customary professional practice, we relied on a peer group of listed companies to determine the operative risk of the company being valued. This practice is in line with the customary professional practice and also accepted by the courts (see OLG Munich, 3 December 2020, 31 Wx 330/16, No. 99 (BeckRS); OLG Düsseldorf, 15 August 2016, 26 W 17/13, No. 56 (juris); OLG Frankfurt, 26 January 2015, 21 W 26/13, No. 51 et seq. (juris); OLG Karlsruhe, 22 June 2015, 12a W 5/15, No. 60 (juris)). This also applies with regard to the inclusion of foreign entities (see OLG Jena, 3 March 2021, 2 W 407/18, *ratio decidendi* p. 30; OLG Frankfurt, 8 September 2020, 21 W 121/15, No. 142 (BeckRS); OLG Stuttgart, 3 April 2020, 20 W 2/17, *ratio decidendi* p. 25; OLG Hamburg, 18 September 2015, 13 W 44/14, *ratio decidendi* p. 12; OLG Düsseldorf, 4 July 2012, 26 W 8/10, No. 64 (juris); OLG Stuttgart, 19 January 2011, 20 W 2/07, No. 224; OLG Düsseldorf, 27 May 2009, 26 W 5/07, *ratio decidendi* p. 43).

As a general rule, it can be stated that there is not a single listed company that can be directly compared to the valuation object from a holistic perspective. Differences to the peer group are due to the unique position of the valuation object and cannot be avoided (see OLG Frankfurt, 3 November 2020, 21 W 76/19, No. 61 (BeckRS)). For this reason, comparable companies need to be found in terms of their business model, specific product segments and types of products, regional coverage and size (see OLG Munich, 9 April 2021, 31 Wx 2/19, 31 Wx 142/19, No. 112 (BeckRS); OLG Düsseldorf, 11 May 2020, 26 W 14/17, No. 49 (BeckRS)). If necessary, the peer group needs to be spread more widely (see OLG Zweibrücken, 23 November 2020, 9 W 1/18, No. 68 (BeckRS)).

In order to derive a suitable peer group we analyzed the operating activities and competitive situation of the SLM Group. On this basis we then researched Bloomberg to identify a suitable group of peers, discussing the matter with the management and taking the competitive situation described in Section 2.2. c) into consideration (peer group additive manufacturing and peer group machine tools manufacturers).

We first tested the informative value of the Company's beta factors using statistical significance criteria (t-test). According to these tests, all the betas are statistically significant. We also analyzed the trading liquidity of the shares of the peer group companies, primarily by comparing the bid-ask spreads and daily average trading volumes.

Presentation of the beta factors of the peer group additive manufacturing

We have calculated the beta factors of the peer group as at the end of our valuation work, both for an observation period of two years using weekly returns as well as for an observation period of five years using monthly returns. For both of these observation period/return interval constellations we drew on both broad (local) benchmark indexes as well as the global MSCI World Total Return Index.

Due to a large number of public takeover offers with regard to the peer group company Stratasys Ltd. we did not consider Stratasys Ltd. for the calculation of the beta factor. Since the majority of the peer group companies have been listed for less than five years, only the peer group company 3D Systems Corp. is included in the calculation for a five-year observation period with monthly returns. We have presented the results of the analysis of the beta factors of the peer group companies in more detail below for each of the combinations of parameters.

The results for an **observation period of two years** using **weekly returns** sourced from the **local benchmark indexes** are presented below:

Name	Index	Levered Beta raw	Levered Beta adj.	Unlevered Beta raw	Unlevered Beta adj.
Desktop Metal Inc.	DWCFT Index	2.15	1.77	2.12	1.74
3D Systems Corp.	DWCFT Index	2.33	1.89	1.98	1.61
Velo3D Inc.	DWCFT Index	2.28	1.85	2.25	1.83
Markforged Holding Corp.	DWCFT Index	1.91	1.61	1.83	1.54
Mean				2.05	1.68
Median				2.05	1.67

Source: Bloomberg, own calculations

The results for an **observation period of two years** using **weekly returns** sourced from a **global benchmark index** are presented below:

Name	Index	Levered Beta raw	Levered Beta adj.	Unlevered Beta raw	Unlevered Beta adj.
Desktop Metal Inc.	GDUEACWF Index*	2.39	1.93	2.35	1.90
3D Systems Corp.	GDUEACWF Index*	2.52	2.01	2.14	1.71
Velo3D Inc.	GDUEACWF Index*	3.20	2.46	3.15	2.43
Markforged Holding Corp.	GDUEACWF Index*	2.34	1.89	2.24	1.81
Mean				2.47	1.96
Median				2.30	1.86

**MSCI All Country World Daily Total Return Gross Index*

Source: Bloomberg, own calculations

The results for an **observation period of five years** using **monthly returns** sourced from **local benchmark indexes** are presented below:

Name	Index	Levered Beta raw	Levered Beta adj.	Unlevered Beta raw	Unlevered Beta adj.
Desktop Metal Inc.	DWCFT Index	n/a	n/a	n/a	n/a
3D Systems Corp.	DWCFT Index	1.90	1.60	1.72	1.45
Velo3D Inc.	DWCFT Index	n/a	n/a	n/a	n/a
Markforged Holding Corp.	DWCFT Index	n/a	n/a	n/a	n/a
Mean				1.72	1.45
Median				1.72	1.45

Source: Bloomberg, own calculations

The results for an **observation period of five years** using **monthly returns** sourced from a **global benchmark index** are presented below:

Name	Index	Levered Beta raw	Levered Beta adj.	Unlevered Beta raw	Unlevered Beta adj.
Desktop Metal Inc.	GDUEACWF Index*	n/a	n/a	n/a	n/a
3D Systems Corp.	GDUEACWF Index*	2.26	1.84	2.04	1.66
Velo3D Inc.	GDUEACWF Index*	n/a	n/a	n/a	n/a
Markforged Holding Corp.	GDUEACWF Index*	n/a	n/a	n/a	n/a
Mean				2.04	1.66
Median				2.04	1.66

Source: Bloomberg, own calculations

The findings of this analysis are presented below, using the **mean of the peer group**:

Period	Interval	Index	Unlevered Beta raw	Unlevered Beta adj.
Two years	weekly	local indices	2.05	1.68
		GDUEACWF Index*	2.47	1.96
Five years	monthly	local indices	1.72	1.45
		GDUEACWF Index*	2.04	1.66

**MSCI All Country World Daily Total Return Gross Index*

Source: Bloomberg, own calculation.

The mean of the peer group betas lies in a range from 2.04 to 2.47 for unlevered (raw) betas. Using adjusted betas, the mean of unlevered betas lies between 1.45 and 1.96.

Presentation of the beta factors of the peer group machine tools manufacturers

We have calculated the beta factors of the peer group as at the end of our valuation work, both for an observation period of two years using weekly returns as well as for an observation period of five years using monthly returns. For both of these observation period/return interval constellations we drew on both broad (local) benchmark indexes as well as the global MSCI World Total Return Index.

We have presented the results of the analysis of the beta factors of the peer group companies in more detail below for each of the combinations of parameters. Due to liquidity and significance criteria, no beta factor is listed for the peer group company Tornos Holding Ltd. for an observation period of two years with weekly returns.

The results for an **observation period of two years** using **weekly returns** sourced from the **local benchmark indexes** are presented below:

Name	Index	Levered Beta raw	Levered Beta adj.	Unlevered Beta raw	Unlevered Beta adj.
Mikron Holding AG	SSIRT Index	0.71	0.81	1.05	1.21
Sandvik AB	OMXSGI Index	1.19	1.12	1.08	1.03
DMG Mori Co., Ltd.	NDDLJN Index	1.35	1.23	1.20	1.11
Tsugami Corp.	NDDLJN Index	1.81	1.54	2.00	1.70
Mean				1.33	1.26
Median				1.14	1.16

Source: Bloomberg, own calculations

The results for an **observation period of two years** using **weekly returns** sourced from a **global benchmark index** are presented below:

Name	Index	Levered Beta raw	Levered Beta adj.	Unlevered Beta raw	Unlevered Beta adj.
Mikron Holding AG	GDUEACWF Index*	0.50	0.67	0.72	0.99
Sandvik AB	GDUEACWF Index*	1.17	1.11	1.06	1.01
DMG Mori Co., Ltd.	GDUEACWF Index*	0.83	0.89	0.78	0.83
Tsugami Corp.	GDUEACWF Index*	0.91	0.94	0.99	1.03
Mean				0.89	0.96
Median				0.89	1.00

**MSCI All Country World Daily Total Return Gross Index*

Source: Bloomberg, own calculations

The results for an **observation period of five years** using **monthly returns** sourced from **local benchmark indexes** are presented below:

Name	Index	Levered Beta raw	Levered Beta adj.	Unlevered Beta raw	Unlevered Beta adj.
Mikron Holding AG	SSIRT Index	1.30	1.20	1.57	1.45
Sandvik AB	OMXSGI Index	1.30	1.20	1.22	1.13
DMG Mori Co., Ltd.	NDDLJN Index	2.06	1.71	1.63	1.38
Tornos Holding AG	SSIRT Index	1.67	1.45	1.82	1.58
Tsugami Corp.	NDDLJN Index	1.59	1.39	1.70	1.49
Mean				1.59	1.41
Median				1.63	1.45

Source: Bloomberg, own calculations

The results for an **observation period of five years** using **monthly returns** sourced from a **global benchmark index** are presented below:

Name	Index	Levered Beta raw	Levered Beta adj.	Unlevered Beta raw	Unlevered Beta adj.
Mikron Holding AG	GDUEACWF Index*	1.11	1.08	1.34	1.30
Sandvik AB	GDUEACWF Index*	1.52	1.34	1.42	1.26
DMG Mori Co., Ltd.	GDUEACWF Index*	1.74	1.49	1.41	1.23
Tornos Holding AG	GDUEACWF Index*	1.46	1.31	1.59	1.42
Tsugami Corp.	GDUEACWF Index*	1.44	1.29	1.54	1.38
Mean				1.46	1.32
Median				1.42	1.30

**MSCI All Country World Daily Total Return Gross Index*

Source: Bloomberg, own calculations

The findings of this analysis are presented below, using the **mean of the peer group**:

Period	Interval	Index	Unlevered Beta raw	Unlevered Beta adj.
Two years	weekly	local indices	1.33	1.26
		GDUEACWF Index*	0.89	0.96
Five years	monthly	local indices	1.59	1.41
		GDUEACWF Index*	1.46	1.32

**MSCI All Country World Daily Total Return Gross Index*

Source: Bloomberg, own calculation.

The mean of the peer group betas lies in a range from 0.89 to 1.59 for unlevered (raw) betas. Using adjusted betas, the mean of unlevered betas lies between 0.96 and 1.41.

Expert derivation of the unlevered beta

For the purposes of this expert appraisal, and taking a holistic view, we set an **unlevered beta of 1.30.**

c) Growth Factor

Within the framework of calculating the capitalized earnings value, a growth factor has to be set for the terminal value. We set this at 1.0%.

In advance, we would also like to refer to the following matter:

If growth is measured on the basis of the increase in nominal earnings indicators, basic experience has shown that companies that retain a portion of their earnings as a source of internal finance will, all other things being equal, report a higher net profit in the following year than those companies that distribute their entire earnings to their shareholders.

As a source of growth, financial surpluses can be broken down into real growth drivers measured as trends (both positive and negative) in the performance indicators in the sense of **operative growth** (reductions or expansions of capacity) and merely nominal trends, i.e. due to changes in prices (**inflation-induced growth**). In addition, tax effects, e.g. due to the different taxation levied on retained earnings and profit distributions, need to be considered separately (see WPH Edition: Bewertung und Transaktionsberatung, 2018, Chap. A, No. 441 et seq.).

For the purpose of deriving the terminal value, there are two models available which are mutually exclusive. In the **dividend discount model** (see Ernst/Thielen/Schneider, Unternehmensbewertungen erstellen und verstehen, 6th edition, 2018, p. 166; Schultze, Methoden der Unternehmensbewertung, 2nd edition, 2003, p. 74), the numerator is given by the distributions/dividends which are discounted using the cost of capital. In contrast to the capitalized earnings method, the share of net profit that is not distributed to shareholders is not considered in the numerator. The remaining portion is used as an internal source of finance for the company and delivers additional growth.

If – which is **not common** in valuation practice – only a portion of the net profit is capitalized in perpetuity, namely, the dividend portion, then the additional growth driven by retaining earnings would need to be considered in the form of a relatively high growth factor. By contrast, in the capitalized earnings method it is assumed that all net distributable earnings will be distributed (one can see this as the value added from distributions plus the value added from retained earnings).

Given that the value added from compounding retained earnings fully covers the future dividend growth originating from retaining these earnings, the growth rate reflected in the growth factor used in the capitalized earnings method primarily represents inflation-related changes in value that can be attributed to the specific price-induced growth rate of the company being valued.

Alternatively, if the value added from compounding retained earnings is not considered, but the business is instead valued using the dividend discount model, the equivalent business value at the beginning of the annuity can be calculated using the following formula (see also Tschöpel/Wiese/Willershausen, WPg 2010, p. 349, 357):

$$V_t = \frac{(ZdE_{t+1} - WbT_{t+1})}{r_{EK} - w}$$

with

V_t = capitalized earnings value at the beginning of the annuity, ZdE_{t+1} = profit of the first year of the annuity to be discounted to present value, WbT_{t+1} = value added from compounding retained earnings in the first year of the annuity, r_{EK} = cost of capital in perpetuity, w = total growth rate.

By converting the equation, the total growth rate can be presented as follows:

$$w = r_{EK} - \frac{(ZdE_{t+1} - WbT_{t+1})}{V_t}$$

The profit of the first year of the annuity to be discounted to present value amounts to approximately EUR 79,233k, the value added from compounding retained earnings in the first year of the annuity amounts to approximately EUR 48,574k, the capitalized earnings value at the beginning of the annuity amounts to approximately EUR 934,271k, and the cost of capital in perpetuity (prior to deducting the growth factor) amounts to approximately 9.48%.

Related to SLM Solutions Group AG, this results in the following total growth rate:

$$w = 9.48\% - (79{,}233 - 48{,}574)/934{,}271 = 6.20\%$$

To this extent, an assumed growth factor of 1.00% used in the business valuation of the SLM Solutions Group AG represents a total growth rate of 6.20 % in perpetuity.

It can be assumed that the return on the capital markets contains an inflation factor. For this reason a comparison of the return on the capital markets and the return from corporate profits must consider the various effects of inflation. The amounts included in the returns on the capital markets to offset inflation generally follow the development of the inflation rate over the medium term.

This is not necessarily the case for corporate profits. The development of corporate profits depends on the market and the competitive situation of the company and changes in the internal cost structure. Cost increases can be offset by restructuring measures without any fall in profit or, if the market situation allows, passed on to the customers. However, they can also lead to a drop in profits if the market does not allow costs to be passed on and internal cost cutting measures are not feasible or have already been exhausted. For this reason, it cannot be automatically assumed that corporate profits will grow in line with the inflation rate. The decisive factor within the framework of a business valuation is therefore not the inflation rate for the wider economy but the effective rate of price increases for the specific company (see Tschöpel et al., WPg 2010, p. 349, 351).

If it can be expected that a company is in a position to pass on the effects of general inflation to its customers, at least in part, for the sustainable future, or it can generate sustainable growth for other reasons, then a "growth factor" needs to be deducted from the discount rate after personal tax. The amount of the growth factor expresses the rate of growth that can be expected in perpetuity for the company being valued.

In the planning period for the financial years 2023 to 2027 and the subsequent transition period, sustainable growth is reflected in the expected developments of income and expenses and in the line items of the balance sheet. Thus a growth factor is not required for this period. Likewise, the line items of the balance sheet and the income statement will continue to develop in perpetuity and therefore also the net financial surpluses for the shareholders derived from the planning. This sustainable growth of the Company can be modeled mathematically by considering a growth factor in the discount rate.

The starting point for determining possible growth factors is the expected average inflation rate. As points of departure, the following chart displays the latest forecasts made by bank analysts and the IMF on the development of consumer prices in Germany, inflation expectations derived from the yield on inflation-linked German government bonds and the latest inflation forecasts issued by the ECB for the euro zone.

Estimates by bank analysts - Change consumer price index Germany	change
2023	
Lower boundry of estimates	5.6%
Upper boundry of estimates	9.0%
Weightes average	6.4%
2024	
Lower boundry of estimates	0.0%
Upper boundry of estimates	7.5%
Weightes average	2.9%
2025	
Lower boundry of estimates	0.7%
Upper boundry of estimates	2.7%
Weightes average	2.0%

Estimates by the International Monetary Fund - Change consumer price index Germany	average change
2023	6.2%
2024	3.1%
2025	2.3%
2026	2.1%
2027	2.0%
2028	2.0%

Estimates by the European Central Bank - ECB staff projections	average change
2023	5.3%
2024	2.9%
2025	2.1%

Inflation expectation inferred from interest yields on inflation protected German Government Bonds	Expectation
10-year government bond	2.4%
25-year government bond	2.6%

Source: Federal Statistical Office, Bloomberg, International Monetary Fund, European Central Bank

The presentation of inflation expectations over the coming years displays a downwards trend. Much more moderate inflation rates are forecast from the year 2025 already. The ECB is forecasting inflation in the euro zone of just over the target of approximately 2.0% in the year 2025. The IMF expects the annual rise in the consumer price index in Germany to lie at 2.0% from the year 2027.

However, when measuring the growth factor, the circumstances of the particular company must also be considered. To this extent, the growth rates in the financial surpluses of different companies can and will differ from one another by nature. According to research by Widmann/Schieszl/Jeromin (FB 2003, p. 800 et seq.) the average growth in profits of West German industrial companies is approximately 45% to 50% of the average inflation rate, independent of the economic cycle. This below-average growth in profits has been confirmed in research by Stellbrink (Der Restwert in der Unternehmensbewertung, 2005, p. 125 et seq.; for a similar view, Baetge et al., Darstellung der Discounted Cashflow-Verfahren (DCF-Verfahren) mit Beispiel, in: Peemöller (publisher), Praxishandbuch der Unternehmensbewertung, 7th edition, 2019, p. 409, 514). Schieszl/Bachmann/Amman (Das Wachstum der finanziellen Überschüsse in der Unternehmensbewertung, in: Peemöller (publisher), Praxishandbuch der Unternehmensbewertung, 6th edition, 2015, p. 699, 715) arrive at growth rates of between 0% and 2% when it comes to the necessary elimination of retained earnings from corporate profits over the period from 1972 to 2011. Consequently, the authors come to the conclusion that historical inflation-induced growth rates typically lay below 2%. The opinion that the growth factor should be generally lower than the inflation rate is mirrored in the relevant prevailing opinion in the technical literature (see Großfeld/Egger/Tönnes, Recht der Unternehmensbewertung, 8th edition, 2020, p. 247; WPH Edition: Bewertung und Transaktionsberatung, 2018, Chap. C No. 127; OLG Munich, 3 December 2020, 31 Wx 330/16, No. 106 (BeckRS); for a contrary view, see OLG Frankfurt, 26 January 2015, 21 W 26/13, No. 63 (juris); OLG Frankfurt, 30 August 2012, 21 W 14/11, No. 114 (juris); OLG Stuttgart, 8 July 2011, 20 W 14/08, No. 279 et seq. (juris)). This is also partly due to the fact that an investment in a company is not totally immune from the effect of inflation (see OLG Munich, 18 February 2014, 31 Wx 211/13, No. 26 (juris); OLG Düsseldorf, 11 April 1988, WM 1988, p. 1052, 1059, 31; OLG Düsseldorf, 12 February 1992, AG 1992, p. 200, 204). The purpose of the growth factor is not to offset inflation at all costs (see OLG Stuttgart, 11 January 2021, 20 W 10/19, *ratio decidendi* p. 22; OLG Zweibrücken, 23 November 2020, 9 W 1/18, No. 70 (BeckRS); OLG Karlsruhe, 12 September 2017, 12 W 1/17, No. 83 (BeckRS).

In light of the above expectations, an initial indication of the potential growth factor for the long and mid-term comes to **approximately 1.0%**.

It needs to be reiterated in connection with the calculation of the growth factor that the primary consideration here is not the increase in income or expenses, but the impact of the Company's specific inflation rate caused by price changes on its net balance of financial surpluses, i.e. the growth of its results (see LG Munich I, 28 April 2017, 5 HK O 26513/11, AG 2017, p. 501, 506). These net financial surpluses are the sole focus of the capitalized earnings calculation. The management of a company will attempt to pass on any supply-side price increases specific to the company to its customers in the form of higher sales prices (see OLG Stuttgart, 30 March 2021, 20 W 8/19, *ratio decidendi* p. 61). For this reason alone, management will not orient their actions towards the consumption-based general inflation rate (e.g. on the basis of the consumer price index for all goods and services for private consumption) (see OLG Frankfurt, 8 September 2020, 21 W 121/15, No. 147 (BeckRS)), but rather keep their focus on the specific business model of their company. If one considers the sources of growth in financial surpluses in the steady-state situation, one finds they are primarily due to price increases (see OLG Munich, 3 December 2020, 31 Wx 330/16, No. 105 (BeckRS)). Pursuing a line of argumentation that is based on income or expenses in isolation is therefore incorrect based solely on its merits.

In addition to the general development of the sector, the competitive position of the SLM Group must also be considered when assessing its growth prospects. Due to the fact that the growth factor reflects the expected average increase in profit in perpetuity, the growth rates of results expected in the detailed planning phase and the subsequent transition period cannot be simply translated into the growth factor applied to the discount rate (see OLG Munich, 15 December 2020, 31 Wx 299/16, *ratio decidendi* p. 16; OLG Frankfurt, 26 January 2015, 21 W 26/13, No. 62 (juris)).

The SLM Group is already exposed to **intense competition** in the addressed and addressable markets, which is expected to intensify further also due to the increasing progress of Chinese suppliers. At the same time, the SLM Group's current situation is characterized by a high concentration of customers and suppliers. There are already currently overcapacities in the market with regard to various machine sizes. In the medium to long term, it is assumed that customer price sensitivity will continue to increase. In this respect, the company assumes that cost increases cannot be fully implemented or passed on on the price side.

Taking into account the business model and the competitive prospects of the SLM Group, we have applied a **sustainable growth discount of 1.0%** in the valuation.

d) Derivation of the Discount Rates

The discount rates were derived for each specific period as follows:

	Detailed planning phase					Transition phase							TV
	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan	2028 TP	2029 TP	2030 TP	2031 TP	2032 TP	2033 TP	2034 TP	2035
Pre-tax risk-free rate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Typified income tax	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%	-0.66%
Risk-free rate after typified income tax	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%
Market risk prem. after typ. income tax	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%
Unlevered beta factor	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Present value at beginning of fiscal yr.	514,826	563,211	616,941	676,236	741,301	803,387	809,792	808,719	830,287	851,051	873,694	900,933	934,271
Interest-bearing debt at beg. of fiscal yr.	6,311	18,753	27,057	30,700	19,976	2,647	33,464	60,652	62,374	62,291	58,442	43,902	22,889
Debt-equity ratio	1.23%	3.33%	4.39%	4.54%	2.69%	0.33%	4.13%	7.50%	7.51%	7.32%	6.69%	4.87%	2.45%
Beta levered	1.31	1.34	1.35	1.35	1.33	1.30	1.35	1.39	1.39	1.39	1.38	1.36	1.33
Risk premium	9.40%	9.54%	9.61%	9.62%	9.50%	9.34%	9.59%	9.82%	9.82%	9.81%	9.77%	9.64%	9.48%
Growth rate													-1.00%
Discount rate	9.40%	9.54%	9.61%	9.62%	9.50%	9.34%	9.59%	9.82%	9.82%	9.81%	9.77%	9.64%	8.48%

As a purely precautionary measure we would like to point out that a change in individual values for the risk-free rate, the market risk premium, the beta factor or the growth rate, any of which might be reasonable in isolation, can in aggregate lead to an unrealistic figure for the discount rate and therefore an unrealistic value for the cash settlement payment (see OLG Frankfurt, 24 November 2011, 21 W 7/11, No. 40 (juris)). Moreover, there is no need under the constitution to grant the highest benefit for each of the individual inputs of the capitalized earnings method, as described by the Higher Regional Court of Stuttgart (see 17 October 2011, 20 W 7/11, No. 188 (juris); for a similar view: OLG Zweibrücken, 23 November 2020, 9 W 1/18, No. 40 (BeckRS); OLG Munich, 12 May 2020, 31 Wx 361/18, No. 34 (BeckRS)). Otherwise, this would result in an accumulation of beneficial decisions which would no longer accurately reflect the "actual" value (see OLG Munich, 3 December 2020, 31 Wx 33/16, No. 44 (BeckRS); OLG Munich, 20 March 2019, 31 Wx 185/17, No. 28 (BeckRS)).

4.4. Valuation of SLM Solutions Group AG

a) Calculation of the Capitalized Earnings Value

The expected net distributions on the one hand and the fictitious value added directly by retained earnings on the other, need to be discounted to net present value as at the valuation date. In order to discount the annual dividend distributions, we assumed that the profit distributions will be made at year end. The distributions are therefore discounted geometrically from the end of the respective financial year to the technical valuation date (1 January 2023). The value added by compounding retained earnings in perpetuity is also discounted to the technical date of the valuation, so that the capitalized earnings value represents the value on the technical valuation date, i.e. the beginning of the first year of the planning period (2023). In a second step, the discounted capitalized earnings value must then be compounded (unwound) to the valuation date later in the year (see BGH, 19 July 2010, II ZB 18/09, AG 2010, p. 631).

Based on the consolidated annual profits of SLM Solutions Group AG and applying the discount rates for each specific period as explained, the capitalized earnings value of the operating assets of SLM Solutions Group AG as at 1 January 2023 is derived as follows:

	Detailed planning phase					Transition phase							TV
	2023 Plan	2024 Plan	2025 Plan	2026 Plan	2027 Plan	2028 TP	2029 TP	2030 TP	2031 TP	2032 TP	2033 TP	2034 TP	2035
	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR	kEUR
Net result	-2,218	13,080	27,964	48,768	75,902	91,894	103,002	98,228	103,202	103,285	98,624	90,914	104,031
Internal financing	2,218	-13,080	-27,964	-48,768	-64,607	0	0	-19,646	-20,640	-20,657	-19,725	-18,183	0
Growth accumulation	0	0	0	0	0	0	0	0	0	0	0	0	-3,441
Potential distribution (1)	0	0	0	0	11,296	91,894	103,002	78,583	82,561	82,628	78,899	72,731	100,590
Value added from distribution	0	0	0	0	11,296	91,894	103,002	78,583	82,561	82,628	78,899	72,731	52,015
Taxation on dividends (2)	0	0	0	0	-2,979	-23,281	-24,237	-20,726	-21,776	-21,793	-20,810	-19,183	-13,719
Value added from retention	0	0	0	0	0	0	0	0	0	0	0	0	48,574
Taxation of capital gains (3)	0	0	0	0	0	0	0	0	0	0	0	0	-7,638
Net receipts	0	0	0	0	8,317	68,614	78,765	57,856	60,786	60,835	58,090	53,548	79,233
Discount rate	9.40%	9.54%	9.61%	9.62%	9.50%	9.34%	9.59%	9.82%	9.82%	9.81%	9.77%	9.64%	8.48%
Present value factor	0.9141	0.8345	0.7613	0.6945	0.6343	0.5801	0.5293	0.4820	0.4389	0.3997	0.3641	0.3321	3.9157
Present value	0	0	0	0	5,275	39,802	41,691	27,885	26,677	24,313	21,151	17,782	310,251

Capitalised earnings value at 01/01/23	514,826

b) No (further) non-operating assets

According to the Management Board of SLM Solutions Group AG, the Company does not have any (other) non-operating assets. Also based on the findings gained in the course of preparing this business valuation, there are no indications of the existence of any other non-operating assets.

c) Business Value

As at 13 July 2023, the business value of SLM Solutions Group AG is derived as follows:

	kEUR
Capitalised earnings value at 1 January 2023	514,826
Compounding factor	1.0489
Business value at 13 July 2023	540,001
Shares outstanding	31,107,819
Value per share in EUR at 13 July 2023	17.36

The business value of SLM AG as at 13 July 2023 calculated using the capitalized earnings method comes to approximately **EUR 540,001k.**

Related to the 31,107,819 shares outstanding (there is no treasury stock), the **value per share** as at 13 July 2023 comes to **EUR 17.36**.

4.5. Comparative Valuations

In individual cases, multiples-based valuations can provide a point of reference for checking the plausibility of a valuation (see Section 3.2.e)).

A necessary prerequisite for the application of multiplier valuations is that the comparative figure shows positive values for both the valuation object and the peer group companies. SLM Technologies AG and the peer group companies currently (still) regularly report negative earnings figures (EBITDA, EBIT), which precludes the use of EBITDA or EBIT multiples.

Against this background, in addition to the valuation according to the capitalized earnings method, we have carried out a comparative valuation with recourse to sales multiples (see Löhnert/Böckmann, Multiplikatorverfahren, in: Peemöller (ed.), Praxishandbuch Unternehmensbewertung, 7th ed. 2019, p. 851). It is also seen as an advantage of sales multipliers that turnover as a reference figure is less strongly influenced by accounting than earnings figures (see WPH Edition, Valuation and Transaction Advice, 2018, Section G, para. 101, p. 370).

The peer group additive manufacturing is used as the comparable company. To derive the multiples, we use analyst estimates of sales. With regard to the year 2022, actual figures were used.

The sales multiples for the peer group companies are as follows:

	Revenue Multiples			
	2022	2023e	2024e	2025e
Desktop Metal Inc.	2.77	2.65	2.21	1.86
3D Systems Corporation	2.07	2.04	1.91	1.59
Velo3D Inc.	3.78	2.51	1.83	n/a
Markforged Holding Corporation	0.99	0.94	0.80	0.59
Minimum	0.99	0.94	0.80	0.59
Median	2.42	2.27	1.87	1.59
Mean	2.40	2.03	1.69	1.35
Maximum	3.78	2.65	2.21	1.86

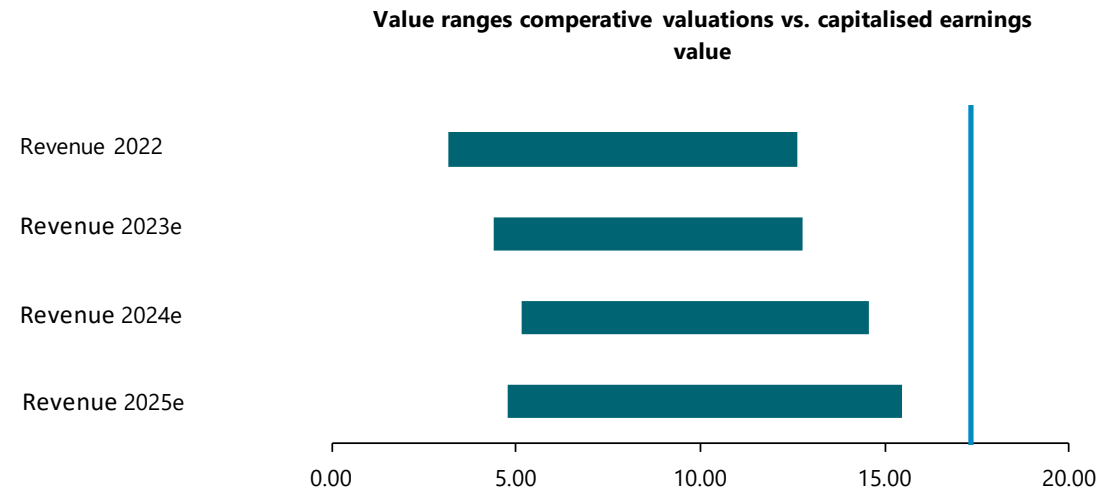
Source: Bloomberg, own calculation.

The following table shows the revenue on which the comparative market valuation was based. Moreover, the table shows the range of values resulting from the enterprise value of the company (market value of total debt and equity) and the equity value (market value of equity). In the reconciliation to the market value of equity, we have deducted the interest-bearing debt after taking into account the repayment or conversion of the convertible bonds still existing as at 31 December 2022, which will take place in the first quarter of 2023.

	Revenue Multiples			
	2022	2023e	2024e	2025e
	kEUR	kEUR	kEUR	kEUR
(Plan)-Revenue	105,709	152,299	207,727	261,611
Enterprise value - Minimum	104,841	142,519	165,865	155,000
Enterprise value - Median	255,664	345,968	388,620	415,588
Enterprise value - Mean	253,901	309,403	350,722	352,653
Enterprise value - Maximum	399,437	403,158	459,781	487,372
- Total interest-bearing liabilities	-6,311	-6,311	-6,311	-6,311
Equity value - Minimum	98,530	136,208	159,554	148,689
Equity value - Median	249,353	339,657	382,309	409,277
Equity value - Mean	247,590	303,092	344,411	346,342
Equity value - Maximum	393,126	396,847	453,470	481,061
Number of shares	31,107,819	31,107,819	31,107,819	31,107,819
Value per share in EUR - Minimum	3.17	4.38	5.13	4.78
Value per share in EUR - Median	8.02	10.92	12.29	13.16
Value per share in EUR - Mean	7.96	9.74	11.07	11.13
Value per share in EUR - Maximum	12.64	12.76	14.58	15.46

Based on the sales multiples of the peer group, the range for the value per share of SLM Solutions AG is between EUR 3.17 and EUR 15.46. The mean values are between EUR 7.96 and EUR 11.13 per share.

The relative values can be presented graphically as follows:



As a result of the comparison-oriented plausibility considerations, it can be stated that there are no indications that the value per share determined using the capitalised earnings value method is too low.

4.6. Market Prices

Beginning and duration of the reference period

The requirements arising from court rulings for the relevance of the share price of SLM AG were examined and are discussed below. We referred to information from Bloomberg in order to determine the share price.

In its ruling dated 19 July 2010 (II ZB 18/09, AG 2010, p. 629 et seq., "Stollwerck") the Federal Court of Justice ruled that the market share price that is used to derive a fair settlement payment must be measured on the average share price over a three-month period prior to announcement of the structural measure.

In its deliberations, the Federal Court of Justice states that if the share price is taken from the period after the structural measures are announced and this "... is included in the reference period, the share price no longer reflects, as required, the price which the shareholder could have expected without the intervention of the majority shareholder, who is duty bound to pay compensation, or without the structural measure having occurred. Thus the share price does not reflect the business value expected by the market on the basis of the supply and demand mechanism but the price which can be obtained precisely because of the structural measure. [...] However, such market demand has nothing to do with the fair value of the share which the minority shareholder should receive as compensation for losing his status as a shareholder, in other words to recompense him for the position he would be in had the structural measure not occurred (BVerfGE 100, 289, 305; BVerfG, ZIP 2007, 175 No. 16)." The selection of a reference period also serves to prevent any conscious manipulation. Abuse by either side should be ruled out. In the opinion of the Federal Court of Justice, the minority shareholders should be protected from manipulation by the majority shareholder choosing a particularly favorable date, by stating that the cash settlement payment may never be lower than the share of the minority shareholder in the business value.

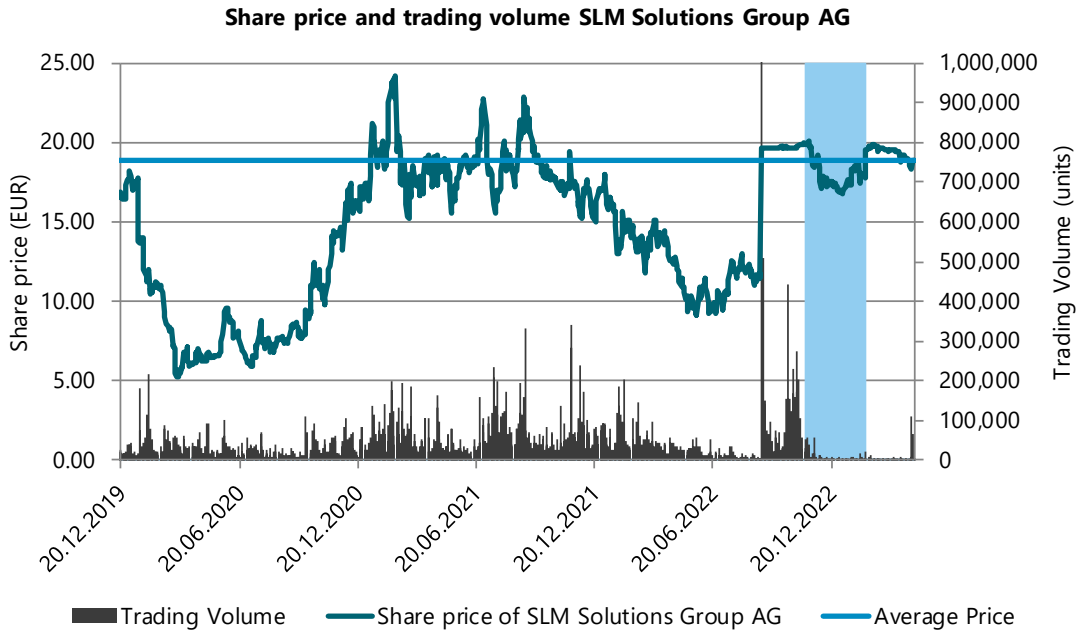
This interpretation is also reflected in Sec. 5 (1) of the bidding regulations for the WpÜG-AngebV which determines that counter-performance in the case of a takeover bid must at least correspond to the average market price of the shares in the target for the three months prior to the decision to make a bid.

This calculation using a three-month period is based on the WpÜG-AngebV in accordance with Secs. 187 and 188 (2) BGB (see Fragen und Antworten zum IDW S 1 i.d.F. 2008 (issued: 14 October 2020), Section 3.1, IDW Life 2020, p. 955).

As published by SLM Solutions Group AG on the same day in an ad hoc announcement, Nikon AM. AG on 10 February 2023 announced to the Management Board of SLM Solutions Group AG its request to acquire the shares of minority shareholders of SLM Solutions Group AG in return for a fair settlement payment within the framework of a squeeze-out under the law of mergers.

Corresponding to the approach described on the internet site of the BaFin, the calculation of the price of the stock on the exchange is based on the three-month period ending on the last day **prior to** the public announcement of the intention to perform a squeeze-out under merger law. Consequently, the three-month period ends on 9 February 2023, the last day of trading before announcement of the intention and begins on 10 November 2022.

The following chart displays the movements in the share price, the trading volume and the three-month average share price of SLM Solutions Group AG before the end of our valuation work. The three-month period prior to announcement of the intention to perform a squeeze-out under merger law is highlighted blue. According to a notification from BaFin dated 12 May 2023 to Morrison & Foerster LLP, the legal advisor to Nikon AM. AG, the imputed volume-weighted three-month average share price as at 9 February 2023 (including) is mathematically approximated at **EUR 18.89**.



Source: Bloomberg, own calculations

Type of averaging and its suitability as a lower limit for the settlement payment

In accordance with the requirements of the Federal Court of Justice, (19 July 2010, II ZB 18/09, AG 2010, p. 629, 632), the volume-weighted average share price should be determined for a three-month reference period. This approach corresponds to the prevailing opinion in the court rulings (see OLG Stuttgart, 31 March 2021, 20 W 8/20, No. 91 (BeckRS); OLG Munich, 3 December 2020, 31 Wx 330/16, No. 146 (BeckRS); OLG Zweibrücken, 23 November 2020, 9 W 1/18, No. 80 (BeckRS); OLG Hamburg, 7 September 2020, 13 W 123/20, No. 20 (BeckRS); OLG Frankfurt, 27 August 2020, 21 W 59/19, No. 20 (BeckRS); OLG Düsseldorf, 11 May 2020, 26 W 14/17, No. 26 (BeckRS)).

Generally, the volume-weighted average share price should be calculated on the basis of the share prices calculated by BaFin pursuant to Sec. 5 (1) WpÜG-AngebV (see OLG Düsseldorf, 11 May 2020, 26 W 14/17, No. 26 (BeckRS); OLG Frankfurt, 30 August 2012, 21 W 14/11, No. 24; OLG Stuttgart, 4 May 2011, AG 2011, p. 560, 561; OLG Frankfurt, 3 September 2010, AG 2010, p. 751, 756 et seq.).

According to the letter of BaFin dated 12 May 2023, the minimum price of the shares of SLM Solutions Group AG calculated by BaFin pursuant to section 31 (1) and (7) WpÜG in conjunction with section 5 WpÜG Offer Ordinance as of 9 February 2023 (inclusive) is as follows

EUR 18.89.

For comparison purposes, we have determined the turnover-weighted stock market price using the price data of the financial information service provider Bloomberg. The turnover-weighted average price taking into account the price data from Bloomberg on the basis of all available trading venues in Germany (ticker: AM3D GR Equity) is EUR 18.92. If only Xetra trading is included (ticker: AM3D GY Equity), the turnover-weighted average price is EUR 18.95. The resulting values thus correspond to the calculations of BaFin except for minor deviations of a few cents. In our opinion, the deviations are also irrelevant for the following reasons: BaFin calculates the average price in accordance with the statutory requirements pursuant to section 5 (3) WpÜG Offer Ordinance in conjunction with section 22 WpHG. The transactions reported pursuant to section 22 WpHG also include intermediate transactions in the settlement of securities orders, which may have an influence on the turnover weighting depending on the quantity of the intermediate transactions. Being aware of the transactions to be reported pursuant to section 22 WpHG, the legislator has linked to this determination in section 5 (3) WpÜG Offer Regulation. The average share price determined in this way is relevant for both takeover and mandatory offers and indirectly also applies as the appropriate consideration in the case of a squeeze-out under takeover law subject to the conditions of section 39a (3) sentence 3 WpÜG. Accordingly, case law and practice also refer to this methodology for determining the cash settlement in the case of structural measures under company law. Irrespective of the question whether the average price determined by BaFin is higher or lower than the average price determined on the basis of other data sets in individual cases, in our opinion the legislative assessment in section 5 (1) and (3) WpÜG Offer Ordinance is transferable to the exclusion of minority shareholders, and we therefore consider the average price determined by BaFin to be decisive.

Based on our analyses, it can therefore be assumed that the turnover-weighted average price of SLM AG calculated by the BaFin of EUR 18.89 is to be used as the lower limit of a fair settlement payment.

4.7. Sensitivity Analysis

We carried out a range of different sensitivity analyses in order to review the influence of a change in the parameters on the value per share. As parameters for this analysis we selected the components of the discount rate, because these parameters have a high impact on the business value.

We would like to warn that the following sensitivity analyses and their arithmetically derived results are provided solely for the purpose of informing the minority shareholders with a right to a fair settlement. Moreover, the resulting values should not be interpreted as a fair cash settlement payment and do not, therefore, contradict the results of our valuation.

As a purely precautionary measure we would like to point out that a change in individual values for the risk-free rate, the market risk premium, the beta factor or the growth rate, any of which might be reasonable in isolation, can in aggregate lead to an unrealistic figure for the discount rate and therefore an unrealistic value for the cash settlement payment (see OLG Frankfurt, 24 November 2011, 21 W 7/11, No. 40 (juris)). Moreover, there is no need under the constitution to grant the highest benefit for each of the individual inputs of the capitalized earnings method, as described by the Higher Regional Court of Stuttgart (see 17 October 2011, 20 W 7/11, No. 188 (juris); for a similar view: OLG Zweibrücken, 23 November 2020, 9 W 1/18, No. 40 (BeckRS); OLG Munich, 12 May 2020, 31 Wx 361/18, No. 34 (BeckRS)). Otherwise, this would result in an accumulation of beneficial decisions which would no longer accurately reflect the "actual" value (see OLG Munich, 3 December 2020, 31 Wx 33/16, No. 44 (BeckRS); OLG Munich, 20 March 2019, 31 Wx 185/17, No. 28 (BeckRS)).

Risk-free rate / growth factor matrix

We have varied the risk-free rate before taxes within a range of 2.0% to 3.0%. We have varied the growth rate within a range of 0.5 % to 1.5 %.

Value per share in EUR		Risk-free rate				
		2.00%	2.25%	2.50%	2.75%	3.00%
Growth rate	0.50%	18.01	17.45	16.92	16.41	15.92
	0.75%	18.26	17.68	17.13	16.61	16.11
	1.00%	18.51	17.92	**17.36**	16.82	16.31
	1.25%	18.79	18.18	17.60	17.04	16.52
	1.50%	19.07	18.45	17.85	17.28	16.73
Change in value per share with change in risk-free rate (Growth rate = 1.00%)		*6.7%*	*3.2%*	*0.0%*	*-3.1%*	*-6.1%*

Based on the assumed growth rate of 1.0%, an increase of the risk-free rate to 2.75%, for example, leads to an arithmetical reduction of the value per share by 3.1%. A reduction of the base interest rate to 2.25 % leads to an arithmetical increase of the value per share by 3.2 %.

Risk-free rate / market risk premium matrix

We varied the after-tax market risk premium within a range of 5.25 % to 6.25 %.

Value per share in EUR		Market risk premium				
		5.25%	5.50%	5.75%	6.00%	6.25%
Risk-free rate	2.00%	20.85	19.63	18.51	17.49	16.55
	2.25%	20.15	18.99	17.92	16.95	16.04
	2.50%	19.48	18.37	**17.36**	16.43	15.57
	2.75%	18.84	17.79	16.82	15.93	15.11
	3.00%	18.23	17.23	16.31	15.46	14.67
Change in value per share with change in market risk premium (base rate = 2.50%)		*12.2%*	*5.8%*	*0.0%*	*-5.4%*	*-10.3%*

Beta / market risk premium matrix

We varied the unlevered beta factor in a range from 1.2 to 1.4.

Value per share in EUR		Beta factor				
		1.20	1.25	1.30	1.35	1.40
Market risk premium	**5.25%**	21.48	20.44	19.48	18.58	17.74
	5.50%	20.30	19.30	18.37	17.51	16.71
	5.75%	19.21	18.25	**17.36**	16.53	15.76
	6.00%	18.21	17.28	16.43	15.63	14.89
	6.25%	17.28	16.39	15.57	14.80	14.09
Change in value per share with change in beta factor (market risk premium = 5.75%)		*10.7%*	*5.1%*	*0.0%*	*-4.8%*	*-9.2%*

5. Conclusion

Nikon AM. AG engaged us to determine the objectified business value of SLM Solutions Group AG, taking account of IDW S 1, 2008 "Principles for the Performance of Business Valuations" released by the Institute of Public Auditors in Germany (IDW), and to calculate a fair settlement payment pursuant to Sec. 327b AktG for the purposes of an intended squeeze-out under the law of mergers. We acted in the function of a neutral valuer in the sense of the principles of IDW S1 2008.

The business value of SLM Solutions Group AG as at 13 July 2023 calculated using the capitalized earnings method comes to approximately **EUR 540,001k**. Related to the 31,107,819 outstanding shares, this results in a value per share of **EUR 17.36** as at 13 July 2023.

The weighted three-month average price calculated by BaFin and notified on 12 May 2023 pursuant to section 5 para. 1 WpÜG Offer Ordinance is **EUR 18.89**.

This is therefore above/below the business value per share determined using the capitalized earnings method. Consequently, a fair settlement payment in the sense of Sec. 327b AktG comes to **EUR 18.89**.

We render this expert opinion in good faith on the basis of our examinations, which were conducted with due care and diligence, and the documents and information provided to us, and in keeping with the professional code of public auditors in Germany.

Stuttgart, 30 May 2023

Ebner Stolz GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft

Dr. Frederik Ruthardt
Wirtschaftsprüfer
[German Public Auditor]

Dr. Fiona Ungemach

[Translator's notes are in square brackets]

General Engagement Terms
for
Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften
[German Public Auditors and Public Audit Firms]
as of January 1, 2017

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1. Scope of application

(1) These engagement terms apply to contracts between German Public Auditors (*Wirtschaftsprüfer*) or German Public Audit Firms (*Wirtschaftsprüfungsgesellschaften*) – hereinafter collectively referred to as "German Public Auditors" – and their engaging parties for assurance services, tax advisory services, advice on business matters and other engagements except as otherwise agreed in writing or prescribed by a mandatory rule.

(2) Third parties may derive claims from contracts between German Public Auditors and engaging parties only when this is expressly agreed or results from mandatory rules prescribed by law. In relation to such claims, these engagement terms also apply to these third parties.

2. Scope and execution of the engagement

(1) Object of the engagement is the agreed service – not a particular economic result. The engagement will be performed in accordance with the German Principles of Proper Professional Conduct (*Grundsätze ordnungsmäßiger Berufsausübung*). The German Public Auditor does not assume any management functions in connection with his services. The German Public Auditor is not responsible for the use or implementation of the results of his services. The German Public Auditor is entitled to make use of competent persons to conduct the engagement.

(2) Except for assurance engagements (*betriebswirtschaftliche Prüfungen*), the consideration of foreign law requires an express written agreement.

(3) If circumstances or the legal situation change subsequent to the release of the final professional statement, the German Public Auditor is not obligated to refer the engaging party to changes or any consequences resulting therefrom.

3. The obligations of the engaging party to cooperate

(1) The engaging party shall ensure that all documents and further information necessary for the performance of the engagement are provided to the German Public Auditor on a timely basis, and that he is informed of all events and circumstances that may be of significance to the performance of the engagement. This also applies to those documents and further information, events and circumstances that first become known during the German Public Auditor's work. The engaging party will also designate suitable persons to provide information.

(2) Upon the request of the German Public Auditor, the engaging party shall confirm the completeness of the documents and further information provided as well as the explanations and statements, in a written statement drafted by the German Public Auditor.

4. Ensuring independence

(1) The engaging party shall refrain from anything that endangers the independence of the German Public Auditor's staff. This applies throughout the term of the engagement, and in particular to offers of employment or to assume an executive or non-executive role, and to offers to accept engagements on their own behalf.

(2) Were the performance of the engagement to impair the independence of the German Public Auditor, of related firms, firms within his network, or such firms associated with him, to which the independence requirements apply in the same way as to the German Public Auditor in other engagement relationships, the German Public Auditor is entitled to terminate the engagement for good cause.

5. Reporting and oral information

To the extent that the German Public Auditor is required to present results in writing as part of the work in executing the engagement, only that written work is authoritative. Drafts are non-binding. Except as otherwise agreed, oral statements and explanations by the German Public Auditor are binding only when they are confirmed in writing. Statements and information of the German Public Auditor outside of the engagement are always non-binding.

6. Distribution of a German Public Auditor's professional statement

(1) The distribution to a third party of professional statements of the German Public Auditor (results of work or extracts of the results of work whether in draft or in a final version) or information about the German Public Auditor acting for the engaging party requires the German Public Auditor's written consent, unless the engaging party is obligated to distribute or inform due to law or a regulatory requirement.

(2) The use by the engaging party for promotional purposes of the German Public Auditor's professional statements and of information about the German Public Auditor acting for the engaging party is prohibited.

7. Deficiency rectification

(1) In case there are any deficiencies, the engaging party is entitled to specific subsequent performance by the German Public Auditor. The engaging party may reduce the fees or cancel the contract for failure of such subsequent performance, for subsequent non-performance or unjustified refusal to perform subsequently, or for unconscionability or impossibility of subsequent performance. If the engagement was not commissioned by a consumer, the engaging party may only cancel the contract due to a deficiency if the service rendered is not relevant to him due to failure of subsequent performance, to subsequent non-performance, to unconscionability or impossibility of subsequent performance. No. 9 applies to the extent that further claims for damages exist.

(2) The engaging party must assert a claim for the rectification of deficiencies in writing (*Textform*) [*Translators Note: The German term "Textform" means in written form, but without requiring a signature*] without delay. Claims pursuant to paragraph 1 not arising from an intentional act expire after one year subsequent to the commencement of the time limit under the statute of limitations.

(3) Apparent deficiencies, such as clerical errors, arithmetical errors and deficiencies associated with technicalities contained in a German Public Auditor's professional statement (long-form reports, expert opinions etc.) may be corrected – also versus third parties – by the German Public Auditor at any time. Misstatements which may call into question the results contained in a German Public Auditor's professional statement entitle the German Public Auditor to withdraw such statement – also versus third parties. In such cases the German Public Auditor should first hear the engaging party, if practicable.

8. Confidentiality towards third parties, and data protection

(1) Pursuant to the law (§ [Article] 323 Abs 1 [paragraph 1] HGB [German Commercial Code: *Handelsgesetzbuch*], § 43 WPO [German Law regulating the Profession of Wirtschaftsprüfer: *Wirtschaftsprüferordnung*], § 203 StGB [German Criminal Code: *Strafgesetzbuch*]) the German Public Auditor is obligated to maintain confidentiality regarding facts and circumstances confided to him or of which he becomes aware in the course of his professional work, unless the engaging party releases him from this confidentiality obligation.

(2) When processing personal data, the German Public Auditor will observe national and European legal provisions on data protection.

9. Liability

(1) For legally required services by German Public Auditors, in particular audits, the respective legal limitations of liability, in particular the limitation of liability pursuant to § 323 Abs. 2 HGB, apply.

(2) Insofar neither a statutory limitation of liability is applicable, nor an individual contractual limitation of liability exists, the liability of the German Public Auditor for claims for damages of any other kind, except for damages resulting from injury to life, body or health as well as for damages that constitute a duty of replacement by a producer pursuant to § 1 ProdHaftG [German Product Liability Act: *Produkthaftungsgesetz*], for an individual case of damages caused by negligence is limited to € 4 million pursuant to § 54 a Abs. 1 Nr. 2 WPO.

(3) The German Public Auditor is entitled to invoke demurs and defenses based on the contractual relationship with the engaging party also towards third parties.

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(4) When multiple claimants assert a claim for damages arising from an existing contractual relationship with the German Public Auditor due to the German Public Auditor's negligent breach of duty, the maximum amount stipulated in paragraph 2 applies to the respective claims of all claimants collectively.

(5) An individual case of damages within the meaning of paragraph 2 also exists in relation to a uniform damage arising from a number of breaches of duty. The individual case of damages encompasses all consequences from a breach of duty regardless of whether the damages occurred in one year or in a number of successive years. In this case, multiple acts or omissions based on the same source of error or on a source of error of an equivalent nature are deemed to be a single breach of duty if the matters in question are legally or economically connected to one another. In this event the claim against the German Public Auditor is limited to € 5 million. The limitation to the fivefold of the minimum amount insured does not apply to compulsory audits required by law.

(6) A claim for damages expires if a suit is not filed within six months subsequent to the written refusal of acceptance of the indemnity and the engaging party has been informed of this consequence. This does not apply to claims for damages resulting from scienter, a culpable injury to life, body or health as well as for damages that constitute a liability for replacement by a producer pursuant to § 1 ProdHaftG. The right to invoke a plea of the statute of limitations remains unaffected.

10. Supplementary provisions for audit engagements

(1) If the engaging party subsequently amends the financial statements or management report audited by a German Public Auditor and accompanied by an auditor's report, he may no longer use this auditor's report.

If the German Public Auditor has not issued an auditor's report, a reference to the audit conducted by the German Public Auditor in the management report or any other public reference is permitted only with the German Public Auditor's written consent and with a wording authorized by him.

(2) If the German Public Auditor revokes the auditor's report, it may no longer be used. If the engaging party has already made use of the auditor's report, then upon the request of the German Public Auditor he must give notification of the revocation.

(3) The engaging party has a right to five official copies of the report. Additional official copies will be charged separately.

11. Supplementary provisions for assistance in tax matters

(1) When advising on an individual tax issue as well as when providing ongoing tax advice, the German Public Auditor is entitled to use as a correct and complete basis the facts provided by the engaging party – especially numerical disclosures; this also applies to bookkeeping engagements. Nevertheless, he is obligated to indicate to the engaging party any errors he has identified.

(2) The tax advisory engagement does not encompass procedures required to observe deadlines, unless the German Public Auditor has explicitly accepted a corresponding engagement. In this case the engaging party must provide the German Public Auditor with all documents required to observe deadlines – in particular tax assessments – on such a timely basis that the German Public Auditor has an appropriate lead time.

(3) Except as agreed otherwise in writing, ongoing tax advice encompasses the following work during the contract period:

a) preparation of annual tax returns for income tax, corporate tax and business tax, as well as wealth tax returns, namely on the basis of the annual financial statements, and on other schedules and evidence documents required for the taxation, to be provided by the engaging party

b) examination of tax assessments in relation to the taxes referred to in (a)

c) negotiations with tax authorities in connection with the returns and assessments mentioned in (a) and (b)

d) support in tax audits and evaluation of the results of tax audits with respect to the taxes referred to in (a)

e) participation in petition or protest and appeal procedures with respect to the taxes mentioned in (a).

In the aforementioned tasks the German Public Auditor takes into account material published legal decisions and administrative interpretations.

(4) If the German Public auditor receives a fixed fee for ongoing tax advice, the work mentioned under paragraph 3 (d) and (e) is to be remunerated separately, except as agreed otherwise in writing.

(5) Insofar the German Public Auditor is also a German Tax Advisor and the German Tax Advice Remuneration Regulation (*Steuerberatungsvergütungsverordnung*) is to be applied to calculate the remuneration, a greater or lesser remuneration than the legal default remuneration can be agreed in writing (*Textform*).

(6) Work relating to special individual issues for income tax, corporate tax, business tax, valuation assessments for property units, wealth tax, as well as all issues in relation to sales tax, payroll tax, other taxes and dues requires a separate engagement. This also applies to:

a) work on non-recurring tax matters, e.g. in the field of estate tax, capital transactions tax, and real estate sales tax**;**

b) support and representation in proceedings before tax and administrative courts and in criminal tax matters;

c) advisory work and work related to expert opinions in connection with changes in legal form and other re-organizations, capital increases and reductions, insolvency related business reorganizations, admission and retirement of owners, sale of a business, liquidations and the like, and

d) support in complying with disclosure and documentation obligations.

(7) To the extent that the preparation of the annual sales tax return is undertaken as additional work, this includes neither the review of any special accounting prerequisites nor the issue as to whether all potential sales tax allowances have been identified. No guarantee is given for the complete compilation of documents to claim the input tax credit.

12. Electronic communication

Communication between the German Public Auditor and the engaging party may be via e-mail. In the event that the engaging party does not wish to communicate via e-mail or sets special security requirements, such as the encryption of e-mails, the engaging party will inform the German Public Auditor in writing (*Textform*) accordingly.

13. Remuneration

(1) In addition to his claims for fees, the German Public Auditor is entitled to claim reimbursement of his expenses; sales tax will be billed additionally. He may claim appropriate advances on remuneration and reimbursement of expenses and may make the delivery of his services dependent upon the complete satisfaction of his claims. Multiple engaging parties are jointly and severally liable.

(2) If the engaging party is not a consumer, then a set-off against the German Public Auditor's claims for remuneration and reimbursement of expenses is admissible only for undisputed claims or claims determined to be legally binding.

14. Dispute Settlement

The German Public Auditor is not prepared to participate in dispute settlement procedures before a consumer arbitration board (*Verbraucherschlichtungsstelle*) within the meaning of § 2 of the German Act on Consumer Dispute Settlements (*Verbraucherstreitbeilegungsgesetz*).

15. Applicable law

The contract, the performance of the services and all claims resulting therefrom are exclusively governed by German law.

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